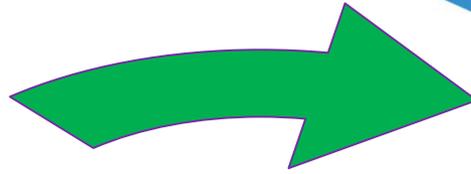
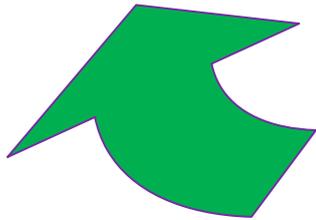


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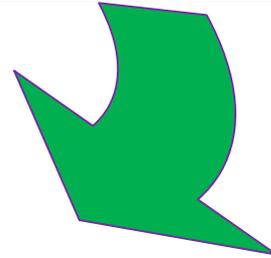


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Articles

The following abstracts are taken from a selection of recently published papers (July – December 2019)

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STROKE:

Research of stroke combined hyperlipidemia-induced erectile dysfunction in rat model.

Author(s): Wang, Ji-Sheng; Dai, Heng-Heng; Yan, Yu-Bing; Gong, Xi-Hao; Li, Xiao; Li, Hai-Song; Wang, Bin

Source: Aging Male; Dec 2019; vol. 22 (no. 4); p. 278-286

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 30451062

Abstract:Objective: The study was aimed to evaluate the influences of erectile dysfunction (ED) in a rat model of stroke combined with hyperlipidemia (HLP). Methods: Male Sprague-Dawley rats were divided into control and hyperlipidemia (HLP) groups. HLP model was constructed by feeding with high-fat and cholesterol diets. Serum levels of total cholesterol (TC), low density lipoprotein (LDL), high density lipoprotein (HDL), triglyceride (TG), and non-HDL were identified to check the model was success. Stroke model was established by FeCl₃. ICP/MAP value was detected to evaluate the erectile function of rats. Serum level of lipoproteins and the expressions of endothelial nitric oxide synthase (eNOS), vascular endothelial growth factor (VEGF) were detected by ELISA. Hematoxylin-eosin (HE) staining of corpus cavernosum and measurement of penis length were utilized to assessment erectile function. Western blot was used. Results: TC, TG, LDL, and non-HDL-C in serum were up-regulated, while HDL level was attenuated. After treatment, the serum lipid level recovered. From the ICP/MAP values, the erectile function of both two treatment groups recovered. The expression of PDE5A was up-regulated, while the levels of eNOS and cGMP were suppressed after surgery. The length of penis was decreased, and corpus cavernosum was damaged following HLP and stroke. However, the erectile function was recovered after treatment. Conclusion: Stroke combined HLP caused ED through NO-cGMP-PDE5 pathway.

Database: CINAHL

Vegetarians and Stroke:.

Author(s): AHC MEDIA

Source: Integrative Medicine Alert; Dec 2019; vol. 22 (no. 12)

Publication Date: Dec 2019

Publication Type(s): Periodical

Abstract: A prospective cohort study in the United Kingdom demonstrated that vegetarians have a 22% lower incidence of ischemic heart disease, but a 20% increased incidence of total stroke, mostly related to hemorrhagic stroke, when compared to meat eaters. No difference in ischemic stroke or acute myocardial infarction was found.

Database: CINAHL

Physician opinions on decision making for percutaneous endoscopic gastrostomy (PEG) feeding tube placement.

Author(s): Fessler, Theresa A.; Short, Timothy B.; Willcutts, Kate F.; Sawyer, Robert G.

Source: Surgical Endoscopy; Dec 2019; vol. 33 (no. 12); p. 4089-4097

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 30809726

Abstract: Background: Percutaneous endoscopically placed gastrostomy (PEG) tubes are useful for long-term enteral nutrition; however, they are associated with lack of benefit for patients with advanced dementia, at end of life, and for some stroke patients with early regain of swallowing function. We surveyed physician opinions on decision making with the aim to identify factors that can lead to inappropriate PEG placement, as a first step of a quality improvement initiative to prevent inappropriate PEG placements at our facility. Methods: A survey was distributed to 231 physicians, with questions about discussion topics, contraindications, responsibilities, and practices in decision making for PEG placement. Five-point Likert scales were used for most responses. Results: Of 62 respondents, the majority were general surgeons (51.6%) and neurologists (30.6%). Levels of agreement were very low that PEG placement is contraindicated in advanced dementia (> 56% disagreed) and at end of life (55% disagreed) with scores of 2.4 and 2.5 (out of 5), respectively. Agreement level was low (score of 2.85) for delaying PEG for stroke patients by at least 2 weeks. Agreement was high for the discussion topics, for allowing 1-7 days for processing information, and for consulting the nutrition service. Over 98% of respondents chose primary team and 58% chose both primary and endoscopy teams as being responsible for discussions with patients and care partners in the decision-making process. Conclusions: Greater awareness is needed of the lack of benefit of PEG feeding in advanced dementia, at end of life, and for some stroke patients with early regain of swallow function. Disagreement exists as to whether the primary team and endoscopist share in the responsibility for discussions in decision making for PEG placement.

Database: CINAHL

Adjustment of oral diet based on flexible endoscopic evaluation of swallowing (FEES) in acute stroke patients: a cross-sectional hospital-based registry study.

Author(s): Braun, Tobias; Juenemann, Martin; Viard, Maxime; Meyer, Marco; Reuter, Iris; Prosiegel, Mario; Kaps, Manfred; Tanislav, Christian

Source: BMC Neurology; Nov 2019; vol. 19 (no. 1)

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31718562

Available at [BMC Neurology](#) - from BioMed Central

Available at [BMC Neurology](#) - from Europe PubMed Central - Open Access

Available at [BMC Neurology](#) - from EBSCO (MEDLINE Complete)

Available at [BMC Neurology](#) - from Unpaywall

Abstract:Background: Diagnosing dysphagia in acute stroke patients is crucial, as this comorbidity determines morbidity and mortality; we therefore investigated the impact of flexible nasolaryngeal endoscopy (FEES) in acute stroke patients.Methods: The FEES investigation as performed in acute stroke patients treated at a large university hospital, allocated as a standard procedure for all patients suspected of dysphagia. We correlated our findings with baseline data, disability status, pneumonia, duration of hospitalisation, necessity for mechanical ventilation and treatment on the intensive care unit. The study was designed as a cross-sectional hospital-based registry.Results: We investigated 152 patients. The median age was 73; 94 were male. Ischemic stroke was diagnosed in 125 patients (82.2%); 27 (17.8%) suffered intracerebral haemorrhage. Oropharyngeal dysphagia was diagnosed in 72.4% of the patients, and was associated with higher stroke severity on admission (median NIHSS 11 [IQR 6-17] vs. 7 [4-12], $p = .013$; median mRS 5 [IQR 4-5] vs. 4 [IQR 3-5], $p = .012$). Short-term mortality was higher among patients diagnosed with dysphagia (7.2% vs. 0%, $p = .107$). FEES examinations revealed that only 30.9% of the patients had an oral diet appropriate for their swallowing abilities. A change of oral diet was associated with a better outcome at discharge (mRS; $p = .006$), less need of mechanical ventilation ($p = .028$), shorter period of hospitalisation ($p = .044$), and lower rates of pneumonia ($p = .007$) and mortality ($p = .011$).Conclusion: Due to the inability of clinical assessments to detect silent aspiration, FEES might be better suited to identify stroke patients at risk and may contribute to a better functional outcome and lower rates of pneumonia and mortality. Our findings also point to a low awareness of dysphagia, even in a specialised stroke centre. FEES in acute stroke patients helps to adjust the oral diet for the vast majority of stroke patients (69.1%) based on their swallowing abilities, potentially avoiding severe complications.

Database: CINAHL

The Prevalence of Dyslipidemia and Hyperglycemia among Stroke Patients: Preliminary Findings.

Author(s): Ali, Iyad; Abuissa, Mahmoud; Alawneh, Anan; Subeh, Omar; Abu Sneineh, Ahmad; Mousa, Sabreen; Deeb, Israa'; Rayyan, Hiba

Source: Stroke Research & Treatment; Oct 2019 ; p. 1-6

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Available at [Stroke Research and Treatment](#) - from Europe PubMed Central - Open Access

Available at [Stroke Research and Treatment](#) - from Hindawi Open Access Journals

Available at [Stroke Research and Treatment](#) - from Unpaywall

Abstract:Background/Aim. Stroke or cerebrovascular accident is defined as sudden or sub acute onset of focal neurologic deficit, caused by the interruption of blood flow to parts of the brain. In this study, we aimed to investigate the prevalence of dyslipidemia and hyperglycemia among stroke patients in Palestine. Materials and Methods. A total of 70 patients with stroke were included in a cross-sectional study between November 2017 and February 2018. Stroke patients were diagnosed based on a CT scan reviewed by a neurologist. Fasting venous blood samples were collected to measure the lipid profile (cholesterol, low-density lipoproteins (LDL), triacylglycerol (TAG), high-density lipoproteins (HDL)), fasting blood glucose (FBG), and glycosylated hemoglobin (HbA1c) levels. An interview-based questionnaire, included background data, past medical history, family history, and other risk factors for stroke, was filled for each patient. Results. Based on our results, 28.57% of patients had high LDL, 17.1% had high cholesterol, 15.7% had high TAG and 61.3% had low HDL. About half of the patients (51.4%) had abnormal HbA1c and abnormal FBG (52.8%). The majority (67.1%) of patients were males, whereas, 11% of patients were obese (BMI of more than 30 kg/m²) and 51.4% were smokers. Regarding the family history of diseases, 81% of patients had a family history of hypertension, 50% had a family history of stroke, and 58% had a family history of diabetes mellitus. Conclusion. Male gender and smoking were most likely to increase the risk of stroke. Risk factors like low HDL, high LDL, high FBG, high HbA1c, and hypertension contribute substantially to the incidence of stroke. A family history of stroke, hypertension and diabetes were significant risk factors for stroke.

Database: CINAHL

Aryl hydrocarbon receptor modulates stroke-induced astrogliosis and neurogenesis in the adult mouse brain.

Author(s): Chen, Wan-Ci; Chang, Li-Hsin; Huang, Shiang-Suo; Huang, Yu-Jie; Chih, Chun-Lien; Kuo, Hung-Chih; Lee, Yi-Hsuan; Lee, I-Hui

Source: Journal of Neuroinflammation; Oct 2019; vol. 16 (no. 1)

Publication Date: Oct 2019

Publication Type(s): Academic Journal

PubMedID: 31606043

Available at [Journal of neuroinflammation](#) - from BioMed Central

Available at [Journal of neuroinflammation](#) - from Europe PubMed Central - Open Access

Available at [Journal of neuroinflammation](#) - from Unpaywall

Abstract:Background: The aryl hydrocarbon receptor (AHR) is a ligand-dependent transcription factor activated by environmental agonists and dietary tryptophan metabolites for the immune response and cell cycle regulation. Emerging evidence suggests that AHR activation after acute stroke may play a role in brain ischemic injury. However, whether AHR activation alters poststroke astrogliosis and neurogenesis remains unknown. Methods: We adopted conditional knockout of AHR from nestin-expressing neural stem/progenitor cells (AHRcKO) and wild-type (WT) mice in the permanent middle cerebral artery occlusion (MCAO) model. WT mice were treated with either vehicle or the AHR antagonist 6,2',4'-trimethoxyflavone (TMF, 5 mg/kg/day) intraperitoneally. The animals were examined at 2 and 7 days after MCAO. Results: The AHR signaling pathway was significantly upregulated after stroke. Both TMF-treated WT and AHRcKO mice showed

significantly decreased infarct volume, improved sensorimotor, and nonspatial working memory functions compared with their respective controls. AHR immunoreactivities were increased predominantly in activated microglia and astrocytes after MCAO compared with the normal WT controls. The TMF-treated WT and AHRcKO mice demonstrated significant amelioration of astrogliosis and microgliosis. Interestingly, these mice also showed augmentation of neural progenitor cell proliferation at the ipsilesional neurogenic subventricular zone (SVZ) and the hippocampal subgranular zone. At the peri-infarct cortex, the ipsilesional SVZ/striatum, and the hippocampus, both the TMF-treated and AHRcKO mice demonstrated downregulated IL-1 β , IL-6, IFN- γ , CXCL1, and S100 β , and concomitantly upregulated Neurogenin 2 and Neurogenin 1. Conclusion: Neural cell-specific AHR activation following acute ischemic stroke increased astrogliosis and suppressed neurogenesis in adult mice. AHR inhibition in acute stroke may potentially benefit functional outcomes likely through reducing proinflammatory gliosis and preserving neurogenesis.

Database: CINAHL

Eating nuts can reduce risk of heart attack and stroke.

Author(s):

Source: Australian Nursing & Midwifery Journal; Oct 2019; vol. 26 (no. 8); p. 5-5

Publication Date: Oct 2019

Publication Type(s): Periodical

Available at [Australian Nursing & Midwifery Journal](#) - from EBSCO (Biomedical Reference Collection - Comprehensive)

Available at [Australian Nursing & Midwifery Journal](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract:The article focuses on research which showed that eating nuts twice a week can effect a 17% lowering of risk of death from cardiovascular disease (CVD).

Database: CINAHL

Controlling Nutritional Status (CONUT) Score as a Predictor of All-Cause Mortality at 3 Months in Stroke Patients.

Author(s): López Espuela, Fidel; Roncero-Martín, Raúl; Zamorano, Juan Diego Pedrera; Rey-Sanchez, Purificación; Aliaga-Vera, Ignacio; Portilla Cuenca, Juan Carlos; Naranjo, Ignacio Casado; Morán-García, José María; Lavado-García, Jesús María

Source: Biological Research for Nursing; Oct 2019; vol. 21 (no. 5); p. 564-570

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Abstract:Malnutrition is frequently observed in patients after stroke and is associated with poor outcomes. Patients at risk of malnutrition may be identified with several nutrition screening tools, but no nutritional screening tool has been validated for use with stroke patients. The aim of this study was to explore the ability of the Controlling Nutritional Status (CONUT) score to predict 3-month mortality in stroke patients. Method: Patients were recruited from consecutive admissions at a hyperacute stroke unit and were screened for risk of malnutrition (light, moderate, or severe) using CONUT scores. At the next visit, 3-

month outcomes were obtained. Results: Of the 164 recruited patients, 51.2% were male. Mean patient age was 77.7 (SD = 7.0) years, and 85.8% of patients had an ischemic stroke. There was a significant difference in the survival rate ($p < .001$) at 3 months between patients with moderate risk for malnourishment compared to the other patients. The multivariate regression Cox model showed that moderate risk of malnourishment, according to the CONUT score, increased the risk for death at 3 months (hazard ratio = 1.086; 95% CI [1.057, 8.305]; $p < .039$). Conclusion: The CONUT score has predictive validity for all-cause mortality in stroke patients after 3 months, both in hospital and after discharge. Further prospective multicenter studies with larger samples are needed to clarify the usefulness of the CONUT score in the prognosis of all-cause mortality in stroke patients.

Database: CINAHL

Hydroxytyrosol, the Major Phenolic Compound of Olive Oil, as an Acute Therapeutic Strategy after Ischemic Stroke.

Author(s): Calahorra, Jesús; Shenk, Justin; Wielenga, Vera H.; Verweij, Vivienne; Geenen, Bram; Dederen, Pieter J.; Peinado Herreros, M^a Ángeles; Siles, Eva; Wiesmann, Maximilian; Kiliaan, Amanda J.

Source: *Nutrients*; Oct 2019; vol. 11 (no. 10); p. 2430-2430

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Available at [Nutrients](#) - from Europe PubMed Central - Open Access

Available at [Nutrients](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrients](#) - from Unpaywall

Abstract: Stroke is one of the leading causes of adult disability worldwide. After ischemic stroke, damaged tissue surrounding the irreversibly damaged core of the infarct, the penumbra, is still salvageable and is therefore a target for acute therapeutic strategies. The Mediterranean diet (MD) has been shown to lower stroke risk. MD is characterized by increased intake of extra-virgin olive oil, of which hydroxytyrosol (HT) is the foremost phenolic component. This study investigates the effect of an HT-enriched diet directly after stroke on regaining motor and cognitive functioning, MRI parameters, neuroinflammation, and neurogenesis. Stroke mice on an HT diet showed increased strength in the forepaws, as well as improved short-term recognition memory probably due to improvement in functional connectivity (FC). Moreover, mice on an HT diet showed increased cerebral blood flow (CBF) and also heightened expression of brain derived neurotrophic factor (Bdnf), indicating a novel neurogenic potential of HT. This result was additionally accompanied by an enhanced transcription of the postsynaptic marker postsynaptic density protein 95 (Psd-95) and by a decreased ionized calcium-binding adapter molecule 1 (IBA-1) level indicative of lower neuroinflammation. These results suggest that an HT-enriched diet could serve as a beneficial therapeutic approach to attenuate ischemic stroke-associated damage.

Database: CINAHL

Relationship between adherence to the Mediterranean Diet, intracerebral hemorrhage, and its location.

Author(s): Tuttolomondo, Antonino; Di Raimondo, Domenico; Casuccio, Alessandra; Velardo, Mariachiara; Salamone, Giovanni; Arnao, Valentina; Pecoraro, Rosaria; Della Corte, Vittoriano; Restivo, Vincenzo; Corpora, Francesca; Maida, Carlo; Simonetta, Irene; Cirrincione, Anna; Vassallo, Valerio; Pinto, Antonio

Source: Nutrition, Metabolism & Cardiovascular Diseases; Oct 2019; vol. 29 (no. 10); p. 1118-1125

Publication Date: Oct 2019

Publication Type(s): Academic Journal

PubMedID: 31383501

Abstract:Introduction: Although some authors evaluated the relationship between adherence to the Mediterranean Diet (MeDi) and both ischemic and hemorrhagic stroke, hemorrhagic stroke alone is not yet examined.Aims: We conducted a retrospective study to evaluate the relationship between adherence to MeDi and intracerebral hemorrhage (ICH) and different locations of ICH (ganglionic/internal capsule, brainstem/cerebellum, or lobar).Methods: We analyzed charts and collected data of all consecutive patients with ICH admitted to our Internal Medicine Ward from 2005 to 2014. A scale indicating the degree of adherence to the traditional MeDi Score was constructed.Results: When compared with 100 subjects without ICH, 103 subjects with ICH had significantly higher mean values of LDL (91.1 ± 38.7 mg/dl vs. 79.2 ± 34.4 mg/dl; $p = 0.031$), triglycerides (118.9 ± 62.9 mg/dl vs. 101.6 ± 47.6 mg/dl; $p = 0.026$), and proteinuria (32.6 ± 50.0 mg/dl vs. 18.1 ± 39.6 mg/dl; $p=0.024$) and a significantly lower mean MeDi Score (3.9 ± 1.0 vs. 7.0 ± 1.4 ; $p < 0.0001$). In a multiple regression analysis, smoking, diastolic blood pressure (DBP), and the MeDi Score remained significantly associated with ICH. We also observed a significantly lower mean MeDi Score in the lobar location group when compared with the ganglionic/internal capsule group (4.3 ± 1.0 vs. 3.5 ± 0.9 ; $p < 0.0005$).Discussion: Our findings regarding the higher prevalence of ICH in patients with lower adherence to MeDi may be related to the fact that patients with lower MeDi Score exhibit a worse cardiovascular risk profile with increased risk factors such as hypertension and dyslipidemia.

Database: CINAHL

Dietary saturated fat intake and risk of stroke: Systematic review and dose-response meta-analysis of prospective cohort studies.

Author(s): Kang, Zhou-Qing; Yang, Ying; Xiao, Bo

Source: Nutrition, Metabolism & Cardiovascular Diseases; Oct 2019; vol. 29 (no. 10)

Publication Date: Oct 2019

Publication Type(s): Academic Journal

PubMedID: 31791641

Abstract:Background and Aims: Because of the conflicting research results, the association between saturated fatty acid (SFA) consumption and the risk of stroke remains controversial. We conducted a meta-analysis to evaluate potential dose-response relation between SFA intake and stroke.Methods and Results: PubMed, Embase, the Cochrane Library Central Register of Controlled Trials, and Web of Science were searched. Summary relative risks (RRs) of the highest vs. the lowest category of SFA intake and their 95% confidence intervals (CIs) were pooled by random-effects models. Linear or nonlinear dose-

response trend estimations were evaluated with data from categories of SFA consumption in each study. Fourteen studies involving a total of 598,435 participants were eligible for high vs. low meta-analysis, and 12 studies involving a total of 462,268 participants were eligible for the dose-response relation assessment. Higher dietary SFA intake was associated with a decreased overall risk for stroke (RR, 0.87; 95% CI, 0.78-0.96; I² = 37.8%). A linear relation between SFA and stroke was explored (P = 0.01), the pooled RR of stroke per 10 g/day increase in SFA intake was 0.94 (95% CI, 0.89-0.98; P = 0.01). Conclusion: This meta-analysis further demonstrated that a higher consumption of dietary SFA is associated with a lower risk of stroke, and every 10 g/day increase in SFA intake is associated with a 6% relative risk reduction in the rate of stroke. Further research is needed to explore the influence of specific SFA types and different macronutrient replacement models of SFA on the stroke risk.

Database: CINAHL

Unsedated Outpatient Percutaneous Endoscopic Gastrostomy in Stroke Patients: Is It Feasible and Safe?

Author(s): Tsaousi, Georgia; Stavrou, George; Kapanidis, Konstantinos; Michalopoulos, Antonios; Kotzampassi, Katerina

Source: Surgical Laparoscopy, Endoscopy & Percutaneous Techniques; Oct 2019; vol. 29 (no. 5); p. 383-388

Publication Date: Oct 2019

Publication Type(s): Academic Journal

PubMedID: 31033632

Abstract: Percutaneous endoscopic gastrostomy (PEG) is an established practice for long-term nutrition in dysphagia-suffering stroke patients. This study sought to determine the feasibility and safety of outpatient, unsedated PEG implementation in stroke patients. This retrospective cohort study involved stroke victims who underwent unsedated outpatient PEG insertion from 2014 to 2017 at our Surgical Endoscopy Unit. Patients were given pharyngeal anesthesia with lidocaine 10% spray, while the PEG tube was placed under local anesthesia. The incidence of intraprocedural and postprocedural complications and 30-day mortality rate were recorded. Data from 127 cases were analyzed. The procedures were performed with minor, transient complications, which resolved after rescue maneuvers. No intraprocedural and postprocedural major complications or death were observed. During the 30-day follow-up, the most important complication involved a single case of accidental PEG removal that was successfully resolved surgically. Unsedated PEG insertion appears to be a feasible, well-tolerated, and safe option for stroke-related dysphagia.

Database: CINAHL

Vegetarians have healthier hearts.

Author(s):

Source: New Scientist; Sep 2019; vol. 243 (no. 3247); p. 17-17

Publication Date: Sep 2019

Publication Type(s): Periodical

Abstract:The article comments on research which found people who ate a vegetarian diet had a reduced risk of heart disease but an increased risk of stroke with the study showing over 10 years people on vegetarian diets had 10 fewer heart disease cases and three more stroke incidents per 1,000 people than meat eaters.

Database: CINAHL

Ramen restaurant prevalence is associated with stroke mortality in Japan: an ecological study.

Author(s): Matsuzono, Kosuke; Mieno, Makiko; Fujimoto, Shigeru

Source: Nutrition Journal; Sep 2019; vol. 18 (no. 1)

Publication Date: Sep 2019

Publication Type(s): Academic Journal

PubMedID: 31484549

Available at [Nutrition journal](#) - from BioMed Central

Available at [Nutrition journal](#) - from Europe PubMed Central - Open Access

Available at [Nutrition journal](#) - from EBSCO (MEDLINE Complete)

Available at [Nutrition journal](#) - from Unpaywall

Abstract:Background: The association between stroke and nutrition has recently been investigated. However, the association between diet and stroke in Japan has not been clarified. We hypothesized that there may be an association between consumption of ramen and stroke mortality. Therefore, we investigated the association between the prevalence of ramen restaurants and stroke mortality in Japanese prefectures.Methods: We used Pearson's correlation coefficients to evaluate associations between the prevalence of each of four restaurant types (ramen, fast food, French or Italian, and udon or soba) and age- and sex-adjusted stroke mortality rates in each prefecture. We also investigated correlations between acute myocardial infarction and the prevalence of each type of restaurant as a control. We obtained age- and sex-adjusted stroke mortality rates and the acute myocardial infarction mortality rate in each prefecture from the 2017 Trends in National Health published in Japan. Data on the number of restaurants of each type in each prefecture were obtained from the database of the Nippon Telegraph and Telephone Corporation.Results: The prevalence of ramen restaurants, but not of other restaurant types, positively correlated with stroke mortality in both men and women ($r > 0.5$). We found no correlation between ramen restaurant prevalence and mortality from acute myocardial infarction.Conclusion: The prevalence of ramen restaurants in Japanese prefectures has a significant correlation with the stroke mortality rate.

Database: CINAHL

Guidewire-assisted Nasogastric Tube Insertion in Post Stroke Patients: A Simple Bedside Trick.

Author(s): Madhusudhan, Soumya; Srinivasaiah, Bharath; Pai, Raghavendra; Gopalaiah, Venkatesh; Pai, Raghavendra K; Gopalaiah, Venkatesh Kumar

Source: Neurology India; Sep 2019; vol. 67 (no. 5); p. 1367-1368

Publication Date: Sep 2019

Publication Type(s): Academic Journal

PubMedID: 31744981

Available at [Neurology India](#) - from EBSCO (MEDLINE Complete)

Available at [Neurology India](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract: Approximately half of these patients have evidence of aspiration, and approximately 20% of these patients develop aspiration pneumonia. [[1]] NGT feeding is a classic, a classic technique to facilitate enteral nutrition and administration of drugs in patients with dysphagia. However, the insertion of NGT using a blind technique in stroke patients is not easy due to oropharyngeal discoordination.

Database: CINAHL

Evidence on the magnitude of the economic, health and population effects of palm cooking oil consumption: an integrated modelling approach with Thailand as a case study.

Author(s): Keogh-Brown, Marcus R.; Jensen, Henning Tarp; Basu, Sanjay; Aekplakorn, Wichai; Cuevas, Soledad; Dangour, Alan D.; Gheewala, Shabbir H.; Green, Rosemary; Joy, Edward JM; Rojroongwasinkul, Nipa; Thaiprasert, Nalitra; Shankar, Bhavani; Smith, Richard D.

Source: Population Health Metrics; Aug 2019; vol. 17 (no. 1)

Publication Date: Aug 2019

Publication Type(s): Academic Journal

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Abstract: Background: Palm oil's high yields, consequent low cost and highly versatile properties as a cooking oil and food ingredient have resulted in its thorough infiltration of the food sector in some countries. Longitudinal studies have associated palm oil's high saturated fatty acid content with non-communicable disease, but neither the economic or disease burdens have been assessed previously. Methods: This novel palm oil-focused disease burden assessment employs a fully integrated health, macroeconomic and demographic Computable General Equilibrium Model for Thailand with nine regional (urban/rural) households. Nutritional changes from food consumption are endogenously translated into health (myocardial infarction (MI) and stroke) and population outcomes and are fed back into the macroeconomic model as health and caregiver-related productive labour supply effects and healthcare costs to generate holistic 2016–2035 burden estimates. Model scenarios mirror the replacement of palm cooking oil with other dietary oils and are compared with simulated total Thai health and macroeconomic burdens for MI and stroke. Results: Replacing consumption of palm cooking oil with other dietary oils could reduce MI/stroke incident cases by 8280/2639 and cumulative deaths by 4683/894 over 20 years, removing approximately 0.5% of the total Thai burden of MI/stroke. This palm cooking oil replacement would reduce consumption shares of saturated/monounsaturated fatty acids in Thai household consumption by 6.5%/3% and increase polyunsaturated fatty acid consumption shares by 14%, yielding a 1.74% decrease in the population-wide total-to-HDL cholesterol ratio after 20 years. The macroeconomic burden that would be removed is US\$308mn, approximately 0.44% of the total burden of MI/stroke on Thailand's economy

or 0.003% of cumulative 20-year GDP. Bangkok and Central region households benefit most from removal of disease burdens. Conclusions: Simulations indicate that consumption of palm cooking oil, rather than other dietary oils, imposes a negative health burden (MI and stroke) and associated economic burden on a high consuming country, such as Thailand. Integrated sectoral model frameworks to assess these burdens are possible, and burden estimates from our simulated direct replacement of palm cooking oil indicate that using these frameworks both for broader analyses of dietary palm oil use and total burden analyses of other diseases may also be beneficial.

Database: CINAHL

Determinants of stroke prevalence in the southeastern region of the United States.

Author(s): Ilunga Tshiswaka, Daudet; Ibe-Lamberts, Kelechi D.; Fazio, Michael; Morgan, John Derek; Cook, Courtney; Memiah, Peter

Source: Journal of Public Health (09431853); Aug 2019; vol. 27 (no. 4); p. 435-442

Publication Date: Aug 2019

Publication Type(s): Academic Journal

Abstract: Purpose: The southeast of the United States (USA) is a high stroke prevalence area otherwise known as the "Stroke Belt" in order to characterize the increased stroke morbidity and mortality rates found there. The purpose of this study was to characterize the relationship between socio-cultural factors and dietary habits related to stroke occurrence within the affected states. Methods: The 2015 Behavioral Risk Factor Surveillance System (BRFSS) data was analyzed for both bivariate and multivariate models aimed at studying the interaction between socio-cultural factors and the prevalence pattern of stroke in the southeastern area of the USA. Results: Overall, 4% of individuals who lived in the US southeastern states of Alabama, Florida, Georgia, Louisiana, and Mississippi had stroke. Of these, Mississippi had the most stroke victims, followed by Alabama, Louisiana, Georgia, and Florida, with 5.1%, 4.7%, 4.5%, 4.3%, and 3.4% respectively ($\chi^2 = 18.68$ and p value < 0.01). The logistic regression showed that individuals who consumed vegetables every day were less likely to be stroke victims than those who did not consume vegetables on a daily basis, with aOR = 0.74; CI = 0.59–0.91; p value < 0.01 . Surprisingly, individuals who drank alcohol were less likely to report stroke than those who did not drink alcohol (aOR = 0.63; CI = 0.51–0.79; p value < 0.001). Conclusion: Characterization of factors associated with stroke prevalence in a region of the USA known for its adverse stroke rates is essential for offsetting the burden of this public health issue and for promoting health.

Database: CINAHL

Egg Consumption and Risk of Total and Cause-Specific Mortality: An Individual-Based Cohort Study and Pooling Prospective Studies on Behalf of the Lipid and Blood Pressure Meta-analysis Collaboration (LBPMC) Group.

Author(s): Mazidi, Mohsen; Katsiki, Niki; Mikhailidis, Dimitri P.; Pencina, Michael J.; Banach, Maciej

Source: Journal of the American College of Nutrition; Aug 2019; vol. 38 (no. 6); p. 552-563

Publication Date: Aug 2019

Publication Type(s): Academic Journal

PubMedID: 31173548

Abstract: The associations of egg consumption with total, coronary heart disease (CHD), and stroke mortality are poorly understood. We prospectively evaluated the link between total, CHD, and stroke mortality with egg consumption using a randomly selected sample of U.S. adults. Next we validated these results within a meta-analysis and systematic review of all available prospective results. We assessed the mean of cardiometabolic risk factors across the intake of eggs. We made the analysis based on data from the National Health and Nutrition Examination Surveys (NHANES; 1999-2010). In NHANES, vital status through December 31, 2011, was ascertained. Cox proportional hazard regression models were used to relate baseline egg consumption with all-cause and cause-specific mortality. PubMed, Scopus, Web of Science, and Google Scholar databases were also searched (up to December 2017). The DerSimonian-Laird method and generic inverse variance methods were used for quantitative data synthesis. Overall, 23,524 participants from NHANES were included (mean age of 47.7 years; 48.7% were men). Across increasing the intake of eggs, adjusted mean levels of cardiometabolic risk factors worsened. Adjusted logistic regression showed that participants in the highest category of egg intake had a greater risk of diabetes (T2DM; 30%) and hypertension (HTN; 48%). With regard to total and CHD mortality, multivariable Cox regression in a fully adjusted model showed no link in males and females. In males, egg intake had a reverse (66%) association with stroke mortality, while this link was not significant among females. The results of pooling data from published prospective studies also showed no link between CHD and total mortality with egg consumption, whereas we observed a reverse (28%) association between egg intake and stroke mortality. These findings were robust after sensitivity analysis. According to our findings, egg intake had no association with CHD and total mortality, whereas was associated with lower risk of mortality from stroke. Egg consumption was associated with T2DM, HTN, C-reactive protein, and markers of glucose/insulin homeostasis. If confirmed in clinical trials (causation), this information may have applications for population-wide health measures. Key teaching points No link between total and CHD mortality with eggs intake in males and females. In males, egg intake had a reverse association with stroke mortality, while this link was not significant among females. The results of pooling data from published prospective studies also showed no link between CHD and total mortality with egg consumption, whereas we observed a reverse association between egg intake and stroke mortality.

Database: CINAHL

The Mediterranean Diet in the Stroke Belt: A Cross-Sectional Study on Adherence and Perceived Knowledge, Barriers, and Benefits.

Author(s): Knight, Caroline J.; Jackson, Olivia; Rahman, Imran; Burnett, Donna O.; Frugé, Andrew D.; Greene, Michael W.

Source: *Nutrients*; Aug 2019; vol. 11 (no. 8); p. 1847-1847

Publication Date: Aug 2019

Publication Type(s): Academic Journal

Available at [Nutrients](#) - from Europe PubMed Central - Open Access

Available at [Nutrients](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrients](#) - from Unpaywall

Abstract:The Mediterranean diet (MedDiet) is recommended by the current Dietary Guidelines for Americans, yet little is known about the perceived barriers and benefits to the diet in the U.S., particularly in the Stroke Belt (SB). Thus, the purpose of this study was to examine MedDiet adherence and perceived knowledge, benefits, and barriers to the MedDiet in the U.S. A cross-sectional study was conducted on 1447 participants in the U.S., and responses were sorted into geographic groups: the SB, California (CA), and all other US states (OtherUS). Linear models and multivariable linear regression analysis was used for data analysis. Convenience, sensory factors, and health were greater barriers to the MedDiet in the SB group, but not the OtherUS group ($p < 0.05$). Weight loss was considered a benefit of the MedDiet in the SB ($p < 0.05$), while price and familiarity were found to be less of a benefit ($p < 0.05$). Respondents with a bachelor's degree or greater education had greater total MEDAS scores ($p < 0.05$) and obese participants had a lower MedDiet adherence score ($p < 0.05$). Our results identify key barriers and benefits of the MedDiet in the SB which can inform targeted MedDiet intervention studies.

Database: CINAHL

OBESITY

Obesity Update in Women.

Author(s): Kapoor, Ekta; Faubion, Stephanie S.; Kling, Juliana M.

Source: Journal of Women's Health (15409996); Dec 2019; vol. 28 (no. 12); p. 1601-1605

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract:The Clinical Update series is intended to help busy providers stay up to date with important and potentially practice changing articles that have been published on topics pertinent to the care of women. The rates of obesity and the resultant morbidities are rising worldwide, making it a high-priority health issue for the medical community. Moreover, the pathophysiology and management of obesity and visceral fat accumulation in women has important nuances, distinct from those in men. It is important to consider the effect of unique female-specific influences such as reproductive stage and pregnancy. Therefore, we have chosen to review six high-impact recent studies relating to obesity and its management in women. These include guidelines for management of obesity in pregnancy, risk of nonmelanoma skin cancer in overweight/obese women, the association of vascular fat and decline in physical function in midlife women, the predictors for weight gain in premenopausal women with early-stage breast cancer, dietary patterns and obesity in postmenopausal women, and finally, normal weight obesity and mortality risk in postmenopausal women.

Database: CINAHL

Serum carotenoids are strongly associated with dermal carotenoids but not self-reported fruit and vegetable intake among overweight and obese women.

Author(s): Morgan, Emily H.; Graham, Meredith L.; Marshall, Grace A.; Hanson, Karla L.; Seguin-Fowler, Rebecca A.

Source: International Journal of Behavioral Nutrition & Physical Activity; Nov 2019; vol. 16 (no. 1)

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [International Journal of Behavioral Nutrition and Physical Activity](#) - from BioMed Central

Available at [International Journal of Behavioral Nutrition and Physical Activity](#) - from Europe PubMed Central - Open Access

Available at [International Journal of Behavioral Nutrition and Physical Activity](#) - from Unpaywall

Abstract:Background: Accurate assessment of fruit and vegetable intake (FVI) is essential for public health nutrition research and surveillance. Blood carotenoid concentrations are robust biomarkers of FVI, but collecting blood samples typically is not feasible in population-based studies. Understanding how well non-invasive measures compare to blood estimates is important for advancing surveillance and evaluation. The objective of this study was to examine the associations between serum carotenoids and four non-invasive measures of FVI in overweight and obese women. Methods: This study utilized baseline data from 157 overweight or obese women (95.5% white, mean age 58.56 years \pm 9.49 years) enrolled in the Strong Hearts, Healthy Communities randomized trial, including two direct measures of carotenoids and three self-reported measures of FVI. Participants completed a fasting blood draw, dermal carotenoid scans using resonance Raman spectroscopy (RRS), a two-item FVI screener modeled after the American Heart Association's Life's Simple 7 "My Life Check" tool (modified AHA tool), the National Cancer Institute's All-Day Fruit and Vegetable Screener (FVS), multiple 24-h dietary recalls, physical measurements, and demographic and health behavior questions. We analyzed blood for total carotenoids and derived total FVI estimates from self-report tools. We used multivariate linear regression models to examine associations between each non-invasive tool and serum carotenoids under four scenarios analogous to different research contexts in which varying breadths of participant data are available. We also calculated adjusted Pearson's correlations between serum carotenoids, dermal carotenoids, and the self-reported measures. Results: Dermal carotenoids were strongly correlated with serum carotenoids (0.71, $P < 0.00067$) and associated with serum carotenoids in all regression models (0.42–0.43, $P < 0.002$). None of the self-reported FVI measures were significantly associated with serum or dermal carotenoids in adjusted regression models or correlation analyses. Conclusions: Compared to self-reported FVI, we found dermal carotenoids measured by RRS to be a superior method to approximate serum carotenoids among overweight and obese women. More research is needed to investigate these assessment methods in diverse populations. Trial registration: ClinicalTrials.gov Identifier: NCT02499731, registered July 16, 2015.

Database: CINAHL

Changes in Circulating BDNF in relation to Sex, Diet, and Exercise: A 12-Week Randomized Controlled Study in Overweight and Obese Participants.

Author(s): Glud, M.; Christiansen, T.; Larsen, L. H.; Richelsen, B.; Bruun, J. M.

Source: Journal of Obesity; Nov 2019 ; p. 1-7

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [Journal of obesity](#) - from Europe PubMed Central - Open Access

Available at [Journal of obesity](#) - from Hindawi Open Access Journals

Available at [Journal of obesity](#) - from Unpaywall

Abstract: Circulating BDNF is higher in women than in men and suggested to be affected by changes in food intake, body weight, and exercise. The purpose of this study was to compare BDNF concentrations in women and men during a 12-week weight loss intervention. Using a previously published 12-week randomized study, serum BDNF was assessed at baseline and after 12 weeks using an enzyme-linked immunosorbent assay method. Fifty overweight or obese but healthy individuals (26 women, mean age of 36.4 ± 7.9 years; 24 men, mean age of 38.0 ± 5.9 years) were included and allocated into three groups: exercise-only (EXO; 12 weeks of aerobic exercise and isocaloric diet), diet-only (DIO; 8 weeks of very low energy diet (VLED 600 kcal/day) followed by a 4-week weight maintenance diet), or diet and exercise (DEX; 12 weeks of aerobic exercise in parallel with 8 weeks of VLED (800 kcal/day) followed by a 4-week weight maintenance diet). At baseline, BDNF levels were 25% higher in women compared to men ($p=0.006$). Body weight was reduced in all intervention groups ($p<0.006$). Exercise (EXO group) induced a 22% reduction in circulating BDNF in men ($p=0.037$) and women ($p=0.080$). In the DIO and DEX groups, a significant reduction in BDNF levels (29.9%; $p=0.035$ and 32.5%; $p=0.003$, respectively) was observed in women but not in men. In conclusion, circulating BDNF was significantly changed by diet alone or combined with exercise in women and only by exercise alone in men. This suggests that changes in circulating BDNF depend on weight loss methods (diet/exercise) as well as sex.

Database: CINAHL

Irregularity in breakfast consumption and daily meal timing patterns in association with body weight status and inflammation.

Author(s): Guinter, Mark A.; Campbell, Peter T.; Patel, Alpa V.; McCullough, Marjorie L.

Source: British Journal of Nutrition; Nov 2019; vol. 122 (no. 10); p. 1192-1200

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract: Irregular breakfast consumption and food timing patterns in relation to weight status and inflammation were investigated in a cross-sectional manner among 644 participants in the Cancer Prevention Study-3 Diet Assessment Sub-study. Breakfast consumption, and the individual means and the intra-individual standard deviation (i sd) of time at first intake of the day, duration of daily intake window and midpoint of daily intake window were collected via six 24-h recalls and examined in relation to BMI, waist circumference (WC) and inflammation (glycoprotein acetyl (GlycA)). Compared with consuming breakfast on all six recalls, linear regression models showed those who consumed breakfast on 4 or 5 of the days had a 1.29 (95 % CI 0.19, 2.38) and 1.64 (95 % CI 0.12, 3.16) kg/m² higher BMI; no association was found for consuming breakfast ≤ 3 d. At 1 h later, the average time of first intake was associated with a 0.44 (95 % CI 0.04, 0.84) kg/m² higher BMI. A 1-h increase in the i sd of first intake was associated with a 1.12 (95 % CI 0.49, 1.75) kg/m² higher BMI; i sd in duration and midpoint of intake window were significant prior to additional adjustment for i sd in the first intake. One-hour increases in i

sd for the first intake time (β : 0.15; 95 % CI 0.04, 0.26) and the midpoint of intake window (β : 0.16; 95 % CI 0.02, 0.31) were associated with higher GlycA. No associations were observed for WC independent of BMI. The results provide evidence that irregularity in breakfast consumption and daily intake timing patterns, particularly early in the day, may be related to weight status and inflammation.

Database: CINAHL

CANCER:

Quick Studies.

Author(s):

Source: Nutrition Action Health Letter; Dec 2019; vol. 46 (no. 10); p. 7-7

Publication Date: Dec 2019

Publication Type(s): Periodical

Available at [Nutrition Action Health Letter](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract:The article highlights several health-related studies. The American Heart Association and American College of Cardiology published its 2019 guidelines on what foods can cut the risk of having a heart attack or stroke. A study found that women assigned to exercise for 45 to 60 minutes at least three times a week all month experienced lesser menstrual pain. Canadian researchers found that some tea bags are made of microplastic and nanoplastic particles which can increase the risk of cancer.

Database: CINAHL

Development and validation of an individualized risk prediction model for oropharynx cancer in the US population.

Author(s): Tota, Joseph E.; Gillison, Maura L.; Katki, Hormuzd A.; Kahle, Lisa; Pickard, Robert K.; Xiao, Weihong; Jiang, Bo; Graubard, Barry I.; Chaturvedi, Anil K.

Source: Cancer (0008543X); Dec 2019; vol. 125 (no. 24); p. 4407-4416

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31454434

Available at [Cancer \(0008543X\)](#) - from Wiley Online Library

Abstract:Background: The incidence of oropharynx cancers has increased substantially in the United States. However, risk stratification tools for the identification of high-risk individuals do not exist. In this study, an individualized risk prediction model was developed and validated for oropharynx cancers in the US population. Methods: A synthetic, US population-based case-control study was conducted. Oropharynx cancer cases diagnosed at Ohio State University (n = 241) were propensity-weighted to represent oropharynx cancers occurring annually in the United States during 2009-2014 (n = 12,656). Controls (n = 9327) included participants in the National Health and Nutrition Examination Survey (2009-2014)

and represented the annual US population aged 30 to 69 years (n = 154,532,508). The individualized 1-year absolute risk of oropharynx cancer was estimated with weighted logistic regression. Results: The risk prediction model included age, sex, race, smoking, alcohol use, lifetime sexual partners, and oral oncogenic human papillomavirus (HPV) status. The model had good discrimination and calibration in split-sample validation (area under the curve [AUC], 0.94; 95% confidence interval [CI], 0.92-0.97; observed/expected [O/E], 1.01; 95% CI, 0.70-1.32) and external validation (AUC, 0.87; 95% CI, 0.84-0.90; O/E, 1.08; 95% CI, 0.77-1.39). In the US population, 1-year predicted risks of oropharynx cancer were highest for older individuals (21.1/100,000 for 65- to 69-year-olds), men (13.9/100,000), whites (10.4/100,000), smokers (18.0/100,000 for >20 pack-years), heavy alcohol users (18.4/100,000), and those with prevalent oral oncogenic HPV (140.4/100,000). The risk prediction model provided substantial risk stratification, with approximately 77% of all oropharynx cancers and approximately 99% of HPV-positive oropharynx cancers occurring in the 10% of the US population with the highest model-predicted risk. Conclusions: This risk prediction model will enable the efficient design of studies to address the outstanding questions pertaining to the natural history, screening, and secondary prevention of oropharynx cancers.

Database: CINAHL

The pro-apoptotic effect of a Terpene-rich *Annona cherimola* leaf extract on leukemic cell lines.

Author(s): Ammourey, Carl; Younes, Maria; El Khoury, Marianne; Hodroj, Mohammad H.; Haykal, Tony; Nasr, Peter; Sily, Marilyne; Taleb, Robin I.; Sarkis, Rita; Khalife, Rana; Rizk, Sandra

Source: BMC Complementary & Alternative Medicine; Dec 2019; vol. 19 (no. 1); p. 1-10

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [BMC Complementary and Alternative Medicine](#) - from BioMed Central

Available at [BMC Complementary and Alternative Medicine](#) - from Europe PubMed Central - Open Access

Available at [BMC Complementary and Alternative Medicine](#) - from EBSCO (MEDLINE Complete)

Available at [BMC Complementary and Alternative Medicine](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract: Background: The edible fruit *Annona cherimola* has previously shown many nutritional and medicinal properties. The current study evaluates the anti-cancer and anti-proliferative properties of *Annona cherimola* ethanolic leaf extract (AELE) on Acute Myeloid Leukemia (AML) cell lines cultured in vitro (Monomac-1 and KG-1). Methods: The anti-proliferative effect of *A. cherimola* ethanolic leaf extract was evaluated via cell viability assay. Its pro-apoptotic effect was assessed through Cell Death ELISA and dual Annexin V/PI staining. To further investigate the molecular mechanism by which the extract promoted apoptosis and inhibited the proliferation of the AML cells used, apoptotic protein expression was determined through western blots. Extract composition was elucidated by Gas Chromatography-Mass Spectrometry (GC-MS). Results: Our results showed that the

treatment with *A. cherimola* ethanolic leaf extract exhibited an inhibitory effect on the proliferation of both cancer cell lines used in a dose- and time-dependent manner, with no toxic effects on normal mononuclear cells (MNCs) isolated from human bone marrow. This effect was mediated by DNA fragmentation and apoptosis, as revealed by Cell Death ELISA and dual Annexin V/PI staining. Western blot analysis revealed a Bax/Bcl2 dependent mechanism of apoptosis, as well as PARP cleavage, confirming the apoptotic results observed previously. These effects may be attributed to the presence of terpenes which constitute a large component of the leafy extract, as revealed via GC-MS. Conclusion: All the data presented in our study show that the terpene-rich *A. cherimola* ethanolic leaf extract exhibits an anti-proliferative and pro-apoptotic effect on the AML cell lines used.

Database: CINAHL

Adherence to the low carbohydrate diet and the risk of breast Cancer in Iran.

Author(s): Sasanfar, Bahareh; Toorang, Fatemeh; Esmailzadeh, Ahmad; Zendehtdel, Kazem

Source: Nutrition Journal; Dec 2019; vol. 18 (no. 1); p. 1-9

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31831005

Available at [Nutrition journal](#) - from BioMed Central

Available at [Nutrition journal](#) - from Europe PubMed Central - Open Access

Available at [Nutrition journal](#) - from EBSCO (MEDLINE Complete)

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Abstract:Background: Previous studies on the link between macronutrients and breast cancer have mostly focused on individual macronutrients rather than their combination. This study investigates the association between adherence to a low carbohydrate diet and odds of breast cancer among women. Methods: This hospital-based case-control study was carried out on 412 women with pathologically confirmed breast cancer within the past year and 456 apparently healthy controls that were matched in terms of age and residential place. Dietary data was collected using a 168-item validated FFQ. Participants were classified in terms of quintiles of percentages of energy intake from carbohydrates, proteins, and fats. Then, individuals in the highest quintile of fat and protein intake were given a score of 5 and those in the lowest quintile of these macronutrients were given a score of 1. Participants in the other quintiles of these macronutrients were given the corresponding score. In terms of carbohydrate intake, those in the highest quintile received a score of 1 and those in the lowest quintile received 5. The scores were then summed up to calculate the total low carbohydrate diet (LCD) score, which varied from 3 to 15. A higher score meant greater adherence to a low carbohydrate diet. Results: The mean age of study participants was 45.2 y and mean BMI was 28.4 kg/m². Mean LCD score of participants was 8.9 ± 2.5 (8.9 ± 2.6 in cases and 9.0 ± 2.5 in controls). Although no significant association was observed between adherence to the LCD score and odds of breast cancer in the study population, a trend toward significant positive association was seen between consumption of LCD and odds of breast cancer in postmenopausal women; after controlling for several potential confounders, individuals in the third quartile of LCD score were 1.94 times more likely to have breast cancer than those in the lowest quartile (95% CI: 1.00, 3.76). This

association strengthened after controlling for dietary variables (2.50; 1.18-5.32). Even after further adjustment for BMI, this association remained significant (2.64, 1.23-5.67). No significant relationship was observed in premenopausal women, either before or after controlling for confounders. Conclusion: Adherence to LCD may be associated with increased odds of breast cancer in postmenopausal women. Prospective cohort studies are needed to confirm these findings.

Database: CINAHL

Oolong tea consumption and its interactions with a novel composite index on esophageal squamous cell carcinoma.

Author(s): Liu, Shuang; Lin, Zheng; Huang, Liping; Chen, Huilin; Liu, Yanfang; He, Fei; Peng, Xiane; Chen, Weilin; Huang, Ruigang; Lu, Wanting; Yang, Huimin; Xiang, Zhisheng; Zhang, Zhihui; Hu, Zhijian

Source: BMC Complementary & Alternative Medicine; Dec 2019; vol. 19 (no. 1); p. 1-8

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [BMC complementary and alternative medicine](#) - from BioMed Central

Available at [BMC complementary and alternative medicine](#) - from Europe PubMed Central - Open Access

Available at [BMC complementary and alternative medicine](#) - from EBSCO (MEDLINE Complete)

Available at [BMC complementary and alternative medicine](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMC complementary and alternative medicine](#) - from Unpaywall

Abstract:Background: No previous study has investigated the association between oolong tea consumption and esophageal squamous cell carcinoma (ESCC), we aim to elucidate the association between oolong tea consumption and ESCC and its joint effects with a novel composite index. Methods: In a hospital-based case-control study, 646 cases of ESCC patients and 646 sex and age matched controls were recruited. A composite index was calculated to evaluate the role of demographic characteristics and life exposure factors in ESCC. Unconditional logistic regression was used to calculate the point estimates between oolong tea consumption and risk of ESCC. Results: No statistically significant association was found between oolong tea consumption and ESCC (OR = 1.39, 95% CI: 0.94–2.05). However, drinking hot oolong tea associated with increased risk of ESCC (OR = 1.60, 95% CI: 1.06–2.41). Furthermore, drinking hot oolong tea increased ESCC risk in the high-risk group (composite index > 0.55) (OR = 3.14, 95% CI: 1.93–5.11), but not in the low-risk group (composite index ≤ 0.55) (OR = 1.16, 95% CI: 0.74–1.83). Drinking warm oolong tea did not influence the risk of ESCC. Conclusions: No association between oolong tea consumption and risk of ESCC were found, however, drinking hot oolong tea significantly increased the risk of ESCC, especially in high-risk populations.

Database: CINAHL

Effects of vitamin D and omega-3 fatty acids co-supplementation on inflammatory biomarkers, tumor marker CEA, and nutritional status in patients with colorectal cancer: a study protocol for a double blind randomized controlled trial.

Author(s): Haidari, Fatemeh; Abiri, Behnaz; Iravani, Masood; Razavi, Seyed-Mohsen; Sarbakhsh, Parvin; Ahmadi-Angali, Kambiz; Vafa, Mohammadreza

Source: Trials; Dec 2019; vol. 20 (no. 1)

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31815661

Available at [Trials](#) - from BioMed Central

Available at [Trials](#) - from Europe PubMed Central - Open Access

Available at [Trials](#) - from EBSCO (MEDLINE Complete)

Available at [Trials](#) - from Unpaywall

Abstract:Background: Much evidence is available demonstrating that both vitamin D and omega-3 fatty acids block the development and progression of colonic carcinogenesis. The results of animal studies have shown that the consumption of omega-3 fatty acids can decrease inflammatory biomarkers, enhance the efficacy of chemotherapy, and decrease the side effects of chemotherapy or cancer. Also, observational studies propose that higher levels of 25(OH)D are related to improved survival of colorectal cancer patients. This study will aim to evaluate the effects of vitamin D and omega-3 fatty acids co-supplementation on inflammatory biomarkers, tumor marker CEA, and nutritional status in colorectal cancer patients.Methods/design: We will carry out an 8-week double-blind randomized, placebo-controlled clinical trial to evaluate the effects of vitamin D and omega-3 fatty acids co-supplementation on inflammatory biomarkers, tumor marker CEA, and nutritional status in patients with stage II or III colorectal cancer undergoing chemotherapy.Discussion: Because of the important effects of vitamin D and omega-3 fatty acids on molecular pathways involved in cancer development and progression, it seems that both vitamin D and omega-3 fatty acids may provide a new adjuvant therapy by decreasing inflammatory biomarkers and resistance to cancer treatment in patients with colorectal cancer.Trial Registration: Iranian Registry of Clinical Trials IRCT20180306038979N1. Registered on 16 March 2018.

Database: CINAHL

Fecal microbiome as determinant of the effect of diet on colorectal cancer risk: comparison of meat-based versus pesco-vegetarian diets (the MeaTlc study).

Author(s): Sofi, Francesco; Dinu, Monica; Pagliai, Giuditta; Pierre, Fabrice; Gueraud, Francoise; Bowman, Jildau; Gerard, Philippe; Longo, Vincenzo; Giovannelli, Lisa; Caderni, Giovanna; de Filippo, Carlotta

Source: Trials; Dec 2019; vol. 20 (no. 1)

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31815647

Available at [Trials](#) - from BioMed Central

Available at [Trials](#) - from Europe PubMed Central - Open Access

Available at [Trials](#) - from EBSCO (MEDLINE Complete)

Available at [Trials](#) - from Unpaywall

Abstract:Background: Convincing evidence suggests that the risk of colorectal cancer (CRC) is increased by the typical Western diet characterized by high consumption of red and processed meat. In addition, some epidemiological studies suggest a reduction in the risk of CRC associated with fish consumption. The role of the gut microbiome in this diet-associated risk is not well understood.Methods/design: This is a randomized parallel open clinical trial comprising a total of 150 clinically healthy subjects randomly assigned to three groups: a meat-based diet of which 4 portions per week are red meat (1 portion = 150 g), 3 portions per week are processed meat (1 portion = 50 g), and 1 portion per week is poultry (1 portion = 150 g), for a total amount of 900 g per week of meat and derivatives; a meat-based diet supplemented with alpha-tocopherol; and a pesco-vegetarian diet excluding fresh and processed meat and poultry, but which includes 3 portions per week of fish for a total amount of 450 g per week. Each intervention will last 3 months. The three diets will be isocaloric and of three different sizes according to specific energy requirements. Anthropometric measurements, body composition, and blood and fecal samples will be obtained from each participant at the beginning and end of each intervention phase. The measure of the primary outcome will be the change from baseline in DNA damage induced by fecal water using the comet assay in a cellular model. Secondary outcome measures will be changes in the profile of fecal microbiomes, global fecal and urinary peroxidation markers, and neoplastic biomarkers.Discussion: Although epidemiological data support the promoting role of meat and the possible protective role of fish in colon carcinogenesis, no study has directly compared dietary profiles characterized by the presence of these two food groups and the role of the gut microbiome in these diet-associated CRC risks. This study will test the effect of these dietary profiles on validated CRC risk biomarkers.Trial Registration: ClinicalTrials.gov, NCT03416777. Registered on 3 May 2018.

Database: CINAHL

Assessing the nutritional needs of men with prostate cancer.

Author(s): McLaughlin, Kaitlin; Hedden, Lindsay; Pollock, Philip; Higano, Celestia; Murphy, Rachel A.

Source: Nutrition Journal; Dec 2019; vol. 18 (no. 1)

Publication Date: Dec 2019

Publication Type(s): Academic Journal

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Available at [Nutrition journal](#) - from BioMed Central

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Abstract:Background: Nutrition is important for prostate cancer (PC) survivorship care to help achieve a healthy weight, reduce treatment side effects and reduce the risk of developing other chronic diseases. We aimed to advance the understanding of the

nutritional needs of men with PC and services that could be potentially implemented to address them. Methods: We conducted a needs assessment of nutrition services for men with PC drawing on four perspectives; 1) patient evaluation of a nutrition education session in British Columbia (BC), 2) survey of BC health professionals, 3) an environmental scan of existing nutrition services across Canada and 4) a scoping literature review. Results: Patients expressed a need for more nutrition information and a desire for additional nutrition services. More than 60% of health professionals believed there is a need for more nutrition services for men with PC, and reported the focus should be on weight management or management of PC progression. The environmental scan revealed few existing services for men with PC across Canada, most were inclusive of multiple cancers and not tailored for men with PC. Eighteen completed studies were identified in the scoping literature review. The majority provided combined diet and exercise programs with various formats of delivery such as individual, group and home-based. Overall, 78% of studies reported improvements in one or more of the following measures: dietary intake/ diet quality, body composition, self-efficacy, quality of life, fatigue, practicing health behavior goals and physical function/ exercise. Four studies assessed feasibility, adherence or satisfaction with all reporting positive findings. Conclusion: Despite the high prevalence of PC in Canada, and the perceived need for more support by patients and health professionals, there are limited nutrition services for men with PC. Evidence from the literature suggests nutrition services are effective and well-accepted by men with PC. Our findings define a need for standardized nutrition services for men with PC that assess and meet long term nutritional needs. Our findings also provide insight into the type and delivery of nutrition services that may help close the gap in care for men with PC.

Database: CINAHL

The relation between Malnutrition Universal Screening Tool (MUST), computed tomography–derived body composition, systemic inflammation, and clinical outcomes in patients undergoing surgery for colorectal cancer.

Author(s): Almasaudi, Arwa S; McSorley, Stephen T; Dolan, Ross D; Edwards, Christine A; McMillan, Donald C

Source: American Journal of Clinical Nutrition; Dec 2019; vol. 110 (no. 6); p. 1327-1334

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [The American Journal of Clinical Nutrition](#) - from EBSCO (MEDLINE Complete)

Abstract: Background Nutritional status is an important factor affecting a patient's clinical outcomes. Early identification of patients who are at risk of malnutrition is important to improve clinical outcomes and reduce health cost. The Malnutrition Universal Screening Tool (MUST) has been recommended as part of the routine nursing assessment for all patients at hospital admission. Objective The aim of this study was to examine the association between nutritional status (MUST), systemic inflammatory response (SIR), body composition, and clinical outcomes in patients undergoing surgery for colorectal cancer. Methods The malnutrition risk was examined using MUST in patients admitted for surgery for colorectal cancer between March 2013 and June 2016. Preoperative computed tomography scans were used to define the body composition. The presence of SIR was evidenced by the modified Glasgow prognostic score and the neutrophil to lymphocyte

ratio. Postoperative complications, severity of complication, length of hospital stay, and mortality were considered as outcome measures. Results The study included 363 patients (199 males, 164 females); 21% of the patients presented with a medium or high nutritional risk. There were significant associations between MUST and subcutaneous adiposity ($P < 0.001$), visceral obesity ($P < 0.001$), and low skeletal muscle index ($P < 0.001$). No statistically significant association was identified between MUST score and presence of any complication or severity of complication. On multivariate analysis, MUST remained independently associated with the length of hospital stay (OR: 2.17; 95% CI: 1.45, 3.26; $P < 0.001$). Kaplan–Meier survival curves showed an increased number of deaths for patients at medium or high risk of malnutrition ($P < 0.001$). This association was found to be independent of other confounding factors (HR: 1.45; 95% CI: 1.06, 1.99; $P = 0.020$). Conclusions MUST score is an independent marker of risk in those undergoing surgery for colorectal cancer and should remain a key part of preoperative assessment.

Database: CINAHL

Body size and dietary risk factors for aggressive prostate cancer: a case-control study.

Author(s): Pal, Mikaela; Hodge, Allison M.; Papa, Nathan; MacInnis, Robert J.; Bassett, Julie K.; Bolton, Damien; Davis, Ian D.; Millar, Jeremy; English, Dallas R.; Hopper, John L.; Severi, Gianluca; Southey, Melissa C.; Milne, Roger L.; Giles, Graham G.

Source: Cancer Causes & Control; Dec 2019; vol. 30 (no. 12); p. 1301-1312

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31552571

Abstract: Purpose: Diet and body size may affect the risk of aggressive prostate cancer (APC), but current evidence is inconclusive. Methods: A case-control study was conducted in men under 75 years of age recruited from urology practices in Victoria, Australia; 1,254 with APC and 818 controls for whom the presence of prostate cancer had been excluded by biopsy. Dietary intakes were assessed using a validated food frequency questionnaire. Multivariable unconditional logistic regression estimated odds ratios and confidence intervals for hypothesized risk factors, adjusting for age, family history of prostate cancer, country of birth, socioeconomic status, smoking, and other dietary factors. Results: Positive associations with APC (odds ratio, 95% confidence intervals, highest vs. lowest category or quintile) were observed for body mass index (1.34, 1.02-1.78, $P_{trend} = 0.04$), and trouser size (1.54, 1.17-2.04, $P_{trend} = 0.001$). Intakes of milk and all dairy products were inversely associated with APC risk (0.71, 0.53-0.96, $P_{trend} = 0.05$, and 0.64, 0.48-0.87, $P_{trend} = 0.012$, respectively), but there was little evidence of an association with other dietary variables ($P_{trend} > 0.05$). Conclusions: We confirmed previous evidence for a positive association between body size and risk of APC, and suggest that consumption of dairy products, and milk more specifically, is inversely associated with risk.

Database: CINAHL

Correlates of poor adherence to a healthy lifestyle among a diverse group of colorectal cancer survivors.

Author(s): Blair, Cindy K.; McDougall, Jean A.; Chiu, Vi K.; Wiggins, Charles L.; Rajput, Ashwani; Harding, Elizabeth M.; Kinney, Anita Y.

Source: Cancer Causes & Control; Dec 2019; vol. 30 (no. 12); p. 1327-1339

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31655944

Abstract: Purpose: Lifestyle factors may have a synergistic effect on health. We evaluated the correlates of poor adherence to a healthy lifestyle among a diverse sample of colorectal cancer (CRC) survivors to inform future lifestyle promotion programs. Methods: Lifestyle questions from a cross-sectional survey were completed by 283 CRC survivors (41% Hispanic, 40% rural, 33% low income). Adherence to recommendations (yes/no) for physical activity, fruit and vegetable servings/day, avoiding tobacco, and healthy weight was summed to create an overall lifestyle quality score. Polytomous logistic regression was used to evaluate correlates of good (reference group), moderate, and poor overall lifestyle quality. Potential correlates included sociodemographic characteristics, cancer-related factors, and indicators of health and well-being. Results: CRC survivors with poor adherence were 2- to 3.4-fold significantly more likely to report multiple comorbidities, poor physical functioning, fatigue, anxiety/depressive symptoms, and poor social participation. In multivariable analyses, poor physical functioning was the only significant correlate of poor adherence to lifestyle recommendations, compared to good adherence [OR (95% CI) 3.4 (1.8-6.4)]. The majority of survivors, 71% and 78%, indicated interest in receiving information on exercise and eating a healthy diet, respectively. Conclusion: Future lifestyle promotion programs for CRC survivors should carefully consider indicators of physical and psychosocial health and well-being, especially poor physical functioning, in the design, recruitment, and implementation of these health programs.

Database: CINAHL

Exocrine pancreatic and enterocyte function in patients with advanced pancreatic cancer.

Author(s): Witvliet-van Nierop, J.E.; de van der Schueren, M.A.E.; Scheffer, H.J.; Vroomen, L.G.; Meijerink, M.R.; van Bodegraven, A.A.; Wierdsma, N.J.

Source: Clinical Nutrition; Dec 2019; vol. 38 (no. 6); p. 2778-2782

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract: Exocrine pancreatic function is affected in patients with locally advanced pancreatic cancer (LAPC), clinically leading to steatorrhea. It is unknown whether maldigestion and malabsorption can also be attributed to impaired intestinal enterocyte function. In this exploratory study enterocyte function was assessed in patients with locally advanced pancreatic cancer, treated with Irreversible Electroporation (IRE). Enterocyte function was studied by Citrulline Generation Test (CGT). Intestinal absorption capacity of energy and fat was calculated from the differences between nutritional intake (four-days diary) and quantified fecal losses energy and fat in three-days feces collection. Twelve patients were included before IRE, and 5 patients had follow-up measurements. Fasted citrulline [CIT] and glutamine [GLU] levels were below reference levels of healthy subjects ([CIT] $38 \pm 8 \mu\text{mol/L}$; [GLU] $561 \pm 77 \mu\text{mol/L}$) both before ([CIT] $25 \pm 9 \mu\text{mol/L}$; [GLU] 65 ± 35

µmol/L) and after IRE ([CIT] 19 ± 9 µmol/L; [GLU] 53 ± 26 µmol/L) whereas CGT curves were normal, indicating normal enterocyte function (slope 0.21 ± 0.12 and 0.17 ± 0.07 µmol/L/min; [CIT] increment 63 ± 39 and $80 \pm 44\%$ respectively). Severe energy/fat malabsorption was present in 6 out of 12 patients with LAPC (mean loss 349 kcal/d, 13 g fat/d) before and in 4 out of 5 patients (mean loss 509 kcal/d, 32 g fat/d) after IRE respectively. Enterocyte function was generally within reference limits in patients with advanced pancreatic cancer. Severe malabsorption may be explained by exocrine pancreatic insufficiency.

Database: CINAHL

Dietary 2-deoxy-D-glucose impairs tumour growth and metastasis by inhibiting angiogenesis.

Author(s): Singh, Saurabh; Pandey, Sanjay; Chawla, Amanpreet Singh; Bhatt, Anant Narayan; Roy, Bal Gangadhar; Saluja, Daman; Dwarakanath, Bilikere S.

Source: European Journal of Cancer; Dec 2019; vol. 123 ; p. 11-24

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract:Accumulating evidence suggests the antiangiogenic potential of the glycolytic inhibitor 2-deoxy-D-glucose (2-DG) among the anticancerous properties of this drug. In the present studies, we investigated the antiangiogenic effects of dietary 2-DG on tumour (Lewis lung carcinoma [LLC]) as well as ionising radiation-induced angiogenesis in mouse models. Dietary 2-DG reduced the serum vascular endothelial growth factor levels (~40%) in LLC-bearing mice along with a significant inhibition of tumour growth and metastases. In vivo Matrigel plug assays showed significant decrease in vascularisation, Fluorescein isothiocyanate (FITC)-dextran fluorescence and factor VIII-positive cells in the plugs from 2-DG-fed mice, supporting the notion that dietary 2-DG significantly suppresses the tumour-associated and radiation-induced angiogenesis. 2-DG inhibited the glucose usage and lactate production as well as ATP levels of human umbilical vein endothelial cells (HUVECs) in a concentration-dependent manner, accompanied by growth inhibition and loss of viability in vitro. Furthermore, 2-DG inhibited the capillary-like tube formation in Matrigel as well as migration and transwell invasion by HUVECs, which are functional indicators of the process of angiogenesis. These results suggest that dietary 2-DG inhibits processes related to angiogenesis, which can impair the growth and metastasis of tumours. • Dietary 2-deoxy- d -glucose (2-DG) inhibits Lewis lung carcinoma primary tumour growth and lung metastasis. • 2-DG administration inhibits tumour-associated and radiation-induced angiogenesis. • Inhibition of glucose metabolism in activated endothelial cells underlies the mechanisms of antiangiogenic potential of 2-DG.

Database: CINAHL

Association between dietary cadmium intake and early gastric cancer risk in a Korean population: a case-control study.

Author(s): Kim, Hyejin; Lee, Jeonghee; Woo, Hae Dong; Kim, Dong Woo; Choi, Il Ju; Kim, Young-II; Kim, Jeongseon

Source: European Journal of Nutrition; Dec 2019; vol. 58 (no. 8); p. 3255-3266

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract: Purpose: Foods such as grains and vegetables are the dominant sources of exposure to cadmium, which has been classified as a carcinogen by various public health agencies. Cadmium exposure is a growing concern due to its associations with numerous harmful health effects, including gastric cancer risk. The objective of this study was to investigate the association of dietary cadmium intake and the consumption of cadmium-contributing foods with early gastric cancer risk. Methods: A case–control study including 1245 subjects (cases, 415; controls, 830) was conducted in Korea. The dietary cadmium intake and the consumption of cadmium-contributing foods were assessed using a semi-quantitative food frequency questionnaire. Results: After adjustment for covariates, the gastric cancer risk was increased for participants in the highest tertile of cadmium intake [odds ratios (ORs) 1.33, 95% confidence intervals (95% CIs) 0.94–1.88], but there was no significance. Both female (ORs 2.71, 95% CIs 1.37–5.36) and male (ORs 1.63, 95% CIs 1.07–2.50) participants in the highest tertile of rice consumption had a higher gastric cancer risk than did those in the lowest tertile. Men in the highest tertile of crab consumption had a gastric cancer risk 2.23 times greater than that of men in the lowest tertile (ORs 2.23, 95% CIs 1.21–4.13), but a difference was not seen in women. Conclusions: Future studies examining the causal effects of dietary cadmium intake and the consumption of cadmium-contributing foods on early gastric cancer risk in large-scale prospective cohorts are recommended.

Database: CINAHL

Coffee and tea drinking in relation to the risk of differentiated thyroid carcinoma: results from the European Prospective Investigation into Cancer and Nutrition (EPIC) study.

Author(s): Zamora-Ros, Raul; Alghamdi, Muath A.; Cayssials, Valerie; Franceschi, Silvia; Almquist, Martin; Hennings, Joakim; Sandström, Maria; Tsilidis, Konstantinos K.; Weiderpass, Elisabete; Boutron-Ruault, Marie-Christine; Hammer Bech, Bodil; Overvad, Kim; Tjønneland, Anne; Petersen, Kristina E. N.; Mancini, Francesca Romana; Mahamat-Saleh, Yahya; Bonnet, Fabrice; Kühn, Tilman; Fortner, Renée T.; Boeing, Heiner

Source: European Journal of Nutrition; Dec 2019; vol. 58 (no. 8); p. 3303-3312

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [European Journal of Nutrition](#) - from Unpaywall

Abstract: Purpose: Coffee and tea constituents have shown several anti-carcinogenic activities in cellular and animal studies, including against thyroid cancer (TC). However, epidemiological evidence is still limited and inconsistent. Therefore, we aimed to investigate this association in a large prospective study. Methods: The study was conducted in the EPIC (European Prospective Investigation into Cancer and Nutrition) cohort, which included 476,108 adult men and women. Coffee and tea intakes were assessed through validated country-specific dietary questionnaires. Results: During a mean follow-up of 14 years, 748 first incident differentiated TC cases (including 601 papillary and 109 follicular TC) were identified. Coffee consumption (per 100 mL/day) was not associated either with

total differentiated TC risk (HRcalibrated 1.00, 95% CI 0.97–1.04) or with the risk of TC subtypes. Tea consumption (per 100 mL/day) was not associated with the risk of total differentiated TC (HRcalibrated 0.98, 95% CI 0.95–1.02) and papillary tumor (HRcalibrated 0.99, 95% CI 0.95–1.03), whereas an inverse association was found with follicular tumor risk (HRcalibrated 0.90, 95% CI 0.81–0.99), but this association was based on a sub-analysis with a small number of cancer cases. Conclusions: In this large prospective study, coffee and tea consumptions were not associated with TC risk.

Database: CINAHL

Non-invasive Use of Positron Emission Tomography to Monitor Diethyl maleate and Radiation-Induced Changes in System xC- Activity in Breast Cancer.

Author(s): Čolović, Milena; Yang, Hua; Merkens, Helen; Colpo, Nadine; Bénard, François; Schaffer, Paul

Source: Molecular Imaging & Biology; Dec 2019; vol. 21 (no. 6); p. 1107-1116

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 30838549

Abstract: Purpose: The system xC- transporter is upregulated in cancer cells in response to oxidative stress (OS). 5-[18F]fluoroaminosuberic acid ([18F]FASu) has been reported as a novel positron emission tomography (PET) imaging agent, targeting system xC-. The goal of this study was to evaluate the utility of [18F]FASu in monitoring cellular response to diethyl maleate (DEM) and radiation-induced OS fluctuations. Procedures: [18F]FASu uptake by breast cancer cells was studied in correlation to OS biomarkers: glutathione (GSH) and reactive oxygen species (ROS), as well as transcriptional and translational levels of xCT (the functional subunit of xC-). System xC- inhibitor, sulfasalazine (SSZ), and small interfering RNA (siRNA) knockdown were used as negative controls. Radiotracer uptake was evaluated in three breast cancer models: MDA-MB-231, MCF-7, and ZR-75-1, at two-time points (1 h and 16 h) following OS induction. In vivo [18F]FASu imaging and biodistribution were performed using MDA-MB-231 xenograft-bearing mice at 16 and 24 h post-radiation treatment. Results: [18F]FASu uptake was positively correlated to intracellular GSH and SLC7A11 expression levels, and radiotracer uptake was induced both by radiation treatment and by DEM at time points longer than 3 h. In an in vivo setting, there was no statistically significant uptake difference between irradiated and control tumors. Conclusion: [18F]FASu is a specific system xC- PET radiotracer and as such it can be used to monitor system xC- activity due to OS. As such, [18F]FASu has the potential to be used in therapy response monitoring by PET. Further optimization is required for in vivo application.

Database: CINAHL

Evaluation of chemotherapy-induced toxicity and health-related quality of life amongst early-stage breast cancer patients receiving Chinese herbal medicine in Malaysia.

Author(s): Liew, Ai Ch'i; Peh, Kok-Khiang; Tan, Boon Seang; Zhao, Wei; Tangiisuran, Balamurugan

Source: Supportive Care in Cancer; Dec 2019; vol. 27 (no. 12); p. 4515-4524

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 30911917

Abstract: Purpose: This observational study aimed to compare the outcome and health-related quality of life (HRQOL) amongst breast cancer patients using Chinese herbal medicine (CHM) and those not using CHM during chemotherapy. Methods: A prospective, non-randomised longitudinal study was conducted in two government integrated hospitals over an 8-month period. Early-stage breast cancer patients who were (1) either already using complementary and alternative medicine (CAM) or not and (2) who were on a regime of 5-fluorouracil, epirubicin, and cyclophosphamide were included in the study. Patients who agreed to receive CHM were assigned to receive individualised CHM prescriptions deemed suitable for the individual at a particular time. Those who were not willing to take Chinese herbal medicines (CHM) were assigned to the non-CHM control group. Blood profile and chemotherapy-induced AE were recorded whilst HRQOL assessment was done using the EORTC QLQ-C30 questionnaire on first, third, and sixth cycles. Results: Forty-seven patients [32 female vs. 1 male, $p = 0.31$; mean year of age: 52.2(SD = 7.6), $p = 0.28$]} were recruited during the study period. Demographics of both groups were comparable. Fifty percent of respondents reported using some kind of CAM before chemotherapy. Diet supplements (40.6%) were the most common CAM used by the respondents. The study showed that patients using CHM had significantly less fatigue ($p = 0.012$), nausea ($p = 0.04$), and anorexia ($p = 0.005$) during chemotherapy. There were no significant differences in patients' HRQOL ($p = 0.79$). There were no AEs reported during the study. Conclusion: The use of CHM as an adjunct treatment with conventional chemotherapy have been shown to reduce fatigue, nausea, and anorexia in breast cancer patients but did not reduce chemotherapy-associated hematologic toxicity. The sample size of this study was not powered to assess the significance of HRQOL between two groups of patients.

Database: CINAHL

Controlling Nutritional Status (CONUT) as a prognostic immunonutritional biomarker for gastric cancer after curative gastrectomy: a propensity score-matched analysis.

Author(s): Hirahara, Noriyuki; Tajima, Yoshitsugu; Fujii, Yusuke; Kaji, Shunsuke; Kawabata, Yasunari; Hyakudomi, Ryoji; Yamamoto, Tetsu; Taniura, Takahito

Source: Surgical Endoscopy; Dec 2019; vol. 33 (no. 12); p. 4143-4152

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 30838449

Abstract: Background: In clinical practice, it is not unusual to treat oncologic patients whose tumor markers are within normal range, even with advanced cancer. The Controlling Nutritional Status (CONUT) score could provide a useful nutritional and immunological prognostic biomarker for cancer patients. In this study, we assessed the prognostic value of the CONUT score for patients with gastric cancer, including a subgroup analysis with stratification based on serum carcinoembryonic antigen (CEA) level. Methods: We retrospectively reviewed the medical records of 368 consecutive patients who underwent curative laparoscopy-assisted gastrectomy. The prognostic value of the CONUT score was

compared between patients with a low (≤ 2) and high (≥ 3) score, with propensity score matching (PSM) used to control for biasing covariates (Depth of tumor, Lymph node metastasis, pathological TNM (pTNM) stage). Results: Overall survival (OS) among all patients was independently predicted by the tumor stage (hazard ratio (HR): 2.231, $p = 0.001$), the CONUT score (HR: 2.254, $p = 0.001$), and serum CEA level (HR: 1.821, $p = 0.025$). Among patients with a normal preoperative serum CEA level, tumor stage (HR: 2.350, $p = 0.007$), and the CONUT score (HR: 1.990, $p = 0.028$) were independent prognostic factors of OS. In the high serum CEA level group, tumor size (HR: 2.930, $p = 0.015$) and the CONUT score (HR: 3.707, $p = 0.004$) were independent prognostic factors of OS. Conclusions: It is advantageous to use both CEA level and the CONUT score to assess the prognosis of patients with gastric cancer, which reflect both tumor-related factors and host-related factors, respectively.

Database: CINAHL

Controlling nutritional status (CONUT) score as a preoperative risk assessment index for older patients with colorectal cancer.

Author(s): Ahiko, Yuka; Shida, Dai; Horie, Tomoko; Tanabe, Taro; Takamizawa, Yasuyuki; Sakamoto, Ryohei; Moritani, Konosuke; Tsukamoto, Shunsuke; Kanemitsu, Yukihide

Source: BMC Cancer; Nov 2019; vol. 19 (no. 1)

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31690275

Available at [BMC cancer](#) - from BioMed Central

Available at [BMC cancer](#) - from Europe PubMed Central - Open Access

Available at [BMC cancer](#) - from EBSCO (MEDLINE Complete)

Available at [BMC cancer](#) - from Unpaywall

Abstract: Background: Assessment of preoperative general condition to predict postoperative outcomes is important, particularly in older patients who typically suffer from various comorbidities and exhibit impaired functional status. In addition to various indices such as Charlson Comorbidity Index (CCI), National Institute on Aging and National Cancer Institute Comorbidity Index (NIA/NCI), Adult Comorbidity Evaluation-27 (ACE-27), and American Society of Anesthesiologists Physical Status classification (ASA-PS), controlling nutritional status (CONUT) score is recently gaining attention as a tool to evaluate the general condition of patients from a nutritional perspective. However, the utility of these indices in older patients with colorectal cancer has not been compared. Methods: The study population comprised 830 patients with Stage I - IV colorectal cancer aged 75 years or older who underwent surgery at the National Cancer Center Hospital from January 2000 to December 2014. Associations of each index with overall survival (OS) (long-term outcome) and postoperative complications (short-term outcome) were examined. Results: For the three indices with the highest Akaike information criterion values (i.e., CONUT score, CCI and ACE-27), but not the remaining indices (NIA/NCI and ASA-PS), OS significantly worsened as general condition scores decreased, after adjusting for known prognostic factors. In contrast, for postoperative complications, only CONUT score was identified as a predictive factor (≥ 4 versus 0-3; odds ratio: 1.90; 95% CI: 1.13-3.13; $P = 0.016$). Conclusion: For older

patients with colorectal cancer, only CONUT score was a predictive factor of both long-term and short-term outcomes after surgery, suggesting that CONUT score is a useful preoperative risk assessment index.

Database: CINAHL

Epigenetic Gene Regulation by Dietary Compounds in Cancer Prevention.

Author(s): Montgomery, McKale; Srinivasan, Aishwarya

Source: *Advances in Nutrition*; Nov 2019; vol. 10 (no. 6); p. 1012-1028

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31100104

Available at [Advances in nutrition \(Bethesda, Md.\)](#) - from EBSCO (MEDLINE Complete)

Available at [Advances in nutrition \(Bethesda, Md.\)](#) - from Unpaywall

Abstract:Traditionally, cancer has been viewed as a set of diseases that are driven by the accumulation of genetic mutations, but we now understand that disruptions in epigenetic regulatory mechanisms are prevalent in cancer as well. Unlike genetic mutations, however, epigenetic alterations are reversible, making them desirable therapeutic targets. The potential for diet, and bioactive dietary components, to target epigenetic pathways in cancer is now widely appreciated, but our understanding of how to utilize these compounds for effective chemopreventive strategies in humans is in its infancy. This review provides a brief overview of epigenetic regulation and the clinical applications of epigenetics in cancer. It then describes the capacity for dietary components to contribute to epigenetic regulation, with a focus on the efficacy of dietary epigenetic regulators as secondary cancer prevention strategies in humans. Lastly, it discusses the necessary precautions and challenges that will need to be overcome before the chemopreventive power of dietary-based intervention strategies can be fully harnessed.

Database: CINAHL

Associations of dairy product consumption with mortality in the European Prospective Investigation into Cancer and Nutrition (EPIC)–Italy cohort.

Author(s): Pala, Valeria; Sieri, Sabina; Chiodini, Paolo; Masala, Giovanna; Palli, Domenico; Mattiello, Amalia; Panico, Salvatore; Tumino, Rosario; Frasca, Graziella; Fasanelli, Francesca; Ricceri, Fulvio; Agnoli, Claudia; Grioni, Sara; Krogh, Vittorio

Source: *American Journal of Clinical Nutrition*; Nov 2019; vol. 110 (no. 5); p. 1220-1230

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [The American Journal of Clinical Nutrition](#) - from EBSCO (MEDLINE Complete)

Abstract:Background The relation of dairy product consumption to health and mortality is controversial. Objectives We investigated associations of consumption of various dairy products with mortality in the Italian cohort of the European Prospective Investigation into Cancer and Nutrition (EPIC)–Italy study. Methods Dairy product consumption was assessed

by validated semiquantitative FFQs. Multivariable Cox models stratified by center, age, and sex and adjusted for confounders estimated associations of milk (total, full fat, and reduced fat), yogurt, cheese, butter, and dairy calcium consumption with mortality for cancer, cardiovascular disease, and all causes. Nonlinearity was tested by restricted cubic spline regression. Results After a median follow-up of 14.9 y, 2468 deaths were identified in 45,009 participants: 59% from cancer and 19% from cardiovascular disease. No significant association of consumption of any dairy product with mortality was found in the fully adjusted models. A 25% reduction in risk of all-cause mortality was found for milk intake from 160 to 120 g/d (HR: 0.75; 95% CI: 0.61, 0.91) but not for the highest (>200 g/d) category of intake (HR: 0.95; 95% CI: 0.84, 1.08) compared with nonconsumption. Associations of full-fat and reduced-fat milk consumption with all-cause and cause-specific mortality were similar to those for milk as a whole. Conclusions In this Italian cohort characterized by low to average milk consumption, we found no evidence of a dose-response association between milk consumption and mortality and also no association of consumption of other dairy products investigated with mortality.

Database: CINAHL

Cost Effectiveness of Nutrition Policies on Processed Meat: Implications for Cancer Burden in the U.S.

Author(s): Kim, David D.; Wilde, Parke E.; Michaud, Dominique S.; Liu, Junxiu; Lizewski, Lauren; Onopa, Jennifer; Mozaffarian, Dariush; Zhang, Fang Fang; Wong, John B.

Source: American Journal of Preventive Medicine; Nov 2019; vol. 57 (no. 5)

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31564600

Abstract: Introduction: Processed meats are associated with increased risk of colorectal and stomach cancers, but health and economic impacts of policies to discourage processed meats are not well established. This paper aims to evaluate the cost effectiveness of implementing tax and warning labels on processed meats. Methods: A probabilistic cohort-state transition model was developed in 2018, including lifetime and short-term horizons, healthcare, and societal perspectives, and 3% discount rates for costs and health outcomes. The model simulated 32 subgroups by age, gender, and race/ethnicity from the U.S. adult population and integrated nationally representative 2011-2014 data on processed meat consumption, with etiologic effects of processed meat consumption on cancer incidence, medical and indirect societal costs, and policy costs. Results: Over a lifetime, the 10% excise tax would prevent 77,000 cases of colorectal cancer (95% uncertainty interval=56,800, 107,000) and 12,500 cases of stomach cancer (95% uncertainty interval=6,880, 23,900), add 593,000 quality-adjusted life years (95% uncertainty interval=419,000, 827,000), and generate net savings of \$2.7 billion from a societal perspective, including \$1.1 billion healthcare costs saved. The warning label policy would avert 85,400 cases of colorectal cancer (95% uncertainty interval=56,600, 141,000) and 15,000 cases of stomach cancer (95% uncertainty interval=6,860, 34,500), and add 660,000 quality-adjusted life years (95% uncertainty interval=418,000, 1,070,000), with net savings of \$4.5 billion from a societal perspective, including \$1.3 billion healthcare costs saved. In subgroup analyses, greater health and economic benefits accrued to (1) younger subpopulations, (2) subpopulations

with greater cancer risk, and (3) those with higher baseline processed meat consumption. Conclusions: The model shows that implementing tax or warning labels on processed meats would be a cost-saving strategy with substantial health and economic benefits. The findings should encourage policy makers to consider nutrition-related policies to reduce cancer burden.

Database: CINAHL

Dietary-phytochemical mediated reversion of cancer-specific splicing inhibits Warburg effect in head and neck cancer.

Author(s): Yadav, Sandhya; Bhagat, Somnath D.; Gupta, Amit; Samaiya, Atul; Srivastava, Aasheesh; Shukla, Sanjeev

Source: BMC Cancer; Nov 2019; vol. 19 (no. 1)

Publication Date: Nov 2019

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PubMedID: 31675998

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Abstract: Background: The deregulated alternative splicing of key glycolytic enzyme, Pyruvate Kinase muscle isoenzyme (PKM) is implicated in metabolic adaptation of cancer cells. The splicing switch from normal PKM1 to cancer-specific PKM2 isoform allows the cancer cells to meet their energy and biosynthetic demands, thereby facilitating the cancer cells growth. We have investigated the largely unexplored epigenetic mechanism of PKM splicing switch in head and neck cancer (HNC) cells. Considering the reversible nature of epigenetic marks, we have also examined the utility of dietary-phytochemical in reverting the splicing switch from PKM2 to PKM1 isoform and thereby inhibition of HNC tumorigenesis. Methods: We present HNC-patients samples, showing the splicing-switch from PKM1-isoform to PKM2-isoform analyzed via immunoblotting and qRT-PCR. We performed methylated-DNA-immunoprecipitation to examine the DNA methylation level and chromatin-immunoprecipitation to assess the BORIS (Brother of Regulator of Imprinted Sites) recruitment and polII enrichment. The effect of dietary-phytochemical on the activity of de novo-DNA-methyltransferase-3b (DNMT3B) was detected by DNA-methyltransferase-activity assay. We also analyzed the Warburg effect and growth inhibition using lactate, glucose uptake assay, invasion assay, cell proliferation, and apoptosis assay. The global change in transcriptome upon dietary-phytochemical treatment was assayed using Human Transcriptome Array 2.0 (HTA2.0). Results: Here, we report the role of DNA-methylation mediated recruitment of the BORIS at exon-10 of PKM-gene regulating the alternative-splicing to generate the PKM2-splice-isoform in HNC. Notably, the reversal of Warburg effect was achieved by employing a dietary-phytochemical, which inhibits the DNMT3B, resulting in the reduced DNA-methylation at exon-10 and hence, PKM-splicing switch from cancer-specific PKM2 to normal PKM1. Global-transcriptome-analysis of dietary-

phytochemical-treated cells revealed its effect on alternative splicing of various genes involved in HNC. Conclusion: This study identifies the epigenetic mechanism of PKM-splicing switch in HNC and reports the role of dietary-phytochemical in reverting the splicing switch from cancer-specific PKM2 to normal PKM1-isoform and hence the reduced Warburg effect and growth inhibition of HNC. We envisage that this approach can provide an effective way to modulate cancer-specific-splicing and thereby aid in the treatment of HNC.

Database: CINAHL

The mRNA-binding Protein TTP/ZFP36 in Hepatocarcinogenesis and Hepatocellular Carcinoma.

Author(s): Kröhler, Tarek; Kessler, Sonja M.; Hosseini, Kevan; List, Markus; Barghash, Ahmad; Patial, Sonika; Laggai, Stephan; Gemperlein, Katja; Haybaeck, Johannes; Müller, Rolf; Helms, Volkhard; Schulz, Marcel H.; Hoppstädter, Jessica; Blackshear, Perry J.; Kiemer, Alexandra K.

Source: Cancers; Nov 2019; vol. 11 (no. 11); p. 1754-1754

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [Cancers](#) - from Europe PubMed Central - Open Access

Available at [Cancers](#) - from Unpaywall

Abstract: Hepatic lipid deposition and inflammation represent risk factors for hepatocellular carcinoma (HCC). The mRNA-binding protein tristetraprolin (TTP, gene name ZFP36) has been suggested as a tumor suppressor in several malignancies, but it increases insulin resistance. The aim of this study was to elucidate the role of TTP in hepatocarcinogenesis and HCC progression. Employing liver-specific TTP-knockout (IsTtp-KO) mice in the diethylnitrosamine (DEN) hepatocarcinogenesis model, we observed a significantly reduced tumor burden compared to wild-type animals. Upon short-term DEN treatment, modelling early inflammatory processes in hepatocarcinogenesis, IsTtp-KO mice exhibited a reduced monocyte/macrophage ratio as compared to wild-type mice. While short-term DEN strongly induced an abundance of saturated and poly-unsaturated hepatic fatty acids, IsTtp-KO mice did not show these changes. These findings suggested anti-carcinogenic actions of TTP deletion due to effects on inflammation and metabolism. Interestingly, though, investigating effects of TTP on different hallmarks of cancer suggested tumor-suppressing actions: TTP inhibited proliferation, attenuated migration, and slightly increased chemosensitivity. In line with a tumor-suppressing activity, we observed a reduced expression of several oncogenes in TTP-overexpressing cells. Accordingly, ZFP36 expression was downregulated in tumor tissues in three large human data sets. Taken together, this study suggests that hepatocytic TTP promotes hepatocarcinogenesis, while it shows tumor-suppressive actions during hepatic tumor progression.

Database: CINAHL

Lifestyle and Dietary Factors and Prostate Cancer Risk: A Multicentre Case-Control Study.

Author(s): Al Qadire, Mohammad; Alkhalaileh, Murad; ALBashtawy, Mohammed

Source: Clinical Nursing Research; Nov 2019; vol. 28 (no. 8); p. 992-1008

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract: This study aims to explore the association between fruit and vegetable intake, high fat, body mass index (BMI) score, physical activity, and the occurrence of prostate cancer among Jordanian men. A case-control study was conducted in three large referral hospitals. The sample included 165 prostate cancer patients in the case group and 177 healthy participants in the control group. The results showed that smoking (odds ratio [OR] = 0.32; 95% confidence interval [CI] = [0.18, 0.57]), a history of prostate infection (OR = 0.21; 95% CI = [0.11, 0.38]), high-fat intake (OR = 0.44; 95% CI = [0.23, 0.85]), and increased mean of BMI (OR = 1.08; 95% CI = [1.02, 1.13]) increased the likelihood of developing prostate cancer. Healthy diet and giving up smoking are recommended, as they may contribute to a reduction in the incidence of prostate cancer. More randomized clinical trials in this area are needed to strengthen the available evidence and reduce the effects of confounding variables.

Database: CINAHL

Nutritional Aspect of Cancer Care in Medical Oncology Patients.

Author(s): Yalcin, Suayib; Gumus, Mahmut; Oksuzoglu, Berna; Ozdemir, Feyyaz; Evrensel, Turkan; Sarioglu, Aysugul Alptekin; Sahin, Berksoy; Mandel, Nil Molinas; Goker, Erdem

Source: Clinical Therapeutics; Nov 2019; vol. 41 (no. 11); p. 2382-2396

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [Clinical Therapeutics](#) - from Unpaywall

Database: CINAHL

Dietary changes adopted by Chinese colorectal cancer patients: A qualitative study.

Author(s): Tang, Julia Wei Chun; Lam, Wendy Wing Tak; Ma, Anson Shin Ying; Law, Wai Lun; Wei, Rockson; Fielding, Richard

Source: European Journal of Cancer Care; Nov 2019; vol. 28 (no. 6)

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [European journal of cancer care](#) - from Wiley Online Library

Abstract: Objective: To explore influences on post-diagnosis dietary decision-making in colorectal cancer survivors (CRC) for future intervention development. Methods: Individual semi-structured interviews were conducted with 30 CRC survivors. All interviews were recorded and transcribed verbatim for grounded theory analysis. Results: Most CRC survivors interviewed reported making both short- and long-term changes post-diagnosis, influenced by physical symptoms and personal beliefs: short-term treatment-driven changes to facilitate recovery, manage treatment side-effects and avoid disruption in treatment; short-term 'patient role' driven changes heavily influenced by family members and cultural beliefs; long-term changes driven by residual symptoms and illness beliefs,

including cancer causal attributions and beliefs about preventing future recurrences. Traditional Chinese medicinal (TCM) beliefs were influential in both short- and long-term dietary decision-making, which may explain why survivors focused on specific food items rather than food patterns. Conclusion: While our findings suggested that the majority of CRC survivors made dietary changes post-diagnosis, their dietary pattern and motivation may change over the course of their illness trajectory. Also, the types of changes made are often not consistent with existing dietary recommendations. It is necessary to consider illness perception and cultural beliefs when delivering dietary care or developing interventions for this population.

Database: CINAHL

Nutritional experiences in head and neck cancer patients.

Author(s): Sandmæl, Jon Arne; Sand, Kari; Bye, Asta; Solheim, Tora Skeidsvoll; Oldervoll, Line; Helvik, Anne-Sofie

Source: European Journal of Cancer Care; Nov 2019; vol. 28 (no. 6)

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [European Journal of Cancer Care](#) - from Wiley Online Library

Available at [European Journal of Cancer Care](#) - from Unpaywall

Abstract:Objective: Extensive research has documented the negative nutritional impact of head neck cancer (HNC) treatment, but few studies have addressed the patients' experiences. The purpose of this study was to describe how patients with HNC experience the nutritional situation and perceive nutritional support from diagnosis to the post-treatment phase. Methods: Patients with HNC were recruited from a randomised pilot study. Individual interviews were conducted after radiotherapy with 10 participants aged 49 – 70 years and analysed by qualitative content analysis. Results: Undergoing surgery was experienced as a poor nutritional starting point for the upcoming radiotherapy. During radiotherapy, increasing side effects made the participants customise their meals to improve food intake. About halfway through radiotherapy, virtually no food intake was experienced and hospital admissions and initiations of tube-feeding occurred in this period. Oral nutritional supplements were recommended for all, but eventually became unbearable to ingest. When radiotherapy was finally completed, the participants felt discouraged about the persistent side effects preventing them from resume eating. The participants missed tailored information about development of side effects and involvement of a dietitian when reflecting on the treatment-period. Conclusion: The comprehensive nutritional problems experienced by patients with HNC require early nutritional assessments and improved individually tailored nutritional support.

Database: CINAHL

Plant Foods, Antioxidant Biomarkers, and the Risk of Cardiovascular Disease, Cancer, and Mortality: A Review of the Evidence.

Author(s): Aune, Dagfinn

Source: Advances in Nutrition; Nov 2019; vol. 10

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31728499

Available at [Advances in nutrition \(Bethesda, Md.\)](#) - from EBSCO (MEDLINE Complete)

Abstract: Although a high intake of plant foods such as fruits, vegetables, whole grains, nuts, and legumes has been recommended for chronic disease prevention, it has been unclear what is the optimal amount of intake of these foods and whether specific subtypes are particularly beneficial. The evidence from several recently published meta-analyses on plant foods and antioxidants and various health outcomes is reviewed as well as more recently published studies. In meta-analyses of prospective studies, inverse associations were observed between intake of fruits, vegetables, whole grains, and nuts and the risk of coronary artery disease, stroke, cardiovascular disease overall, total cancer, and all-cause mortality. The strongest reductions in risk were observed at an intake of 800 g/d for fruits and vegetables, 225 g/d for whole grains, and 15-20 g/d for nuts, respectively. Whole-grain and nut consumption was also inversely associated with mortality from respiratory disease, infections, and diabetes. Stronger and more linear inverse associations were observed between blood concentrations of antioxidants (vitamin C, carotenoids, vitamin E) and cardiovascular disease, cancer, and all-cause mortality than for dietary intake. Most studies that have since been published have been consistent with these results; however, further studies are needed on subtypes of plant foods and less common causes of death. These results strongly support dietary recommendations to increase intake of plant foods, and suggest optimal intakes for chronic disease prevention may be ~800 g/d for intakes of fruits and vegetables, 225 g/d for whole grains, and 15-20 g/d for nuts. Diets high in plant foods could potentially prevent several million premature deaths each year if adopted globally.

Database: CINAHL

Prevalence of and attitudes towards complementary therapy use for weight after breast cancer in Australia: a national survey.

Author(s): Ee, Carolyn; Cave, Adele Elizabeth; Naidoo, Dhevaksha; Boyages, John

Source: BMC Complementary & Alternative Medicine; Nov 2019; vol. 19 (no. 1)

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [BMC complementary and alternative medicine](#) - from BioMed Central

Available at [BMC complementary and alternative medicine](#) - from Europe PubMed Central - Open Access

Available at [BMC complementary and alternative medicine](#) - from EBSCO (MEDLINE Complete)

Available at [BMC complementary and alternative medicine](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMC complementary and alternative medicine](#) - from Unpaywall

Abstract: Background: Weight gain is common after breast cancer (BC) treatment and may increase the risk of disease recurrence. Complementary medicine (CM) use is high amongst BC patients. This paper describes the use of CM from a cross-sectional self-administered

survey on prevalence and management of weight after BC. Methods: Use of CM was assessed using a question modified from the I-CAM Questionnaire. Participants were asked to rate perceived effectiveness, advantages and disadvantages, and which CM they were willing to use for weight management if there was evidence for effectiveness. The survey was emailed to members of the Breast Cancer Network Australia Survey and Review Group, the largest consumer advocacy group in Australia for people with breast cancer. Results: There were a total of 309 responses. Three quarters had used CM in the past 12 months. One third had tried CM for weight loss. Yoga, meditation and pilates were perceived to be effective for weight loss. Perceived advantages of CMs for weight loss were the ability to improve general wellbeing, relaxation, and being non-pharmacological while disadvantages were financial cost, finding a reliable practitioner, and lack of research for effectiveness. Three quarters would be willing to try CM for weight loss if there was evidence for effectiveness, with the most popular CMs being acupuncture, relaxation, yoga, supplements, and meditation. Conclusions: The high use of CM in this group is consistent with previous research. Our research suggests that BC survivors would use acupuncture, meditation, supplements and yoga for weight loss if supported by scientifically-credible evidence. Research into the effectiveness of these treatments on weight loss after BC is warranted.

Database: CINAHL

Impact of a Tailored Nutrition and Lifestyle Intervention for Overweight Cancer Survivors on Dietary Patterns, Physical Activity, Quality of Life, and Cardiometabolic Profiles.

Author(s): Spees, Colleen K.; Braun, Ashlea C.; Hill, Emily B.; Grainger, Elizabeth M.; Portner, James; Young, Gregory S.; Kleinhenz, Matthew D.; Chitchumroonchokchai, Chureeporn; Clinton, Steven K.

Source: Journal of Oncology; Nov 2019 ; p. 1-13

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [Journal of Oncology](#) - from Europe PubMed Central - Open Access

Available at [Journal of Oncology](#) - from Hindawi Open Access Journals

Available at [Journal of Oncology](#) - from Unpaywall

Abstract:Survivors of cancer often experience treatment-related toxicity in addition to being at risk of cancer recurrence, second primary cancers, and greater all-cause mortality. The objective of this study was to test the safety and efficacy of an intensive evidence-based garden intervention to improve outcomes for cancer survivors after curative therapy. To do so, a clinical trial of adult overweight and obese cancer survivors within 2 years of completing curative therapy was completed. The 6-month intervention, delivered within the context of harvesting at an urban garden, combined group education with cooking demonstrations, remote motivational interviewing, and online digital resources. Data on dietary patterns, program satisfaction, and quality of life were collected via questionnaires; anthropometrics, physical activity, and clinical biomarkers were measured objectively. Of the 29 participants, 86% were white, 83% were female, and the mean age was 58 years. Compared to baseline, participants had significant improvements in Healthy Eating Index (HEI) scores (+5.2 points, $p=0.006$), physical activity (+1,208 steps, $p=0.033$), and quality of

life (+16.07 points, $p=0.004$). Significant improvements were also documented in weight (-3.9 kg), waist circumference (-5.5 cm), BMI (-1.5 kg/m²), systolic BP (-9.5 mmHg), plasma carotenoids (+35%), total cholesterol (-6%), triglycerides (-14%), hs-CRP (-28%), and IGFBP-3 (-5%) (all $p<0.010$). These findings demonstrate a tailored multifaceted garden-based biobehavioral intervention for overweight and obese cancer survivors after curative therapy is safe and highly effective, warranting larger randomized controlled trials to identify program benefits, optimal maintenance strategies, program value relative to cost, and approaches for integration into a survivor's oncology management program. This trial is registered on ClinicalTrials.gov NCT02268188.

Database: CINAHL

Antioxidant and Antiproliferative Activities of Bioactive Compounds Contained in *Rosmarinus officinalis* Used in the Mediterranean Diet.

Author(s): Bourhia, Mohammed; Laasri, Fatima Ezzahra; Aourik, Hind; Boukhris, Aicha; Ullah, Riaz; Bari, Ahmed; Ali, Syed Saeed; El Mzibri, Mohammed; Benbacer, Laila; Gmouh, Said

Source: Evidence-based Complementary & Alternative Medicine (eCAM); Nov 2019 ; p. 1-8

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [Evidence-based complementary and alternative medicine : eCAM](#) - from Europe PubMed Central - Open Access

Available at [Evidence-based complementary and alternative medicine : eCAM](#) - from Hindawi Open Access Journals

Available at [Evidence-based complementary and alternative medicine : eCAM](#) - from IngentaConnect - Open Access

Available at [Evidence-based complementary and alternative medicine : eCAM](#) - from Unpaywall

Abstract:Background. *Rosmarinus officinalis* (*R. officinalis*) is a medicinal plant called rosemary, largely used in the Mediterranean diet for many decades ago. Objective. The aim of the present study was to investigate the polyphenolic content, the antioxidant activity, and the antiproliferative effect against human prostate cancer cell lines (LNCaP) of carnosol and carnosic acid as bioactive compounds contained in *R. officinalis* growing in Morocco. Materials and Methods. Polyphenolic content of *R. officinalis* ethanolic extract was studied using colorimetric assay. Carnosol and carnosic acid contained in *R. officinalis* extract were quantified using high-performance liquid chromatography (HPLC). The antiproliferative effect of the studied extracts on LNCaP was evaluated by WST-1 bioassay, and the antioxidant activity was assessed using DPPH assay. Results. The extracts of *R. officinalis* showed an important polyphenolic content ranging from 74.15 $\mu\text{g}\cdot\text{GAE}/\text{mg}$ to 146.63 $\mu\text{g}\cdot\text{GAE}/\text{mg}$. The percentage of carnosol and carnosic acid in rosemary crops ranges from 11.7 to 17.3% and 1.09% to 3%, respectively. The extracts of *R. officinalis* exhibited a promoting antioxidant activity with IC₅₀ ranging from 0.236 mg/mL to 0.176 mg/mL. Regarding the antiproliferative effect, the WST-1 assay revealed that all the tested extracts reduced notably the cell viability with IC₅₀ values ranging from 14.15 to 15.04 $\mu\text{g}/\text{mL}$.

Conclusion. In the current work, carnosol and carnosic acid exhibit antioxidant and antiproliferative activities in a concentration-dependent manner.

Database: CINAHL

Association Between Soft Drink Consumption and Mortality in 10 European Countries.

Author(s): Mullee, Amy; Romaguera, Dora; Pearson-Stuttard, Jonathan; Viallon, Vivian; Stepien, Magdalena; Freisling, Heinz; Fagherazzi, Guy; Mancini, Francesca Romana; Boutron-Ruault, Marie-Christine; Kühn, Tilman; Kaaks, Rudolf; Boeing, Heiner; Aleksandrova, Krasimira; Tjønneland, Anne; Halkjær, Jytte; Overvad, Kim; Weiderpass, Elisabete; Skeie, Guri; Parr, Christine L.; Quirós, J. Ramón

Source: JAMA Internal Medicine; Nov 2019; vol. 179 (no. 11); p. 1479-1490

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31479109

Available at [JAMA internal medicine](#) - from EBSCO (MEDLINE Complete)

Abstract:Importance: Soft drinks are frequently consumed, but whether this consumption is associated with mortality risk is unknown and has been understudied in European populations to date.Objective: To examine the association between total, sugar-sweetened, and artificially sweetened soft drink consumption and subsequent total and cause-specific mortality.Design, Setting, and Participants: This population-based cohort study involved participants (n = 451 743 of the full cohort) in the European Prospective Investigation into Cancer and Nutrition (EPIC), an ongoing, large multinational cohort of people from 10 European countries (Denmark, France, Germany, Greece, Italy, the Netherlands, Norway, Spain, Sweden, and the United Kingdom), with participants recruited between January 1, 1992, and December 31, 2000. Excluded participants were those who reported cancer, heart disease, stroke, or diabetes at baseline; those with implausible dietary intake data; and those with missing soft drink consumption or follow-up information. Data analyses were performed from February 1, 2018, to October 1, 2018.Exposure: Consumption of total, sugar-sweetened, and artificially sweetened soft drinks.Main Outcomes and Measures: Total mortality and cause-specific mortality. Hazard ratios (HRs) and 95% CIs were estimated using multivariable Cox proportional hazards regression models adjusted for other mortality risk factors.Results: In total, 521 330 individuals were enrolled. Of this total, 451 743 (86.7%) were included in the study, with a mean (SD) age of 50.8 (9.8) years and with 321 081 women (71.1%). During a mean (range) follow-up of 16.4 (11.1 in Greece to 19.2 in France) years, 41 693 deaths occurred. Higher all-cause mortality was found among participants who consumed 2 or more glasses per day (vs consumers of <1 glass per month) of total soft drinks (hazard ratio [HR], 1.17; 95% CI, 1.11-1.22; P < .001), sugar-sweetened soft drinks (HR, 1.08; 95% CI, 1.01-1.16; P = .004), and artificially sweetened soft drinks (HR, 1.26; 95% CI, 1.16-1.35; P < .001). Positive associations were also observed between artificially sweetened soft drinks and deaths from circulatory diseases (≥2 glasses per day vs <1 glass per month; HR, 1.52; 95% CI, 1.30-1.78; P < .001) and between sugar-sweetened soft drinks and deaths from digestive diseases (≥1 glass per day vs <1 glass per month; HR, 1.59; 95% CI, 1.24-2.05; P < .001).Conclusions and Relevance: This study found that consumption of total, sugar-sweetened, and artificially sweetened soft drinks was

positively associated with all-cause deaths in this large European cohort; the results are supportive of public health campaigns aimed at limiting the consumption of soft drinks.

Database: CINAHL

Fasting as a Therapy in Neurological Disease.

Author(s): Phillips, Matthew C.L.

Source: Nutrients; Oct 2019; vol. 11 (no. 10); p. 2501-2501

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Available at [Nutrients](#) - from Europe PubMed Central - Open Access

Available at [Nutrients](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrients](#) - from Unpaywall

Abstract:Fasting is deeply entrenched in evolution, yet its potential applications to today's most common, disabling neurological diseases remain relatively unexplored. Fasting induces an altered metabolic state that optimizes neuron bioenergetics, plasticity, and resilience in a way that may counteract a broad array of neurological disorders. In both animals and humans, fasting prevents and treats the metabolic syndrome, a major risk factor for many neurological diseases. In animals, fasting probably prevents the formation of tumors, possibly treats established tumors, and improves tumor responses to chemotherapy. In human cancers, including cancers that involve the brain, fasting ameliorates chemotherapy-related adverse effects and may protect normal cells from chemotherapy. Fasting improves cognition, stalls age-related cognitive decline, usually slows neurodegeneration, reduces brain damage and enhances functional recovery after stroke, and mitigates the pathological and clinical features of epilepsy and multiple sclerosis in animal models. Primarily due to a lack of research, the evidence supporting fasting as a treatment in human neurological disorders, including neurodegeneration, stroke, epilepsy, and multiple sclerosis, is indirect or non-existent. Given the strength of the animal evidence, many exciting discoveries may lie ahead, awaiting future investigations into the viability of fasting as a therapy in neurological disease.

Database: CINAHL

Supportive care needs of people with pancreatic cancer: a literature review.

Author(s): Scott, Emma; Jewell, Anna

Source: Cancer Nursing Practice; Sep 2019; vol. 18 (no. 5); p. 35-43

Publication Date: Sep 2019

Publication Type(s): Academic Journal

Available at [Cancer Nursing Practice](#) - from Unpaywall

Abstract:Quality of life is crucial to people with pancreatic cancer due to poor survival rates and high symptom burden. Timely and person-centred supportive and palliative care can help people maintain a good quality of life. This article reports findings of a review that highlights the physical and psychological needs of people with pancreatic cancer and

interventions that may help meet those needs. Information, supportive and palliative care needs should be assessed, and appropriate interventions implemented early in the illness and on an ongoing basis. The article also highlights the role of a multidisciplinary team, including clinical nurse specialists, oncologists, palliative care specialists, dietitians and mental health practitioners, in implementing personalised care.

Database: CINAHL

Eating-related distress in advanced cancer patients with cachexia and family members: a survey in palliative and supportive care settings.

Author(s): Amano, Koji; Morita, Tatsuya; Koshimoto, Saori; Uno, Teruaki; Katayama, Hirofumi; Tatara, Ryohei

Source: Supportive Care in Cancer; Aug 2019; vol. 27 (no. 8); p. 2869-2876

Publication Date: Aug 2019

Publication Type(s): Academic Journal

PubMedID: 30554279

Abstract: Purpose: Few studies have investigated nutrition impact symptoms and eating-related distress among advanced cancer patients and their families. This is a questionnaire survey to examine the severity of nutrition impact symptoms and the prevalence of eating-related distress among them in palliative and supportive care settings. Methods: Questionnaires for patients and their families were preliminarily developed. We selected 16 common symptoms of advanced cancer, i.e., 9 symptoms of the ESAS-r and 7 of the PG-SGA. Each questionnaire concerning eating-related distress consisted of 12 items. Results: A total of 140 out of 147 patients responded (95.2%). They were classified into two groups: (1) non-cachexia/pre-cachexia (n = 57) and (2) cachexia/refractory cachexia (n = 83). The top 3 out of 16 symptoms in all patients were feeling of well-being, lack of appetite, and tiredness. Significant differences were observed in 8 symptoms between the two groups: tiredness (p = 0.007), drowsiness (p = 0.007), lack of appetite (p < 0.001), early satiety (p = 0.001), diarrhea (p = 0.025), abnormal taste (p = 0.02), difficulty swallowing (p = 0.002), and feeling of well-being (p = 0.003). Regarding eating-related distress in patients, significant differences were observed in all items, except for 2, between the two groups. Concerning eating-related distress in families, significant differences were observed in all items between the two groups. Conclusion: Advanced cancer patients with cachexia have more severe nutrition impact symptoms than those without cachexia, and patients with cachexia and their families have greater eating-related distress than those without cachexia.

Database: CINAHL

A novel discharge pathway for patients with advanced cancer requiring home parenteral nutrition.

Author(s): Bond, A.; Teubner, A.; Taylor, M.; Willbraham, L.; Gillespie, L.; Farrer, K.; McMahan, M.; Leahy, G.; Abraham, A.; Soop, M.; Clamp, A. R.; Hasan, J.; Mitchell, C.; Jayson, G. C.; Lal, S.

Source: Journal of Human Nutrition & Dietetics; Aug 2019; vol. 32 (no. 4); p. 492-500

Publication Date: Aug 2019

Publication Type(s): Academic Journal

Available at [Journal of Human Nutrition and Dietetics](#) - from Wiley Online Library

Abstract:Background: The use of home parenteral nutrition (HPN) for palliative indications is increasing internationally and is the leading indication in some countries. Discharge on HPN can be complex in metabolically unstable patients and requires intestinal failure expertise. Methods: Between 2012 and 2018, we performed a retrospective analysis aiming to assess the impact of a novel remote discharge pathway for palliative HPN patients. This was evaluated using a quality improvement approach. Results: One hundred and twenty-five patients with active malignancy [mean (range) age 58 (25–80) years] were referred to the intestinal failure unit (IFU) for remote discharge. Of 82 patients were discharged from the oncology Centre on HPN using the pathway. The remaining 43 patients either declined HPN or the Oncology team felt that the patient became too unwell for HPN or died prior to discharge. There was an increase in patients referred for remote discharge from 13 in 2012 to 43 in 2017. The mean number of days between receipt of referral by the IFU to discharge on HPN from the oncology centre reduced from 29.4 days to 10.1 days. Following remote discharge, the mean number of days on HPN was 215.9 days. Catheter-related blood stream infection rates in this cohort were very low at 0.169 per 1000 catheter days. Conclusions: This is the first study to demonstrate the remote safe, effective and rapid discharge of patients requiring palliative HPN between two hospital sites. This allows patients with a short prognosis more time in their desired location.

Database: CINAHL

Nutritional care.

Author(s): Biagioli, Valentina

Source: International Journal of Palliative Nursing; Jul 2019; vol. 25 (no. 7); p. 315-315

Publication Date: Jul 2019

Publication Type(s): Academic Journal

Abstract:The author discusses the importance of improving the role of palliative care nurses in the decision-making process to deal with the uncertainty surrounding artificial nutrition and hydration. Topics mentioned include the duty of nurses to resolve conflicts between the opinions of professionals, the patient, and the family; emergence of different perspectives when making a decision on the insertion or maintenance of artificial feeding; and education for palliative nurses on decision-making.

Database: CINAHL

CHILDREN

Nutrition.

Author(s): CRESPI, MATT

Source: Access; Dec 2019; vol. 33 (no. 10); p. 3-3

Publication Date: Dec 2019

Publication Type(s): Periodical

Available at [Access](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract:The author discusses issues related to health and nutrition as of December 2019. Topics covered include American Dental Hygienists' Association's Prevention and Wellness policies, a policy change to raise the visibility of a daily oral care routine within the dietary guidelines, and a consensus statement issued by the Robert Wood Johnson in September 2019 on healthy beverage consumption in early childhood.

Database: CINAHL

Parenteral nutrition use in children with cancer.

Author(s): McGrath, Kathleen H.

Source: Pediatric Blood & Cancer; Dec 2019; vol. 66 (no. 12)

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31535458

Available at [Pediatric blood & cancer](#) - from Wiley Online Library

Abstract:Multiple disease and treatment-related factors contribute to intestinal insult and influence the nutritional status of children with cancer. Many children with cancer will experience intestinal dysfunction during their cancer journey and children with cancer are a common referral group for inpatient parenteral nutrition. Appropriate use of parenteral nutrition in children with cancer and intestinal failure may alleviate malnutrition and associated risks. However, proper selection of patients, correct parenteral nutrition prescription, and close monitoring is important to avoid unnecessary intestinal failure or parenteral nutrition-related complications, minimize long-term nutritional sequelae or additional costs to health services, and optimize intestinal rehabilitation.

Database: CINAHL

Food habits during treatment of childhood cancer: a critical review.

Author(s): Beaulieu-Gagnon, S.; Bélanger, V.; Marcil, V.

Source: Nutrition Research Reviews; Dec 2019; vol. 32 (no. 2); p. 265-281

Publication Date: Dec 2019

Publication Type(s): Periodical

Abstract:Several factors can affect the nutritional status of children undergoing cancer therapy. The present review aims to describe children's food intake during cancer treatments and to explore the contributing determinants. It also assesses the nutritional educational interventions developed for this clientele. Scientific literature from January 1995 to January 2018 was searched through PubMed and MEDLINE using keywords related to childhood cancer and nutritional intake. Quantitative and qualitative studies were reviewed: forty-seven articles were selected: thirty-eight related to food intake and parental practices and nine related to nutritional interventions. Patients' intakes in energy, macronutrients and micronutrients were compared with those of healthy controls or with requirement standards. Generally, patients ate less energy and proteins than healthy

children, but adhered similarly to national guidelines. There is a lack of consensus for standard nutrient requirement in this population and a need for more prospective evaluations. Qualitative studies provide an insight into the perceptions of children, parents and nurses on several determinants influencing eating behaviours, including the type of treatment and their side effects. Parental practices were found to be diverse. In general, savoury and salty foods were preferred to sweet foods. Finally, most interventional studies in childhood cancer have presented their protocol or assessed the feasibility of an intervention. Therefore, because of the variability of study designs and since only a few studies have presented results, their impact on the development of healthful eating habits remains unclear. A better understanding of children's nutritional intakes and eating behaviours during cancer treatment could guide future nutritional interventions.

Database: CINAHL

Validation of an algorithmic nutritional approach in children undergoing chemotherapy for cancer.

Author(s): Totadri, Sidharth; Trehan, Amita; Mahajan, Diviyaa; Viani, Karina; Barr, Ronald; Ladas, Elena J.

Source: Pediatric Blood & Cancer; Dec 2019; vol. 66 (no. 12)

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31464100

Available at [Pediatric blood & cancer](#) - from Wiley Online Library

Abstract:Background: Undernutrition impacts clinical outcome adversely in children with cancer. This study aimed to validate a nutritional algorithm with specific application to the low- and middle-income country (LMIC) setting.Procedure: Fifty children with a new diagnosis of cancer were enrolled in this randomized interventional study. Weight, height/length, and mid-upper-arm circumference (MUAC) were measured at baseline. The study arm was administered nutritional care as per the algorithm and the control arm received the institutional standard of care. Weight was monitored regularly and MUAC was repeated after 3 months. Children were classified based on weight for height if <2 years of age or body mass index if ≥2 years, as normal, wasted, and severely wasted. The algorithmic approach comprised administration of oral supplements, nasogastric feeds, and/or parenteral nutrition based on objective assessment of the nutritional status.Results: Fifty patients were analyzed (study: 25, control: 25). Four in the study arm (16%) and six in the control arm (24%) had wasting at baseline. MUAC was <5th percentile in 15 (60%) and 13 (52%) patients in the study and control arms, respectively. At the end of 3 months, the median increment in weight was 0.8 kg (interquartile range [IQR]: -0.02; 2.00) and 0.0 kg (IQR: -0.70; 1.25) in the study and control arms, respectively (P = .153). The median increment in MUAC was 1.20 cm (IQR: 0.10; 2.30) and 0.00 cm (IQR: -0.50; 1.10) in the study and control arms, respectively (P = .020).Conclusions: The application of an algorithm designed for use in LMICs resulted in significant improvement in nutritional status, as measured by MUAC.

Database: CINAHL

Fluctuations in dietary intake during treatment for childhood leukemia: A report from the DALLT cohort.

Author(s): Ladas, Elena J.; Orjuela, Manuela; Stevenson, Kristen; Cole, Peter D.; Lin, Meiko; Athale, Uma H.; Clavell, Luis A.; Leclerc, Jean-Marie; Laverdiere, Caroline; Michon, Bruno; Schorin, Marshall A.; Welch, Jennifer Greene; Asselin, Barbara L.; Sallan, Stephen E.; Silverman, Lewis B.; Kelly, Kara M.

Source: Clinical Nutrition; Dec 2019; vol. 38 (no. 6); p. 2866-2874

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract: Acute lymphoblastic leukemia (ALL) is the most common pediatric malignancy. Nutritional morbidities are a persistent problem facing pediatric patients during and after treatment and age-gender groups that are at risk for nutritional conditions have not been clearly identified. Therapy is a contributing factor; however, the role of dietary intake remains largely unknown. Prior to conduct of interventional trials, an understanding of the effects of treatment on fluctuations in dietary intake is necessary. We enrolled 794 children with ALL in a prospective clinical trial. Dietary intake was collected with a food frequency questionnaire at diagnosis and throughout the course of treatment for pediatric ALL. Reported values were compared to the Dietary Recommended Intake (DRI), and normative values (NHANES). Hierarchical linear models and multilevel mixed-effects ordered logistic regression models were used to evaluate longitudinal changes in dietary intake; independent samples t-test with Bonferroni correction was performed to compare to NHANES. Of the evaluable participants at each timepoint, dietary intake was obtained on 81% (n = 640), 74% (n = 580) and 74% (n = 558) at diagnosis, end of induction phase of treatment, and continuation, respectively. Despite exposure to corticosteroids, caloric intake decreased over therapy for most age-gender groups. Predictive models of excess intake found reduced odds of over-consuming calories (OR 0.738, P < 0.05); however, increased odds of over-consuming fat (OR 6.971, P < 0.001). When compared to NHANES, we consistently found that $\geq 1/3$ of children were consuming calories in excess of normative values. For select micronutrients, a small proportion of participants were above or below the DRI at each time evaluated. Our study suggests that dietary intake fluctuates during treatment for ALL as compared to age-gender recommended and normative values. Improving our understanding of nutrient fluctuations and dietary quality will facilitate subsequent analyses addressing relationships of dietary intake, toxicity, and survival. • This is the first prospectively cohort monitoring dietary intake among children with ALL. • Several disease risk factors were identified for intakes below and in excess of recommended values. • Despite previous publications documenting the sharp rise of obesity during treatment for pediatric ALL, our findings suggest other factors may be responsible for development of obesity other than excess dietary intake alone.

Database: CINAHL

Practical management of home parenteral nutrition in infancy.

Author(s): Hill, Susan

Source: Early Human Development; Nov 2019; vol. 138

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31606228

Abstract:The child born today with chronic intestinal failure (IF) can expect to survive throughout childhood and into adult life even if dependent on parenteral nutrition (PN) support. The three major aetiologies of chronic IF are short bowel syndrome (SBS), intestinal dysmotility and mucosal disease. SBS is the commonest of these conditions in infancy, most frequently subsequent to resection for necrotising enterocolitis (NEC). The focus of IF management is to ensure appropriate weight gain and growth whilst minimising complications (related to underlying disease as well as to PN) and aiming for intestinal autonomy. Strategies to avoid complications and aid PN weaning include early oral/enteral feed introduction, 'cycling' PN as soon as tolerated, limiting lipid infusions and discharging home on overnight PN with formally trained parents. A newer treatment for SBS is GLP-2 analogue. Multidisciplinary care in a specialist intestinal rehabilitation centre with collaboration with local professional support is key to success.

Database: CINAHL

The Role of Adolescents From a Low Socioeconomic Background in Household Food Preparation: A Qualitative Study.

Author(s): Leak, Tashara M.; Aasand, Taylor A.; Vickers, Zata; Reicks, Marla

Source: Health Promotion Practice; Nov 2019; vol. 20 (no. 6); p. 890-896

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [Health Promotion Practice](#) - from Unpaywall

Abstract:The purpose of this study was to understand adolescents' from low-income households perceptions of their involvement in home food preparation, reasons underlying the extent to which they were involved, and positive and negative consequences associated with their involvement. Semistructured interviews were conducted with a convenience sample of 19 adolescents (13-18 years). Audio-recorded interviews were transcribed verbatim. Themes were identified using grounded theory and the constant comparative method. Eight adolescents described cooking as a primary responsibility due to adult work and family schedules, age, gender, and/or cultural expectations. They were typically preparing food for themselves and their family without assistance, and making decisions about what was prepared. They identified positive and negative consequences including enjoyment and satisfaction, as well as stress and less time for other activities. Eleven adolescents mostly assisted the primary food preparer, with little input in deciding what was prepared. They identified benefits such as enjoyment and family interaction. Foods prepared by many adolescents tended to be quick and easy to prepare foods. Future studies should investigate the relationship between adultified cooking responsibilities, diet quality, and health. Also, cooking education for adolescents needs to address how to prepare a healthy family meal on a budget.

Database: CINAHL

Childhood Disability and Nutrition: Findings from a Population-Based Case Control Study in Rural Bangladesh.

Author(s): Jahan, Israt; Karim, Tasneem; Al Imam, Mahmudul Hassan; Das, Manik Chandra; Ali, Khaled Mohammad; Muhit, Mohammad; Khandaker, Gulam

Source: *Nutrients*; Nov 2019; vol. 11 (no. 11); p. 2728-2728

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [Nutrients](#) - from Europe PubMed Central - Open Access

Available at [Nutrients](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrients](#) - from Unpaywall

Abstract:Background: Evidence regarding the complex relationship between childhood disability and malnutrition is limited in low and middle income countries. We aimed to measure the association between childhood disability and malnutrition in rural Bangladesh. Method: We conducted a population-based case control study among children aged <18 years in a rural sub-district (i.e., Shahjadpur) in Bangladesh. Children with permanent disability (i.e., Cases) and their age/sex-matched peers (i.e., Controls) were identified from the local community utilizing the key informant method. Socioeconomic, anthropometric, and educational information was collected using a pre-tested questionnaire. Only Cases underwent detailed medical assessment for clinical and rehabilitation information. Descriptive and bivariate analyses were performed. Results: Between October 2017 and February 2018, 1274 Cases and 1303 Controls were assessed. Cases had 6.6 times and 11.8 times higher odds of being severely underweight and severely stunted respectively than Controls. Although epileptic children had the highest overall prevalence of malnutrition, the age/sex-adjusted odds of malnutrition were significantly higher among children with physical impairments. Underweight and/or stunting among children with disability was significantly associated with parental educational qualification, socioeconomic status and mainstream school attendance. Conclusion: The significantly high proportion of severe malnutrition among children with disability calls for urgent action and implementation of inclusive nutrition intervention programs in rural Bangladesh.

Database: CINAHL

Promoting Cooking, Nutrition, and Physical Activity in Afterschool Settings.

Author(s): Muzaffar, Henna; Nikolaus, Cassandra J.; Ogolsky, Brian G.; Lane, Amanda; Liguori, Carli; Nickols-Richardson, Sharon M.

Source: *American Journal of Health Behavior*; Nov 2019; vol. 43 (no. 6); p. 1050-1063

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract:Objective: In this study, we evaluated the afterschool PAWS (Peer-education About Weight Steadiness) Club program delivered by peer or adult educators to improve food choices, physical activity, and psychosocial variables related to healthy eating. Methods: We had 109 adolescents (53 in adult-led group; 56 in peer-led group) participate in a cluster randomized controlled intervention. The 12-session curriculum framed within Social Cognitive Theory (SCT) and Stages of Change addressed mediators of behavior

change related to cooking skills, food intake, and physical activity. Anthropometric, dietary intake, physical activity, and SCT mediators were assessed at baseline, post-intervention, and 6-months post-intervention. Results: Adolescents in the peer-led group significantly improved whole grain intake at post-intervention ($p = .017$) and 6-months post-intervention ($p = .014$). Both peer-led and adult-led groups had significant reductions in caloric intake at 6-months post-intervention ($p = .047$). Only the adult-led group improved self-efficacy (SE) and social/family support (SS) for healthy eating at post-intervention [$p = .019$ (SE); $p = .048$ (SS)] and 6-months post-intervention [$p = .036$ (SE); $p = .022$ (SS)]. Conclusions: The PAWS Club program promoted lower caloric intake by adolescents. Peer educators were effective at increasing whole grains in adolescents, and adult educators contributed to positive changes in SE and SS related to healthy eating.

Database: CINAHL

Successful Management of Ketogenic Parenteral Nutrition: A Pediatric Case Study.

Author(s): Lowe, Helen; Segal, Stacey; Mouzaki, Marialena; Langos, Veronika; Dlamini, Nomazulu

Source: JPEN Journal of Parenteral & Enteral Nutrition; Aug 2019; vol. 43 (no. 6); p. 815-818

Publication Date: Aug 2019

Publication Type(s): Academic Journal

PubMedID: 30570167

Abstract: A case study is presented of 8-year-old male with intractable epilepsy secondary to left-middle and anterior cerebral artery ischemic stroke. It mentions blood biochemistries were monitored on a daily basis to ensure tolerance to fat and to monitor biochemical status; and G-tube insertion was complicated by peritonitis requiring a prolonged nil per os period. It also mentions that successful management of Ketogenic Parenteral Nutrition was initiated.

Database: CINAHL

[METABOLISM AND DIABETES:](#)

DIABETES - & - PREDIABETES: CAN WE REVERSE THE EPIDEMIC?

Author(s): LIEBMAN, BONNIE

Source: Nutrition Action Health Letter; Dec 2019; vol. 46 (no. 10); p. 3-6

Publication Date: Dec 2019

Publication Type(s): Periodical

Available at [Nutrition Action Health Letter](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract: The article discusses studies which examined whether prediabetes and type 2 diabetes in older adults can be reversed. Topics covered include the outcome of overweight or obese patients diagnosed with type 2 diabetes who were treated with either usual care or with a very-low-calorie diet, the key role that weight loss plays in type 2 diabetes, and the effectiveness of lower-calorie diets in treating type 2 diabetes and obesity.

Database: CINAHL

Associations between Dietary Pulses Alone or with Other Legumes and Cardiometabolic Disease Outcomes: An Umbrella Review and Updated Systematic Review and Meta-analysis of Prospective Cohort Studies.

Author(s): Vigiuliouk, Effie; Glenn, Andrea J; Nishi, Stephanie K; Chiavaroli, Laura; Seider, Maxine; Khan, Tauseef; Bonaccio, Marialaura; Iacoviello, Licia; Mejia, Sonia Blanco; Jenkins, David J A; Kendall, Cyril W C; Kahleová, Hana; Rahelić, Dario; Salas-Salvadó, Jordi; Sevenpiper, John L

Source: Advances in Nutrition; Nov 2019; vol. 10

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31728500

Available at [Advances in Nutrition](#) - from EBSCO (MEDLINE Complete)

Available at [Advances in Nutrition](#) - from Unpaywall

Abstract: To update the European Association for the Study of Diabetes clinical practice guidelines for nutrition therapy, we conducted an umbrella review and updated systematic review and meta-analysis (SRMA) of prospective cohort studies of the association between dietary pulses with or without other legumes and cardiometabolic disease outcomes. We searched the PubMed, MEDLINE, EMBASE, and Cochrane databases through March 2019. We included the most recent SRMAs of prospective cohort studies and new prospective cohort studies published after the census dates of the included SRMAs assessing the relation between dietary pulses with or without other legumes and incidence and mortality of cardiovascular diseases (CVDs) [including coronary heart disease (CHD), myocardial infarction (MI), and stroke], diabetes, hypertension, and/or obesity. Two independent reviewers extracted data and assessed risk of bias. Risk estimates were pooled using the generic inverse variance method and expressed as risk ratios (RRs) with 95% CIs. The overall certainty of the evidence was assessed using the GRADE approach. Six SRMAs were identified and updated to include 28 unique prospective cohort studies with the following number of cases for each outcome: CVD incidence, 10,261; CVD mortality, 16,168; CHD incidence, 7786; CHD mortality, 3331; MI incidence, 2585; stroke incidence, 8570; stroke mortality, 2384; diabetes incidence, 10,457; hypertension incidence, 83,284; obesity incidence, 8125. Comparing the highest with the lowest level of intake, dietary pulses with or without other legumes were associated with significant decreases in CVD (RR: 0.92; 95% CI: 0.85, 0.99), CHD (RR: 0.90; 95% CI: 0.83, 0.99), hypertension (RR: 0.91; 95% CI: 0.86, 0.97), and obesity (RR: 0.87; 95% CI: 0.81, 0.94) incidence. There was no association with MI, stroke, and diabetes incidence or CVD, CHD, and stroke mortality. The overall certainty of the evidence was graded as "low" for CVD incidence and "very low" for all other outcomes. Current evidence shows that dietary pulses with or without other legumes are associated with reduced CVD incidence with low certainty and reduced CHD, hypertension, and obesity incidence with very low certainty. More research is needed to improve our estimates. This trial was registered at clinicaltrials.gov as NCT03555734.

Database: CINAHL

Legume Consumption and Cardiometabolic Health.

Author(s): Becerra-Tomás, Nerea; Papandreou, Christopher; Salas-Salvadó, Jordi

Source: Advances in Nutrition; Nov 2019; vol. 10

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31728491

Available at [Advances in nutrition \(Bethesda, Md.\)](#) - from EBSCO (MEDLINE Complete)

Available at [Advances in nutrition \(Bethesda, Md.\)](#) - from Unpaywall

Abstract: Legumes are key components of several plant-based diets and are recognized as having a wide range of potential health benefits. Previous systematic reviews and meta-analyses have summarized the evidence regarding different cardiometabolic outcomes, such as cardiovascular disease (CVD) and type 2 diabetes (T2D), and legume consumption. However, those studies did not differentiate between nonsoy and soy legumes, which have different nutritional profiles. The aim of the present updated review, therefore, was to summarize and meta-analyze the published evidence regarding legume consumption (making a distinction between nonsoy and soy legumes) and cardiometabolic diseases. In addition, we reviewed randomized clinical trials assessing the effect of legume consumption on CVD risk factors in order to understand their associations. The results revealed a prospective, significant inverse association between total legume consumption and CVD and coronary heart disease risk, whereas a nonsignificant association was observed with T2D and stroke. In the stratified analysis by legume subtypes, only nonsoy legumes were associated with lower risk of T2D. Unfortunately, owing to the paucity of studies analyzing legumes and CVD, it was not possible to stratify the analysis for these outcomes. Because of the high degree of heterogeneity observed for most of the outcomes and the few studies included in some analyses, further prospective studies are warranted to determine the potential role of legume consumption on CVD and T2D.

Database: CINAHL

Glycaemic stability of a cyclist with Type 1 diabetes: 4011 km in 20 days on a ketogenic diet.

Author(s): Nolan, J.; Rush, A.; Kaye, J.

Source: Diabetic Medicine; Nov 2019; vol. 36 (no. 11); p. 1503-1507

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [Diabetic Medicine](#) - from Wiley Online Library

Abstract: Background: Maintaining glycaemic control during exercise presents a significant challenge for people living with Type 1 diabetes. Significant glycaemic variability has been observed in athletes with Type 1 diabetes in competitive contexts. While very-low-carbohydrate ketogenic diets have been shown to minimize glycaemic excursions, no published data have examined if this translates to exercise. Case report: We report the case of a 37-year-old man with Type 1 diabetes who successfully undertook a 4011 km cycle across Australia over 20 consecutive days whilst consuming a very-low-carbohydrate ketogenic diet. Continuous glucose monitoring data capture was 98.4% for the ride

duration and showed remarkable glycaemic stability, with a standard deviation of 2.1 mmol/l (average interstitial glucose 6.1 mmol/l) and 80.4% of time spent within a range of 3.9–10 mmol/l. Interstitial glucose was <3 mmol/l for 2.1% of this time, with only a single episode of symptomatic hypoglycaemia prompting brief interruption of exercise for carbohydrate administration. Conclusion: This case demonstrates the viability of a very-low-carbohydrate ketogenic diet in an individual with Type 1 diabetes undertaking exercise. While the effect of a very-low-carbohydrate ketogenic diet is yet to be examined more broadly in athletes with Type 1 diabetes, the glycaemic stability observed suggests that fat adaptation may attenuate glycaemic swings and reduce reliance on carbohydrate consumption during exercise for maintaining euglycaemia. What's new?: The benefits of exercise in Type 1 diabetes are well understood. Uptake is suboptimal despite this, partly as a result of glycaemic instability. Reduced glycaemic variability has been observed in individuals consuming ketogenic diets. Remarkable glycaemic stability was observed in a person with Type 1 diabetes exercising at moderate to high intensities over 20 consecutive days while consuming a ketogenic diet. A ketogenic diet is a viable dietary strategy for individuals with Type 1 diabetes who exercise. It may attenuate glycaemic fluctuations and reduce the carbohydrate required to maintain euglycaemia during exercise. Lower average glucose may increase the risk of hypoglycaemia and warrants collaboration with healthcare professionals.

Database: CINAHL

A pilot test of the GoWoman weight management intervention for women with mobility impairments in the online virtual world of Second Life®.

Author(s): Nosek, Margaret A.; Robinson-Whelen, Susan; Ledoux, Tracey A.; Hughes, Rosemary B.; O'Connor, Daniel P.; Lee, Rebecca E.; Goe, Rebecca; Silveira, Stephanie L.; Markley, Rachel; Nosek, Thomas M.

Source: Disability & Rehabilitation; Nov 2019; vol. 41 (no. 22); p. 2718-2729

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract: Objective: Pilot test GoWoman, a small-group weight management intervention for mobility impaired women that was a disability- and gender-responsive adaptation of the Diabetes Prevention Program delivered in the online virtual world of Second Life®. Objectives were to (1) examine pre-/post-intervention differences in weight, waist circumference, diet, physical activity, self-efficacy for diet and physical activity, nutrition knowledge and social support for weight management, (2) determine intervention feasibility (fidelity, attrition, engagement, acceptability). Design: Single-group modified interrupted time series quasi-experimental design whereby participants served as their own controls. Results: Thirteen women attended ≥8 of 16 GoWoman weekly sessions and lost an average of 5.97 pounds (2.71 kg) (3.31%) body weight (Cohen's d = 0.74) and 1.44 inches (3.66 cm) (3.58%) waist circumference (Cohen's d = 0.83). There were significant improvements in physical activity, diet and self-efficacy for diet and physical activity. All benchmarks for feasibility were met. Ratings of intervention content, group interactions and support and virtual world experiences were highly positive. Conclusion: Findings suggest that a disability- and gender-responsive weight management intervention with peer group support delivered in an online virtual world is feasible, meaningful and may assist with weight management for mobility impaired women. This study addresses a gap in

the general and rehabilitation research literature by addressing the disproportionately high rates of obesity among women with mobility impairments, who are generally excluded from tests of weight management interventions if they have limited ability to engage in vigorous physical activity. The GoWoman program is an adaptation of the Diabetes Prevention Program Lifestyle Change curriculum that is tailored to meet the unique weight management needs of women with mobility impairments, and was created to become a publicly available, disability- and gender-responsive intervention that can be used in community and rehabilitation settings. More rehabilitation and health promotion program should be offered in the free, online, virtual world of Second Life® since participants in this pilot study offered many favorable comments about the new learning and social opportunities available to them there and they did not have to deal with the disability-related environmental and health challenges that often prevent them from participating in face-to-face workshops. Preliminary indications of improvements in body weight, waist circumference, diet and physical activity after attending the GoWoman weight management intervention offered in Second Life® tell us that these strategies are feasible for helping women with mobility impairments manage their weight and should undergo further testing.

Database: CINAHL

The Early Detection and Management of Diabetic Neuropathy: Sudomotor testing helps evaluate the autonomic nervous system.

Author(s): MCDONALD, KEVIN C.

Source: Podiatry Management; Nov 2019; vol. 38 (no. 9); p. 121-123

Publication Date: Nov 2019

Publication Type(s): Periodical

Abstract:The article provides information on the early diagnosis and management of diabetic neuropathy (DN), a serious disease that affects about 30 million people in the U.S. Topics discussed include one of the keys to the diagnosis of axonal PN, early detection of PN through an accurate, sensitive and quantifiable measure of autonomic nerve disease, and treatment of PN including exercise, diet, and lifestyle modifications.

Database: CINAHL

Dairy foods, dairy fat, diabetes, and death: what can be learned from 3 large new investigations?

Author(s): Mozaffarian, Dariush

Source: American Journal of Clinical Nutrition; Nov 2019; vol. 110 (no. 5); p. 1053-1054

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [The American Journal of Clinical Nutrition](#) - from EBSCO (MEDLINE Complete)

Abstract:An introduction articles in the issue is presented on topics including dairy fat consumption and onset of diabetes in three cohorts of U.S. health professionals, how changes in dairy foods related to incident diabetes in the same three U.S. cohorts of health

professionals, and dairy consumption and death from cancer, cardiovascular disease, and all causes.

Database: CINAHL

Dietary intakes of flavan-3-ols and cardiometabolic health: systematic review and meta-analysis of randomized trials and prospective cohort studies.

Author(s): Raman, Gowri; Avendano, Esther E; Chen, Siyu; Wang, Jiaqi; Matson, Julia; Gayer, Bridget; Novotny, Janet A; Cassidy, Aedín

Source: American Journal of Clinical Nutrition; Nov 2019; vol. 110 (no. 5); p. 1067-1078

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [The American journal of clinical nutrition](#) - from EBSCO (MEDLINE Complete)

Available at [The American journal of clinical nutrition](#) - from Unpaywall

Abstract:Background Although available data suggest that some dietary flavan-3-ol sources reduce cardiometabolic risk, to our knowledge no review has systematically synthesized their specific contribution. Objective We aimed to examine, for the first time, if there is consistent evidence that higher flavan-3-ol intake, irrespective of dietary source, reduces cardiometabolic risk. Methods MEDLINE, Cochrane Central, and Commonwealth Agricultural Bureau abstracts were searched for prospective cohorts and randomized controlled trials (RCTs) published from 1946 to March 2019 on flavan-3-ol intake and cardiovascular disease (CVD) risk. Random-effects models meta-analysis was used. The Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach assessed the strength of evidence. Results Of 15 prospective cohorts (23 publications), 4 found highest compared with lowest habitual intakes of flavan-3-ols were associated with a 13% reduction in risk of CVD mortality and 2 found a 19% reduction in risk of chronic heart disease (CHD) incidence. Highest compared with lowest habitual intakes of monomers were associated with a reduction in risk of type 2 diabetes mellitus (T2DM) (n = 5) and stroke (n = 4) (10% and 18%, respectively). No association was found for hypertension. Of 156 RCTs, flavan-3-ol intervention resulted in significant improvements in acute/chronic flow-mediated dilation (FMD), systolic (SBP) and diastolic blood pressure (DBP), total cholesterol (TC), LDL and HDL cholesterol, triglycerides (TGs), hemoglobin A1c (HbA1c), and homeostasis model assessment of insulin resistance (HOMA-IR). All analyses, except HbA1c, were associated with moderate/high heterogeneity. When analyses were limited to good methodological quality studies, improvements in TC, HDL cholesterol, SBP, DBP, HOMA-IR, and acute/chronic FMD remained significant. In GRADE evaluations, there was moderate evidence in cohort studies that flavan-3-ol and monomer intakes were associated with reduced risk of CVD mortality, CHD, stroke, and T2DM, whereas RCTs reported improved TC, HDL cholesterol, SBP, and HOMA-IR. Conclusions Available evidence supports a beneficial effect of flavan-3-ol intake on cardiometabolic outcomes, but there was considerable heterogeneity in the meta-analysis. Future research should focus on an integrated intake/biomarker approach in cohorts and high-quality dose-response RCTs. This review was registered at www.crd.york.ac.uk/PROSPERO/ as CRD42018035782.

Database: CINAHL

Baseline Characteristics of Randomized Participants in the Glycemia Reduction Approaches in Diabetes: A Comparative Effectiveness Study (GRADE).

Author(s): Wexler, Deborah J.; Krause-Steinrauf, Heidi; Crandall, Jill P.; Florez, Hermes J.; Hox, Sophia H.; Kuhn, Alexander; Sood, Ajay; Underkofler, Chantal; Aroda, Vanita R.

Source: Diabetes Care; Nov 2019; vol. 42 (no. 11); p. 2098-2107

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31391203

Available at [Diabetes care](#) - from Unpaywall

Abstract:Objective: GRADE (Glycemia Reduction Approaches in Diabetes: A Comparative Effectiveness Study) is a 36-center unmasked, parallel treatment group, randomized controlled trial evaluating four diabetes medications added to metformin in people with type 2 diabetes (T2DM). We report baseline characteristics and compare GRADE participants to a National Health and Nutrition Examination Survey (NHANES) cohort. Research Design and Methods: Participants were age ≥ 30 years at the time of diagnosis, with duration of T2DM < 10 years, HbA1c 6.8-8.5% (51-69 mmol/mol), prescribed metformin monotherapy, and randomized to glimepiride, sitagliptin, liraglutide, or insulin glargine. Results: At baseline, GRADE's 5,047 randomized participants were 57.2 ± 10.0 years of age, 63.6% male, with racial/ethnic breakdown of 65.7% white, 19.8% African American, 3.6% Asian, 2.7% Native American, 7.6% other or unknown, and 18.4% Hispanic/Latino. Duration of diabetes was 4.2 ± 2.8 years, with mean HbA1c of $7.5 \pm 0.5\%$ (58 ± 5.3 mmol/mol), BMI of 34.3 ± 6.8 kg/m², and metformin dose of $1,944 \pm 204$ mg/day. Among the cohort, 67% reported a history of hypertension, 72% a history of hyperlipidemia, and 6.5% a history of heart attack or stroke. Applying GRADE inclusion criteria to NHANES indicates enrollment of a representative cohort with T2DM on metformin monotherapy (NHANES cohort average age, 57.9 years; mean HbA1c, 7.4% [57 mmol/mol]; BMI, 33.2 kg/m²; duration, 4.2 ± 2.5 years; and 7.2% with a history of cardiovascular disease). Conclusions: The GRADE cohort represents patients with T2DM treated with metformin requiring a second diabetes medication. GRADE will inform decisions about the clinical effectiveness of the addition of four classes of diabetes medications to metformin.

Database: CINAHL

The prevalence of cardiometabolic multimorbidity and its association with physical activity, diet, and stress in Canada: evidence from a population-based cross-sectional study.

Author(s): Sakakibara, Brodie M.; Obembe, Adebimpe O.; Eng, Janice J.

Source: BMC Public Health; Oct 2019; vol. 19 (no. 1)

Publication Date: Oct 2019

Publication Type(s): Academic Journal

PubMedID: 31651286

Available at [BMC Public Health](#) - from BioMed Central

Available at [BMC Public Health](#) - from Europe PubMed Central - Open Access

Available at [BMC Public Health](#) - from EBSCO (MEDLINE Complete)

Available at [BMC Public Health](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMC Public Health](#) - from Unpaywall

Abstract:Background: Cardiometabolic multimorbidity (CM) is defined as having a diagnosis of at least two of stroke, heart disease, or diabetes, and is an emerging health concern, but the prevalence of CM at a population level in Canada is unknown. The objectives of this study were to quantify the: 1) prevalence of CM in Canada; and 2) association between CM and lifestyle behaviours (e.g., physical activity, consumption of fruits and vegetables, and stress).Methods: Using data from the 2016 Canadian Community Health Survey, we estimated the overall and group prevalence of CM in individuals aged ≥ 50 years ($n = 13,226,748$). Multiple logistic regression was used to quantify the association between CM and lifestyle behaviours compared to a group without cardiometabolic conditions.Results: The overall prevalence of CM was 3.5% (467,749 individuals). Twenty-two percent (398,755) of people with diabetes reported having another cardiometabolic condition and thus CM, while the same was true for 32.2% (415,686) of people with heart disease and 48.4% (174,754) of stroke survivors. 71.2% of the sample reported eating fewer than five servings of fruits and vegetables per day. The odds of individuals with CM reporting zero minutes of physical activity was 2.35 [95% CI = 1.87 to 2.95] and having high stress was 1.89 [95% CI = 1.49 to 2.41] times the odds of the no cardiometabolic condition reference group. The odds of individuals with all three cardiometabolic conditions reporting zero minutes of physical activity was 4.31 [95% CI = 2.21 to 8.38] and having high stress was 3.93 [95% CI = 2.03 to 7.61].Conclusion: The number of Canadians with CM or at risk of CM is high and these individuals have lifestyle behaviours that are associated with adverse health outcomes. Lifestyle behaviours tend to diminish with increasing onset of cardiometabolic conditions. Lifestyle modification interventions focusing on physical activity and stress management for the prevention and management CM are warranted.

Database: CINAHL

Smart Phone APP to Restore Optimal Weight (SPAROW): protocol for a randomised controlled trial for women with recent gestational diabetes.

Author(s): Lim, Karen; Chi, Claudia; Chan, Shiao-Yng; Lim, Su Lin; Ang, Siew Min; Yoong, Joanne S.; Tsai, Cammy; Wong, Su Ren; Yew, Tong Wei; Tai, E. Shyong; Yong, Eu-Leong

Source: BMC Public Health; Oct 2019; vol. 19 (no. 1); p. 1-13

Publication Date: Oct 2019

Publication Type(s): Academic Journal

PubMedID: 31615456

Available at [BMC public health](#) - from BioMed Central

Available at [BMC public health](#) - from Europe PubMed Central - Open Access

Available at [BMC public health](#) - from EBSCO (MEDLINE Complete)

Available at [BMC public health](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMC public health](#) - from Unpaywall

Abstract:Background: Gestational diabetes (GDM) is a known risk factor for type 2 diabetes mellitus (T2DM), and women with a history of GDM have a 7-fold increased risk of

developing the disease. Achieving a healthy weight post-delivery is key in reducing the risk of future diabetes in these women. The aim of this trial is to investigate the use of an interactive smartphone application (APP) to restore women to optimal weight following delivery. **Methods:** This will be an open-label randomized controlled trial. Two hundred women with gestational diabetes will be randomized to receive the intervention or standard care following delivery. Participants will be reviewed at 6 weeks and 4 months post-delivery. The intervention is an APP serving as a platform for weight, diet and physical activity tracking. The APP provides 3-5 min educational videos suggesting suitable lifestyle adjustments relevant to postnatal period such as breast feeding, diet and exercise. Lastly, the APP will allow real-time interaction between users and the team of dietitians, physiotherapists and occupational therapists to encourage restoration of optimal weight. Women in the control arm will be informed about the increased risk of developing T2DM and advised to maintain a healthy weight. Primary outcome measure is the restoration of participants' booking weight if booking BMI ≤ 23 , or weight loss of at least 5% from booking weight if booking BMI > 23 over the 4 month period. Secondary outcome measures will assess serum metabolic and inflammatory markers, quality of life via questionnaires and cost-effectiveness of the intervention at each follow-up visit. **Discussion:** This will be the first randomised controlled trial investigating the use of a smartphone application for postpartum weight loss in women with gestational diabetes. The major ethnic groups in our study population represent the majority of ethnic groups in Asia, amongst which the prevalence of diabetes is high. If shown to be effective, this APP may be used in wider clinical settings to improve postpartum weight loss and reduce the risk of developing T2DM in these women. **Trial Registration:** This study was registered on [clintrials.gov](https://www.clinicaltrials.gov) on the 30th of October 2017, under the trial registration number: NCT03324737 .

Database: CINAHL

Nutritional assessment of older adults with diabetes mellitus.

Author(s): Saintrain, Maria Vieira de Lima; Sandrin, Rafaela Lais e Silva Pesenti; Bezerra, Carina Bandeira; Lima, Ana Ofélia Portela; Nobre, Marina Arrais; Braga, Débora Rosana Alves

Source: Diabetes Research & Clinical Practice; Sep 2019; vol. 155

Publication Date: Sep 2019

Publication Type(s): Academic Journal

PubMedID: 31425770

Abstract: **Aims:** We aimed to screen the nutritional status of older adults with diabetes mellitus, seeking to outline the needs of this population group considering their socioeconomic status. **Methods:** Cross-sectional study of 246 diabetic people aged 65-94 years in Northeastern Brazil. Semi-structured questionnaires were used to collect sociodemographic, general health and lifestyle data. The Mini Nutritional Assessment was used to screen nutritional status. **Results:** Participants' mean age was 73 ± 6.4 years, and there was a predominance of women (56.5%). The mean duration of diabetes was 14.1 years (± 9.6 years). Patients aged 80 years or older presented a 3.7-fold higher risk of malnutrition ($p < 0.001$), and those who were uneducated exhibited a 5.8-fold higher risk of malnutrition ($p = 0.040$). Patients with BMI of 18.6-24.9 kg/m^2 presented a 2.2-fold higher risk of malnutrition than overweight or obese patients ($p < 0.001$). Nutritional status was significantly associated with coronary artery disease ($p = 0.010$) and stroke ($p < 0.001$).

Malnourished patients exhibited a 2.2-fold higher occurrence of infection in the past 6 months ($p = 0.017$) and 2-fold higher occurrence of foot injuries ($p = 0.028$) than their well-nourished peers. Conclusion: Malnutrition in older diabetic patients exacerbates underlying diseases and contributes to unfavorable prognosis, particularly in the oldest old and in individuals with low levels of education.

Database: CINAHL

Dietary Patterns and Cardiometabolic Outcomes in Diabetes: A Summary of Systematic Reviews and Meta-Analyses.

Author(s): Kahleova, Hana; Salas-Salvadó, Jordi; Rahelić, Dario; Kendall, Cyril WC; Rembert, Emilie; Sievenpiper, John L

Source: Nutrients; Sep 2019; vol. 11 (no. 9); p. 2209-2209

Publication Date: Sep 2019

Publication Type(s): Academic Journal

Available at [Nutrients](#) - from Europe PubMed Central - Open Access

Available at [Nutrients](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrients](#) - from Unpaywall

Abstract: The Diabetes and Nutrition Study Group (DNSG) of the European Association for the Study of Diabetes (EASD) conducted a review of existing systematic reviews and meta-analyses to explain the relationship between different dietary patterns and patient-important cardiometabolic outcomes. To update the clinical practice guidelines for nutrition therapy in the prevention and management of diabetes, we summarize the evidence from these evidence syntheses for the Mediterranean, Dietary Approaches to Stop Hypertension (DASH), Portfolio, Nordic, liquid meal replacement, and vegetarian dietary patterns. The Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach was used to assess the quality of evidence. We summarized the evidence for disease incidence outcomes and risk factor outcomes using risk ratios (RRs) and mean differences (MDs) with 95% confidence intervals (CIs), respectively. The Mediterranean diet showed a cardiovascular disease (CVD) incidence (RR: 0.62; 95%CI, 0.50, 0.78), and non-significant CVD mortality (RR: 0.67; 95%CI, 0.45, 1.00) benefit. The DASH dietary pattern improved cardiometabolic risk factors ($P < 0.05$) and was associated with the decreased incidence of CVD (RR, 0.80; 95%CI, 0.76, 0.85). Vegetarian dietary patterns were associated with improved cardiometabolic risk factors ($P < 0.05$) and the reduced incidence (0.72; 95%CI: 0.61, 0.85) and mortality (RR, 0.78; 95%CI, 0.69, 0.88) of coronary heart disease. The Portfolio dietary pattern improved cardiometabolic risk factors and reduced estimated 10-year coronary heart disease (CHD) risk by 13% (-1.34% (95%CI, -2.19 to -0.49)). The Nordic dietary pattern was correlated with decreased CVD (0.93 (95%CI, 0.88, 0.99)) and stroke incidence (0.87 (95%CI, 0.77, 0.97)) and, along with liquid meal replacements, improved cardiometabolic risk factors ($P < 0.05$). The evidence was assessed as low to moderate certainty for most dietary patterns and outcome pairs. Current evidence suggests that the Mediterranean, DASH, Portfolio, Nordic, liquid meal replacement and vegetarian dietary patterns have cardiometabolic advantages in populations inclusive of diabetes.

Database: CINAHL

The Prevalence of Metabolic Syndrome and Its Related Risk Complications among Koreans.

Author(s): Lee, Seung-Hoo; Tao, Shuting; Kim, Hak-Seon

Source: *Nutrients*; Aug 2019; vol. 11 (no. 8); p. 1755-1755

Publication Date: Aug 2019

Publication Type(s): Academic Journal

Available at [Nutrients](#) - from Europe PubMed Central - Open Access

Available at [Nutrients](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrients](#) - from Unpaywall

Abstract: There is an increasing number of metabolic syndrome (MetS) patients worldwide, and there is no exception in South Korea. The risk complications of metabolic syndrome have been investigated by many previous research studies, while no data on any current trends of MetS are available. Therefore, the present study investigates the recent prevalence of MetS and its associated risk complications in Korean adults by using the Korean National Health and Nutrition Examination Survey (KNHANES). The Survey respondents (n = 4744) were adults over the age of 30, and they had participated in KNHANES 2016, which is a health survey of a national representative sample of non-institutionalized civilian South Koreans. The cross-tabulation analysis was applied to figure out the general characteristics impacting on the prevalence of MetS; furthermore, the odds ratios and 95% confidence intervals (CIs) using multivariate logistic regression analysis were presented for the risk complications of MetS. Findings from this study indicated that subjective health status, family structure, age, income level, use of nutrition labelling and gender showed significant connections with the prevalence of MetS. The risk diseases, stroke (OR = 2.174, 95% CI = 1.377–3.433, p < 0.01), myocardial infarction (MI) (OR = 2.667, 95% CI = 1.474–4.824, p < 0.01) and diabetes (OR = 6.533, 95% CI = 4.963, p < 0.001) were explored and verified attributable to the prevalence of MetS. The findings in this study suggest that sociodemographic characteristics-concentrated strategies are vital to prevent the prevalence of MetS in South Korea, and relative risk complications ought to be cautiously dealt with as well.

Database: CINAHL

Sugar-Sweetened Beverages and Cardiometabolic Health: An Update of the Evidence.

Author(s): Malik, Vasanti S.; Hu, Frank B.

Source: *Nutrients*; Aug 2019; vol. 11 (no. 8); p. 1840-1840

Publication Date: Aug 2019

Publication Type(s): Academic Journal

Available at [Nutrients](#) - from Europe PubMed Central - Open Access

Available at [Nutrients](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrients](#) - from Unpaywall

Abstract: Sugar-sweetened beverages (SSBs) have little nutritional value and a robust body of evidence has linked the intake of SSBs to weight gain and risk of type 2 diabetes (T2D), cardiovascular disease (CVD), and some cancers. Metabolic Syndrome (MetSyn) is a clustering of risk factors that precedes the development of T2D and CVD; however,

evidence linking SSBs to MetSyn is not clear. To make informed recommendations about SSBs, new evidence needs to be considered against existing literature. This review provides an update on the evidence linking SSBs and cardiometabolic outcomes including MetSyn. Findings from prospective cohort studies support a strong positive association between SSBs and weight gain and risk of T2D and coronary heart disease (CHD), independent of adiposity. Associations with MetSyn are less consistent, and there appears to be a sex difference with stroke with greater risk in women. Findings from short-term trials on metabolic risk factors provide mechanistic support for associations with T2D and CHD. Conclusive evidence from cohort studies and trials on risk factors support an etiologic role of SSB in relation to weight gain and risk of T2D and CHD. Continued efforts to reduce intake of SSB should be encouraged to improve the cardiometabolic health of individuals and populations.

Database: CINAHL

REHABILITATION:

Impaired oral health status on admission is associated with poor clinical outcomes in post-acute inpatients: A prospective cohort study.

Author(s): Shiraishi, Ai; Yoshimura, Yoshihiro; Wakabayashi, Hidetaka; Tsuji, Yuri; Shimazu, Sayuri; Jeong, Seungwon

Source: Clinical Nutrition; Dec 2019; vol. 38 (no. 6); p. 2677-2683

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract: Oral health is an integral part of nutrition and rehabilitation. The purpose of this study was to investigate the impact of impaired oral health status on clinical and functional outcomes in post-acute in-hospital rehabilitation. We conducted a prospective cohort study of hospitalized patients undergoing rehabilitation at a 225-bed post-acute rehabilitation hospital in Japan. All newly admitted patients were eligible to enroll during the two-year research period. Oral health status was evaluated on admission using the Revised Oral Assessment Guide (ROAG). Nutritional status, assessed using the Mini Nutritional Assessment-Short Form; activities of daily living, assessed by Functional Independence Measure motor scores; home discharge; all-cause in-hospital mortality; and length of hospital stay were measured as clinical and rehabilitation outcomes. Multivariate analyses were used to determine whether the ROAG score on admission was associated with these outcomes at discharge. Of the 1066 patients enrolled, 1056 were included in the final analysis. The mean age was 70 ± 17 years. Fifty-two percent of patients were women. Stroke (21.7%) and musculoskeletal disorders (30.5%) were the most common reasons for admission. Slight or moderate to severe oral health problems were detected in 609 (57.7%) and 163 (15.4%) patients, respectively. Eighteen patients died during hospitalization. The ROAG score at admission was independently associated with Functional Independence Measure motor scores at discharge ($P = 0.022$), home discharge ($P = 0.005$), in-hospital mortality ($P = 0.039$), and length of hospital stay ($P = 0.045$), after adjusting for potential confounders. Impaired oral health status may be associated with rehabilitation outcomes in hospitalized patients. Early detection of oral health problems and treatment by dental

professionals, or through cooperation between medical and dental professionals, should be implemented in these patients.

Database: CINAHL

Beneficial Effects of Leucine Supplementation on Criteria for Sarcopenia: A Systematic Review.

Author(s): Martínez-Arnau, Francisco M.; Fonfría-Vivas, Rosa; Cauli, Omar

Source: *Nutrients*; Oct 2019; vol. 11 (no. 10); p. 2504-2504

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Available at [Nutrients](#) - from Europe PubMed Central - Open Access

Available at [Nutrients](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrients](#) - from Unpaywall

Abstract:Objective: Treating sarcopenia remains a challenge, and nutritional interventions present promising approaches. We summarize the effects of leucine supplementation in treating older individuals with sarcopenia associated with aging or to specific disorders, and we focus on the effect of leucine supplementation on various sarcopenia criteria, e.g., muscular strength, lean mass, and physical performance. Methods: A literature search for articles related to this topic was performed on the relevant databases, e.g., the PubMed/Medline, Embase, EBSCO, Cochrane, Lilacs, and Dialnet. The identified articles were reviewed according to Preferred Reporting Items for Systematic reviews and meta-analyses (PRISMA) guidelines. Results: Of the 163 articles we consulted, 23 met our inclusion criteria, analysing the effect of leucine or leucine-enriched protein in the treatment of sarcopenia, and 13 of these studies were based on randomized and placebo-controlled trials (RCTs). In overall terms, the published results show that administration of leucine or leucine-enriched proteins (range 1.2–6 g leucine/day) is well-tolerated and significantly improves sarcopenia in elderly individuals, mainly by improving lean muscle-mass content and in this case most protocols also include vitamin D co-administration. The effect of muscular strength showed mix results, and the effect on physical performance has seldom been studied. For sarcopenia-associated with specific disorders, the most promising effects of leucine supplementation are reported for the rehabilitation of post-stroke patients and in those with liver cirrhosis. Further placebo-controlled trials will be necessary to determine the effects of leucine and to evaluate sarcopenia with the criteria recommended by official Working Groups, thereby limiting the variability of methodological issues for sarcopenia measurement across studies.

Database: CINAHL

Sarcopenia and Psychosocial Variables in Patients in Intensive Care Units: The Role of Nutrition and Rehabilitation in Prevention and Treatment.

Author(s): Gropper, Sareen; Hunt, Dennis; Chapa, Deborah W.

Source: *Critical Care Nursing Clinics of North America*; Dec 2019; vol. 31 (no. 4); p. 489-499

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Database: CINAHL

The Interplay of Nutrition, Physical Activity, Severity of Illness, and Mortality in Critically Ill Burn Patients: Is There a Connection?

Author(s): Shields, Beth A; Carpenter, Jennifer N; Bustillos, Brenda D; Jordan, Alicia N; Cunningham, Kyle B; Vega, Saul J; Aden, James K; Rowan, Matthew P; Rizzo, Julie A; Dewey, William S; Gurney, Jennifer M; Ainsworth, Craig R; Cancio, Leopoldo C

Source: Journal of Burn Care & Research; Nov 2019; vol. 40 (no. 6); p. 936-942

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31298707

Available at [Journal of Burn Care & Research](#) - from Unpaywall

Abstract:The purpose of this project was to evaluate the relationships between nutrition, physical activity levels (PALs), severity of illness (SOI), and survival in critically ill burn patients. We conducted a retrospective evaluation of consecutively admitted adult patients who had an intensive care unit stay ≥ 8 days after $\geq 20\%$ TBSA burns. Linear regression was used to assess the association between SOI (sequential organ failure assessment scores) and PALs as well as between SOI and nutritional intake. After univariate analysis comparing survivors and nonsurvivors, factors with $P < .10$ were analyzed with multiple logistic regression. Characteristics of the 45 included patients were: 42 ± 15 years old, $37 \pm 17\%$ TBSA burns, 22% mortality. Factors independently associated with survival were burn size (negatively) ($P = .018$), height (positively) ($P = .006$), highest PAL during the first eight intensive care unit days (positively) ($P = .016$), and kcal balance during the fifth through the eighth intensive care unit days (positively) ($P = .012$). Sequential organ failure assessment scores had a significant ($P < .001$) but weak association with nutrition intake ($R^2 = 0.05$) and PALs ($R^2 = 0.25$). Higher nutritional intake and activity were significantly associated with lower mortality in critically ill burn patients. Given the weak associations between both nutritional intake and PALs with SOI, the primary barrier in achieving nutrition and activity goals was not SOI. We recommend that physical rehabilitation and nutritional intake be optimized in an effort to improve outcomes in critically ill burn patients.

Database: CINAHL

Prognostic factors associated with achieving total oral diet following osteocutaneous microvascular free tissue transfer reconstruction of the oral cavity.

Author(s): Kansara, Sagar; Wang, Tao; Koochakzadeh, Sina; Liou, Nelson E.; Graboyes, Evan M.; Skoner, Judith M.; Hornig, Joshua D.; Sandulache, Vlad C.; Day, Terry A.; Huang, Andrew T.

Source: Oral Oncology; Nov 2019; vol. 98 ; p. 1-7

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31521884

Abstract:Introduction: Osteocutaneous microvascular free tissue transfer (OMFTT) is the current standard in reconstruction of large bony defects of the oral cavity. Although being

able to swallow ranks as a top priority for patients undergoing OMFTT, factors associated with achieving an oral diet following surgery remain unclear. We sought to describe the rate of total oral diet achievement, and to identify possible pre-, intra-, and post-operative factors associated with achievement in patients undergoing OMFTT. **Methods:** Retrospective review between January 1, 2010 and March 31, 2018 at two tertiary academic centers. **Results:** 249 patients (67% male, mean age 58 years) met inclusion criteria, with a median follow up of 15 months. Overall, 142 (57%) of patients achieved a total PO diet post-operatively, with median time to achievement of 3.2 months. Multivariate analysis identified that lack of concurrent glossectomy (SHR 1.72 [1.09-2.70], $p = 0.02$), N0/1 disease (SHR 1.92 [1.16-3.13], $p = 0.011$), avoidance of post-operative fistula formation (SHR 1.96 [1.22-3.23], $p = 0.005$), pre-operative G-tube independence (SHR 3.33 [1.69-6.25], $p < 0.001$), and successful dental rehabilitation (SHR 2.08 [1.43-3.03], $p < 0.001$) are independently associated with total oral diet achievement. **Conclusions:** Bony resections not requiring glossectomy, limited nodal disease burden, pre-operative gastrostomy-independence, avoidance of post-operative fistula, and dental rehabilitation are independently associated with achievement of total oral diet following OMFTT reconstruction of the oral cavity. Counseling patients on associated risk factors is important in guiding post-treatment expectations. Minimization of post-operative fistula, and maximization of dental rehabilitation may significantly improve total oral diet achievement in this patient population.

Database: CINAHL

The Role of the Registered Dietitian in Supportive Oncology Care...Food & Nutrition Conference & Expo, 26-29 October 2019, Philadelphia, PA.

Author(s): DeMille, D.; Wetzel, A.

Source: Journal of the Academy of Nutrition & Dietetics; Sep 2019

Publication Date: Sep 2019

Publication Type(s): Academic Journal

Abstract: Registered Dietitians (RDs) provide essential nutrition expertise to supportive oncology care (SOC), offering means to enhance patient experience and clinical outcomes. Our SOC Program is interdisciplinary. RDs collaborate with physicians, social workers, nurse navigators, and palliative care nurse practitioners to ensure optimal nutrition care during active treatment, palliative care, and long-term survivorship. Our interdisciplinary approach identifies risk of clinical malnutrition and addresses symptoms affecting nutrition. Within our SOC team, screening may begin with the nurse navigator at diagnosis if the patient presents with weight loss, nutrition related symptoms or has a high nutrition risk diagnosis. RD's also screen and assess all patients, as indicated by clinical course, before, during and after treatment. With this model of universal access, all patients and their families have access to nutrition programming including lectures, support groups and cooking demonstrations. RDs are central to a distinctive bundled program called CARE (Cancer Rehabilitation) Clinic, This stand-alone interdisciplinary clinic offers a 'one stop shop' for patients with physical therapy, speech therapy and advanced practice nurse in a bundled services approach for prehabilitation and rehabilitation. Additional referrals for related psychological, spiritual, financial needs that may influence nutrition, function, and overall well-being are included in CARE. Living with and after cancer is complex and frequently entails consideration of nutritional status. RDs, as part of any SOC team, help alleviate

nutrition related side effects, provide nutrition education, and optimize nutritional outcomes as part of a comprehensive plan of care for patients and their families.

Database: CINAHL

CARDIOVASCULAR DISEASE:

Seaweed intake and risk of cardiovascular disease: the Japan Public Health Center–based Prospective (JPHC) Study.

Author(s): Murai, Utako; Yamagishi, Kazumasa; Sata, Mizuki; Kokubo, Yoshihiro; Saito, Isao; Yatsuya, Hiroshi; Ishihara, Junko; Inoue, Manami; Sawada, Norie; Iso, Hiroyasu; Tsugane, Shoichiro; Group, JPHC Study

Source: American Journal of Clinical Nutrition; Dec 2019; vol. 110 (no. 6); p. 1449-1455

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [The American Journal of Clinical Nutrition](#) - from EBSCO (MEDLINE Complete)

Abstract:Background The minerals, vitamins, soluble dietary fibers, and flavonoids of seaweed are protective for preventing cardiovascular diseases. However, the association between seaweed intake and risk of cardiovascular disease has not been established. Objectives We examined the dietary intake of seaweed and its impact upon stroke and ischemic heart disease risk among a Japanese study population. Methods We surveyed 40,707 men and 45,406 women from 2 large cohorts (age range: 40–69 y). Seaweed intake was determined by FFQ at baseline (1990–1994). Incidences of stroke and ischemic heart disease were ascertained until the end of 2009 (Cohort I) or 2012 (Cohort II). Sex-specific cardiovascular disease HRs (95% CIs) were estimated using Cox proportional hazard models after stratification by area and adjustment for cardiovascular disease risk and dietary factors. Results During 1,493,232 person-years of follow-up, 4777 strokes (2863 ischemic stroke, 1361 intraparenchymal hemorrhages, and 531 subarachnoid hemorrhages) and 1204 ischemic heart disease cases were identified. Among men, significant multivariable HRs (95% CIs) for almost daily consumption compared with almost no consumption of seaweed were seen in ischemic heart disease [0.76 (0.58, 0.99); P -trend = 0.04] and total cardiovascular diseases [0.88 (0.78, 1.00); P -trend = 0.08]. Among women, such inverse associations were 0.56 (0.36, 0.85; P -trend = 0.006) for ischemic heart disease and 0.89 (0.76, 1.05; P -trend = 0.10) for total cardiovascular diseases. No significant associations were observed between seaweed intake and risk of total stroke or stroke types among either men or women. Conclusions Seaweed intake was inversely associated with risk of ischemic heart disease.

Database: CINAHL

The Healthiest Medical Test Results.

Author(s):

Source: Consumer Reports on Health; Dec 2019; vol. 31 (no. 12); p. 6-8

Publication Date: Dec 2019

Publication Type(s): Periodical

Abstract:The article offers health tips on healthiest medical test results and their friendly levels. Topics discussed include estimate cardiovascular disease risk based on factors such as age, diabetes status, and smoking history; consider taking lifestyle measures, such as following a heart-healthy eating program; and daily servings of fruit and veggies may reduce the risk of heart attack, stroke, and cancer.

Database: CINAHL

Lifestyle behaviours in patients with established cardiovascular diseases: a European observational study.

Author(s): Fernández, Diana; Brotons, Carlos; Moral, Irene; Bulc, Mateja; Afonso, Mélanie; Akan, Hülya; Pinto, Susana; Vucak, Jasna; da Silva Martins, Carlos Manuel

Source: BMC Family Practice; Nov 2019; vol. 20 (no. 1)

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [BMC Family Practice](#) - from BioMed Central

Available at [BMC Family Practice](#) - from Europe PubMed Central - Open Access

Available at [BMC Family Practice](#) - from EBSCO (MEDLINE Complete)

Available at [BMC Family Practice](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMC Family Practice](#) - from Unpaywall

Abstract:Background: Patients who have experienced a cardiovascular clinical event such as a myocardial infarction or stroke qualify for intensive risk factor evaluation and management. The aim of this study is to explore lifestyle changes as well as the achievement of targets for risk factors in patients with established cardiovascular disease. Methods: Cross-sectional study conducted in primary care practices. The study was carried out in six European countries (Croatia, France, Portugal, Slovenia, Spain and Turkey). Patients with established cardiovascular disease (coronary heart disease and stroke) attended in primary care were selected and assessed from January to June 2016. Patients were recruited and assessed at the practice by research assistants between 6 months and 3 years after the event. Statistical comparisons were done with the unpaired two-sided Student's t-test for continuous variables and Chi-square test for categorical variables. Results: Nine hundred and seventy-three patients (32.4% females) were assessed. About 14% of them were smokers, 32% were physically inactive, and 30% had nutritionally poor eating behaviours. LDL cholesterol target value below 70 mg/dl was achieved in about 23% of patients, and in general, women were less cardio-protected by drugs than men. Conclusions: Many patients with established cardiovascular disease who attended in general practice still fail to achieve the lifestyle, risk factor, and therapeutic targets set by European guidelines. These results are relevant to general practitioners because these patients have a high risk of subsequent cardiovascular events, including MI, stroke, and death.

Database: CINAHL

Higher Dietary Non-enzymatic Antioxidant Capacity Is Associated with Decreased Risk of All-Cause and Cardiovascular Disease Mortality in Japanese Adults.

Author(s): Kashino, Ikuko; Mizoue, Tetsuya; Serafini, Mauro; Akter, Shamima; Sawada, Norie; Ishihara, Junko; Kotemori, Ayaka; Inoue, Manami; Yamaji, Taiki; Goto, Atsushi; Iwasaki, Motoki; Noda, Mitsushiko; Tsugane, Shoichiro; Group, Japan Public Health Center-based Prospective Study

Source: Journal of Nutrition; Nov 2019; vol. 149 (no. 11); p. 1967-1976

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31498407

Available at [The Journal of nutrition](#) - from EBSCO (MEDLINE Complete)

Abstract:Background: Few studies have assessed associations of non-enzymatic antioxidant capacity (NEAC) in the overall diet with all-cause or specific mortality, and their results have been inconsistent.Objectives: The present study investigated the association between dietary NEAC and all-cause or cause-specific mortality.Methods: The study was a large-scale population-based prospective cohort study in Japan consisting of 42,520 men and 50,207 women aged 44-76 y, who had no history of cancer, stroke, ischemic heart disease, or chronic liver disease. We evaluated FFQ-based dietary NEAC with use of published databases in which the NEACs of individual foods were analyzed by ferric reducing antioxidant power (FRAP) and oxygen radical absorbance capacity (ORAC) assays. Dietary NEAC was calculated by multiplying the estimated NEAC with the consumed amount and summing up those values for all foods, and was categorized in quartiles. We identified death and cause of death with use of residential registry and death certificates. HRs and 95% CIs for death from the second survey, which was conducted from April 1995 to December 2014 were estimated with Cox proportional hazards regression analysis.Results: After 1,498,308 person-years of follow-up, 12,978 total deaths occurred. The multivariable-adjusted HRs (95% CIs) for all-cause mortality for the highest compared with the lowest quartile of FRAP and ORAC were 0.85 (0.80, 0.89) and 0.84 (0.79, 0.89), respectively. Dietary NEACs were inversely associated with mortality from cardiovascular disease (CVD), but not from cancer. The multivariable-adjusted HRs (95% CIs) for CVD for the highest compared with the lowest quartile of FRAP and ORAC were 0.83 (0.75, 0.92) and 0.79 (0.70, 0.89), respectively.Conclusions: Higher dietary NEACs from FRAP and ORAC were associated with lower risk of all-cause mortality and mortality from CVD in Japanese adults.

Database: CINAHL

Dietary intake of anthocyanins and risk of cardiovascular disease: A systematic review and meta-analysis of prospective cohort studies.

Author(s): Kimble, Rachel; Keane, Karen M.; Lodge, John K.; Howatson, Glyn

Source: Critical Reviews in Food Science & Nutrition; Oct 2019; vol. 59 (no. 18); p. 3032-3043

Publication Date: Oct 2019

Publication Type(s): Academic Journal

PubMedID: 30277799

Available at [Critical Reviews in Food Science & Nutrition](#) - from Unpaywall

Abstract:Accumulating evidence suggests flavonoid intake is associated with reduced risk of non-communicable diseases. We aimed to systematically determine and quantify the potential association between dietary anthocyanin intake and risk of cardiovascular diseases (CVD). A systematic literature search of studies reporting anthocyanin intake and risk of fatal or nonfatal CVD was performed using SCOPUS, MEDLINE, CINAHL and Cochrane Library. The relative risk (RR) or hazard ratio (HR) of highest category of anthocyanin foods were pooled in a random-effects meta-analysis. Subgroup analysis were conducted to determine possible sources of heterogeneity. The meta-analysis suggested intake of dietary anthocyanins and reduced risk of CHD (RR = 0.91, 95% CI: 0.83, 0.99; I² = 12.0, Ph = 0.337) and CVD mortality (RR = 0.92, 95% CI: 0.87, 0.97; I² = 0.0, Ph = 0.584). However, there was no relationship between the intake of these compounds and reduced risk of MI, stroke or total CVD. Subgroup analysis determined reduced risk of CHD and CVD mortality was more prominent for anthocyanidin intake, as opposed to anthocyanin or berries. Our systematic review and meta-analysis provides evidence that anthocyanins, specifically anthocyanidins, reduce the risk of CHD and CVD mortality. Further randomized controlled trials on anthocyanin intake and CVD risk factors are needed to support these findings.

Database: CINAHL

Changes in diet and physical activity resulting from the Strong Hearts, Healthy Communities randomized cardiovascular disease risk reduction multilevel intervention trial.

Author(s): Folta, Sara C.; Paul, Lynn; Nelson, Miriam E.; Strogatz, David; Graham, Meredith; Eldridge, Galen D.; Higgins, Michael; Wing, David; Seguin-Fowler, Rebecca A.

Source: International Journal of Behavioral Nutrition & Physical Activity; Oct 2019; vol. 16 (no. 1)

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Available at [International Journal of Behavioral Nutrition and Physical Activity](#) - from BioMed Central

Available at [International Journal of Behavioral Nutrition and Physical Activity](#) - from Europe PubMed Central - Open Access

Available at [International Journal of Behavioral Nutrition and Physical Activity](#) - from Unpaywall

Abstract:Background: Women living in rural areas face unique challenges in achieving a heart-healthy lifestyle that are related to multiple levels of the social-ecological framework. The purpose of this study was to evaluate changes in diet and physical activity, which are secondary outcomes of a community-based, multilevel cardiovascular disease risk reduction intervention designed for women in rural communities. Methods: Strong Hearts, Healthy Communities was a six-month, community-randomized trial conducted in 16 rural towns in Montana and New York, USA. Sedentary women aged 40 and older with overweight and obesity were recruited. Intervention participants (eight towns) attended twice weekly exercise and nutrition classes for 24 weeks (48 total). Individual-level components included aerobic exercise, progressive strength training, and healthy eating practices; a civic

engagement component was designed to address social and built environment factors to support healthy lifestyles. The control group (eight towns) attended didactic healthy lifestyle classes monthly (six total). Dietary and physical activity data were collected at baseline and post-intervention. Dietary data were collected using automated self-administered 24-h dietary recalls, and physical activity data were collected by accelerometry and self-report. Data were analyzed using multilevel linear regression models with town as a random effect. Results: At baseline, both groups fell short of meeting many recommendations for cardiovascular health. Compared to the control group, the intervention group realized significant improvements in intake of fruit and vegetables combined (difference: 0.6 cup equivalents per day, 95% CI 0.1 to 1.1, $p = .026$) and in vegetables alone (difference: 0.3 cup equivalents per day, 95% CI 0.1 to 0.6, $p = .016$). For physical activity, there were no statistically significant between-group differences based on accelerometry. By self-report, the intervention group experienced a greater increase in walking MET minutes per week (difference: 113.5 MET-minutes per week, 95% CI 12.8 to 214.2, $p = .027$). Conclusions: Between-group differences in dietary and physical activity behaviors measured in this study were minimal. Future studies should consider how to bolster behavioral outcomes in rural settings and may also continue to explore the value of components designed to enact social and environmental change. Trial registration: clinicaltrials.gov Identifier: NCT02499731. Registered 16 July 2015.

Database: CINAHL

Nut consumption and incidence of cardiovascular diseases and cardiovascular disease mortality: a meta-analysis of prospective cohort studies.

Author(s): Becerra-Tomás, Nerea; Paz-Graniel, Indira; Kendall, Cyril W.C.; Kahleova, Hana; Rahelić, Dario; Sievenpiper, John L; Salas-Salvadó, Jordi

Source: Nutrition Reviews; Oct 2019; vol. 77 (no. 10); p. 691-709

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Available at [Nutrition Reviews](#) - from Unpaywall

Abstract:Context Previous meta-analyses evaluating the association between nut consumption and the risk of cardiovascular disease (CVD) had substantial methodological limitations and lacked recently published large prospective studies; hence, making an updated meta-analysis highly desirable. Objective To update the clinical guidelines for nutrition therapy in relation to the European Association for the Study of Diabetes (EASD), a systematic review and meta-analysis of prospective studies was conducted using the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) system to summarize the evidence of the association between total nuts, specific types of nuts, and the incidence of, and mortality from, CVD outcomes. Data sources Relevant articles were identified by searching the PubMed and Cochrane databases. Data extraction Two independent researchers screened the articles to identify those that met the inclusion criteria. Data analysis The inverse variance method with fixed-effect or random-effects models was used to pool data across studies (expressed as risk ratio [RR] and 95% confidence interval [CI]). Heterogeneity was tested and quantified using the Cochrane Q test and I²-statistic, respectively. The GRADE system was used to assess the quality of the evidence. Results Nineteen studies were included in the analyses. The results revealed an

inverse association between total nut consumption (comparing highest vs lowest categories) and CVD incidence (RR, 0.85; 95%CI, 0.80-0.91; I2, 0%), CVD mortality (RR, 0.77; 95%CI, 0.72-0.82; I2, 3%), coronary heart disease (CHD) incidence (RR, 0.82; 95%CI, 0.69-0.96; I2, 74%), CHD mortality (RR, 0.76; 95%CI, 0.67-0.86; I2, 46%), stroke mortality (RR, 0.83; 95%CI, 0.75-0.93; I2, 0%), and atrial fibrillation (RR, 0.85; 95%CI, 0.73-0.99; I2, 0%). No association was observed with stroke incidence and heart failure. The certainty of the evidence ranged from moderate to very low. **Conclusions** This systematic review and meta-analysis revealed a beneficial role of nut consumption in reducing the incidence of, and mortality from, different CVD outcomes.

Database: CINAHL

Ezetimibe Lipid-Lowering Trial on Prevention of Atherosclerotic Cardiovascular Disease in 75 or Older (EWTOPIA 75): A Randomized, Controlled Trial.

Author(s): Ouchi, Yasuyoshi; Sasaki, Jun; Arai, Hidenori; Yokote, Koutaro; Harada, Kazumasa; Katayama, Yasuo; Urabe, Takao; Uchida, Yasufumi; Hayashi, Masaru; Yokota, Naoto; Nishida, Hirokazu; Otonari, Takatoshi; Arai, Tadashi; Sakuma, Ichiro; Sakabe, Kazuo; Yamamoto, Masayasu; Kobayashi, Takashi; Oikawa, Shinichi; Yamashita, Shizuya; Rakugi, Hiromi

Source: Circulation; Sep 2019; vol. 140 (no. 12); p. 992-1003

Publication Date: Sep 2019

Publication Type(s): Academic Journal

PubMedID: 31434507

Available at [Circulation](#) - from Ovid (Journals @ Ovid) - Remote Access

Abstract:Background: Evidence regarding the primary prevention of coronary artery disease events by low-density lipoprotein cholesterol (LDL-C) lowering therapy in older individuals, aged ≥ 75 years, is insufficient. This trial tested whether LDL-C-lowering therapy with ezetimibe is useful for the primary prevention of cardiovascular events in older patients. **Methods:** This multicenter, prospective, randomized, open-label, blinded end-point evaluation conducted at 363 medical institutions in Japan examined the preventive efficacy of ezetimibe for patients aged ≥ 75 years, with elevated LDL-C without history of coronary artery disease. Patients, who all received dietary counseling, were randomly assigned (1:1) to receive ezetimibe (10 mg once daily) versus usual care with randomization stratified by site, age, sex, and baseline LDL-C. The primary outcome was a composite of sudden cardiac death, myocardial infarction, coronary revascularization, or stroke. **Results:** Overall, 3796 patients were enrolled between May 2009 and December 2014, and 1898 each were randomly assigned to ezetimibe versus control. Median follow-up was 4.1 years. After exclusion of 182 ezetimibe patients and 203 control patients because of lack of appropriate informed consent and other protocol violations, 1716 (90.4%) and 1695 (89.3%) patients were included in the primary analysis, respectively. Ezetimibe reduced the incidence of the primary outcome (hazard ratio [HR], 0.66; 95% CI, 0.50-0.86; $P=0.002$). Regarding the secondary outcomes, the incidences of composite cardiac events (HR, 0.60; 95% CI, 0.37-0.98; $P=0.039$) and coronary revascularization (HR, 0.38; 95% CI, 0.18-0.79; $P=0.007$) were lower in the ezetimibe group than in the control group; however, there was no difference in the incidence of stroke, all-cause mortality, or adverse events between trial groups. **Conclusions:** LDL-C-lowering therapy with ezetimibe prevented cardiovascular

events, suggesting the importance of LDL-C lowering for primary prevention in individuals aged ≥ 75 years with elevated LDL-C. Given the open-label nature of the trial, its premature termination and issues with follow-up, the magnitude of benefit observed should be interpreted with caution. Clinical Registration: URL: <https://www.umin.ac.jp>. Unique identifier: UMIN000001988.

Database: CINAHL

Implementation of a Brazilian Cardioprotective Nutritional (BALANCE) Program for improvement on quality of diet and secondary prevention of cardiovascular events: A randomized, multicenter trial.

Author(s): Weber, Bernardete; Bersch-Ferreira, Ângela C.; Torreglosa, Camila R.; Marcadenti, Aline; Lara, Enilda S.; da Silva, Jacqueline T.; Costa, Rosana P.; Santos, Renato H.N.; Berwanger, Otavio; Bosquetti, Rosa; Pagano, Raira; Mota, Luis G.S.; de Oliveira, Juliana D.; Soares, Rafael M.; Galante, Andrea P.; da Silva, Suzana A.; Zampieri, Fernando G.; Kovacs, Cristiane; Amparo, Fernanda C.; Moreira, Priscila

Source: American Heart Journal; Sep 2019; vol. 215 ; p. 187-197

Publication Date: Sep 2019

Publication Type(s): Academic Journal

PubMedID: 31349110

Available at [American heart journal](#) - from Unpaywall

Abstract:Background: Appropriate dietary recommendations represent a key part of secondary prevention in cardiovascular disease (CVD). We evaluated the effectiveness of the implementation of a nutritional program on quality of diet, cardiovascular events, and death in patients with established CVD.Methods: In this open-label, multicenter trial conducted in 35 sites in Brazil, we randomly assigned (1:1) patients aged 45 years or older to receive either the BALANCE Program (experimental group) or conventional nutrition advice (control group). The BALANCE Program included a unique nutritional education strategy to implement recommendations from guidelines, adapted to the use of affordable and regional foods. Adherence to diet was evaluated by the modified Alternative Healthy Eating Index. The primary end point was a composite of all-cause mortality, cardiovascular death, cardiac arrest, myocardial infarction, stroke, myocardial revascularization, amputation, or hospitalization for unstable angina. Secondary end points included biochemical and anthropometric data, and blood pressure levels.Results: From March 5, 2013, to April 7, 2015, a total of 2534 eligible patients were randomly assigned to either the BALANCE Program group (n = 1,266) or the control group (n = 1,268) and were followed up for a median of 3.5 years. In total, 235 (9.3%) participants had been lost to follow-up. After 3 years of follow-up, mean modified Alternative Healthy Eating Index (scale 0-70) was only slightly higher in the BALANCE group versus the control group (26.2 ± 8.4 vs 24.7 ± 8.6 , $P < .01$), mainly due to a 0.5-serving/d greater intake of fruits and of vegetables in the BALANCE group. Primary end point events occurred in 236 participants (18.8%) in the BALANCE group and in 207 participants (16.4%) in the control group (hazard ratio, 1.15; 95% CI 0.95-1.38; $P = .15$). Secondary end points did not differ between groups after follow-up.Conclusions: The BALANCE Program only slightly improved adherence to a healthy diet in patients with established CVD and had no significant effect on the incidence of cardiovascular events or death.

Database: CINAHL

Mushroom consumption, biomarkers, and risk of cardiovascular disease and type 2 diabetes: a prospective cohort study of US women and men.

Author(s): Lee, Dong Hoon; Yang, Meng; Giovannucci, Edward L; Sun, Qi; Chavarro, Jorge E

Source: American Journal of Clinical Nutrition; Sep 2019; vol. 110 (no. 3); p. 666-674

Publication Date: Sep 2019

Publication Type(s): Academic Journal

Available at [American Journal of Clinical Nutrition](#) - from EBSCO (MEDLINE Complete)

Abstract:Background Mushrooms are good dietary sources of important vitamins, minerals, and bioactive compounds which may be important in the prevention of chronic diseases. However, studies have not prospectively evaluated the potential health effects of mushrooms with respect to major cardiometabolic diseases. Objectives The aim of this study was to examine the association of mushroom consumption with major cardiometabolic diseases and mediating biomarkers in 2 large prospective US cohorts. Methods We followed 67,139 women from the Nurses' Health Study (1986–2012) and 43,541 men from the Health Professionals Follow-up Study (1986–2012) who were free of chronic diseases. Mushroom consumption was assessed at baseline through the use of a food-frequency questionnaire. Cardiometabolic biomarkers were collected in subpopulations of the 2 cohorts. Cox proportional hazards models were used to estimate HRs and 95% CIs of cardiovascular disease (CVD), including coronary heart disease (CHD) and stroke, and type 2 diabetes (T2D), associated with mushroom consumption. Results We identified total 11,894 CVD (7,616 CHD; 4,278 stroke), and 10,206 T2D cases in >2 million person-years of follow-up. In the pooled multivariable-adjusted analysis, participants who consumed ≥ 5 servings of mushrooms per week had no significantly different risk of total CVD (HR: 1.02; 95% CI: 0.91, 1.14), CHD (HR: 1.00; 95% CI: 0.87, 1.16), stroke (HR: 1.05; 95% CI: 0.87, 1.25), or T2D (HR: 1.04; 95% CI: 0.93, 1.16) than participants who consumed mushrooms <1 time/mo. We consistently found no association between mushroom consumption and the aforementioned cardiometabolic diseases, in subgroups of sex, lifestyle factors, and medical conditions. Moreover, mushroom consumption was not associated with plasma biomarkers of lipids, insulin, and inflammation. Conclusions We found no association of mushroom consumption with biomarkers and risks of CVD and T2D in US adults. More large prospective cohort studies are warranted to investigate this association in other racial/ethnic groups.

Database: CINAHL

Can regular long-term breakfast cereals consumption benefits lower cardiovascular diseases and diabetes risk? A longitudinal population-based study.

Author(s): Xu, Xiaoyue; Parker, Deborah; Inglis, Sally C.; Byles, Julie

Source: Annals of Epidemiology; Sep 2019; vol. 37 ; p. 43-43

Publication Date: Sep 2019

Publication Type(s): Academic Journal

PubMedID: 31378560

Abstract: Purpose: Studies indicate breakfast cereals may reduce the risk of overweight, cardiovascular diseases, and diabetes, but a limited number of longitudinal studies have explored these relationships, indicating the need for further assessment. Methods: We used 45 and Up Study data to examine the longitudinal association between breakfast cereals (and different categories of cereals) and heart disease, stroke, and diabetes. Dietary consumption was assessed by a short food frequency questionnaire. Diagnosed heart disease, stroke, and diabetes were self-reported. Generalized estimating equation models were used to examine the longitudinal associations. Results: Of a total of 142,503 participants (aged 45 years and older), people in the older age group (aged 80 or older) had significantly higher breakfast cereal consumption ($P < .001$) than those in the younger age group (aged 45-64 years). A significantly inverse association was found between breakfast muesli and heart disease, stroke, and diabetes across all age groups. Associations between other categories of breakfast cereals (biscuit, bran, and oat cereals) and these three diseases differed by age groups. A positive association was found between oat cereals and diabetes for people in the younger age groups (aged 80 years and younger), but not for people in the older age group (aged 80 years and older). Conclusions: The benefit of breakfast muesli consumption was highlighted in prevention of these three diseases. The result suggests that age-specific dietary guidelines, with a particular focus on the types of breakfast cereals consumption in prevention of chronic diseases for older people need to be developed.

Database: CINAHL

Association of vitamin K with cardiovascular events and all-cause mortality: a systematic review and meta-analysis.

Author(s): Chen, Heng-Gui; Sheng, Li-Ting; Zhang, Yan-Bo; Cao, An-Lan; Lai, Yu-Wei; Kunutsor, Setor K.; Jiang, Limiao; Pan, An

Source: European Journal of Nutrition; Sep 2019; vol. 58 (no. 6); p. 2191-2205

Publication Date: Sep 2019

Publication Type(s): Academic Journal

Abstract: Purpose: We conducted a meta-analysis to systematically assess the prospective association between vitamin K and cardiovascular disease (CVD) events and all-cause mortality. Methods: We searched PubMed and EMBASE through January 2019 for prospective studies that reported the association of vitamin K (assessed by dietary intake or circulating concentration) with CVD events [including total CVD, CVD mortality, total coronary heart disease (CHD), fatal CHD, nonfatal myocardial infarction (MI), and stroke] and all-cause mortality. Multivariable-adjusted hazard ratios (HRs) comparing top versus bottom tertiles of vitamin K were combined using random-effects meta-analysis. Results: Twenty-one articles were included with 222,592 participants. A significant association was found between dietary phylloquinone and total CHD (pooled HR 0.92; 95% CI 0.84, 0.99; $I^2 = 0\%$; four studies), as well as menaquinone and total CHD (0.70; 95% CI 0.53, 0.93; $I^2 = 32.1\%$; two studies). No significant association was observed between dietary vitamin K and all-cause mortality, CVD mortality, or stroke. Elevated plasma desphospho-uncarboxylated MGP (dp-ucMGP), a marker of vitamin K deficiency, was associated with an increased risk of all-cause mortality (1.84; 95% CI 1.48, 2.28; $I^2 = 16.8\%$; five studies) and CVD mortality (1.96; 95% CI 1.47, 2.61; $I^2 = 0\%$; two studies). No significant association was observed between circulating total osteocalcin and all-cause mortality or total CVD. Conclusions: Our

findings showed that higher dietary vitamin K consumption was associated with a moderately lower risk of CHD, and higher plasma dp-ucMGP concentration, but not total circulating osteocalcin, was associated with increased risks of all-cause and CVD mortality. However, causal relations cannot be established because of limited number of available studies, and larger prospective studies and randomized clinical trials are needed to validate the findings.

Database: CINAHL

Effects of Nutritional Supplements and Dietary Interventions on Cardiovascular Outcomes: An Umbrella Review and Evidence Map.

Author(s): Khan, Safi U.; Khan, Muhammad U.; Riaz, Haris; Valavoor, Shahul; Zhao, Di; Vaughan, Lauren; Okunrintemi, Victor; Riaz, Irbaz Bin; Khan, Muhammad Shahzeb; Kaluski, Edo; Murad, M. Hassan; Blaha, Michael J.; Guallar, Eliseo; Michos, Erin D.

Source: Annals of Internal Medicine; Aug 2019; vol. 171 (no. 3); p. 190-198

Publication Date: Aug 2019

Publication Type(s): Academic Journal

PubMedID: 31284304

Available at [Annals of Internal Medicine](#) - from EBSCO (MEDLINE Complete)

Abstract:Background: The role of nutritional supplements and dietary interventions in preventing mortality and cardiovascular disease (CVD) outcomes is unclear.Purpose: To examine evidence about the effects of nutritional supplements and dietary interventions on mortality and cardiovascular outcomes in adults.Data Sources: PubMed, CINAHL, and the Cochrane Library from inception until March 2019; ClinicalTrials.gov (10 March 2019); journal Web sites; and reference lists.Study Selection: English-language, randomized controlled trials (RCTs) and meta-analyses of RCTs that assessed the effects of nutritional supplements or dietary interventions on all-cause mortality or cardiovascular outcomes, such as death, myocardial infarction, stroke, and coronary heart disease.Data Extraction: Two independent investigators abstracted data, assessed the quality of evidence, and rated the certainty of evidence.Data Synthesis: Nine systematic reviews and 4 new RCTs were selected that encompassed a total of 277 trials, 24 interventions, and 992 129 participants. A total of 105 meta-analyses were generated. There was moderate-certainty evidence that reduced salt intake decreased the risk for all-cause mortality in normotensive participants (risk ratio [RR], 0.90 [95% CI, 0.85 to 0.95]) and cardiovascular mortality in hypertensive participants (RR, 0.67 [CI, 0.46 to 0.99]). Low-certainty evidence showed that omega-3 long-chain polyunsaturated fatty acid (LC-PUFA) was associated with reduced risk for myocardial infarction (RR, 0.92 [CI, 0.85 to 0.99]) and coronary heart disease (RR, 0.93 [CI, 0.89 to 0.98]). Folic acid was associated with lower risk for stroke (RR, 0.80 [CI, 0.67 to 0.96]; low certainty), whereas calcium plus vitamin D increased the risk for stroke (RR, 1.17 [CI, 1.05 to 1.30]; moderate certainty). Other nutritional supplements, such as vitamin B6, vitamin A, multivitamins, antioxidants, and iron and dietary interventions, such as reduced fat intake, had no significant effect on mortality or cardiovascular disease outcomes (very low- to moderate-certainty evidence).Limitations: Suboptimal quality and certainty of evidence.Conclusion: Reduced salt intake, omega-3 LC-PUFA use, and folate supplementation could reduce risk for some cardiovascular outcomes in adults. Combined calcium plus vitamin D might increase risk for stroke.Primary Funding Source: None.

Database: CINAHL

Association of Lifelong Intake of Barley Diet with Healthy Aging: Changes in Physical and Cognitive Functions and Intestinal Microbiome in Senescence-Accelerated Mouse-Prone 8 (SAMP8).

Author(s): Shimizu, Chikako; Wakita, Yoshihisa; Kihara, Makoto; Kobayashi, Naoyuki; Tsuchiya, Youichi; Nabeshima, Toshitaka

Source: Nutrients; Aug 2019; vol. 11 (no. 8); p. 1770-1770

Publication Date: Aug 2019

Publication Type(s): Academic Journal

Available at [Nutrients](#) - from Europe PubMed Central - Open Access

Available at [Nutrients](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrients](#) - from Unpaywall

Abstract: Barley intake reportedly reduces the risk of cardiovascular disease, but effects on the systemic phenotypes during healthy aging have not yet been examined. Therefore, we examined the effects of barley on the lifespan; behavioral phenotypes, such as locomotor activity, and cognitive functions, and intestinal microbiome in the senescence-accelerated mouse-prone 8 (SAMP8) mouse. We prepared two mild high-fat diets by adding lard, in which the starch components of AIN-93G were replaced by rice or barley "Motchiriboshi." SAMP8 (four weeks old, male) mice were fed AIN-93G until eight weeks old, and then rice (rice group) or barley diet (rice: barley = 1:4, barley group) until death. Changes in aging-related phenotypes, object and spatial recognition, locomotor and balancing activities, and the intestinal microbiome were recorded. Moreover, plasma cholesterol levels were analyzed at 16 weeks old. Barley intake prolonged the lifespan by approximately four weeks, delayed locomotor atrophy, and reduced balancing ability and spatial recognition. Barley intake significantly increased the medium and small particle sizes of high-density lipoprotein (HDL) cholesterol, which is associated with a reduced risk of total stroke. The Bacteroidetes to Firmicutes ratio in the barley group was significantly higher than that in the rice group during aging. Thus, lifelong barley intake may have positive effects on healthy aging.

Database: CINAHL

Dietary Inflammatory Index Is Associated with Risk of All-Cause and Cardiovascular Disease Mortality but Not with Cancer Mortality in Middle-Aged and Older Japanese Adults.

Author(s): Okada, Emiko; Shirakawa, Toru; Shivappa, Nitin; Wakai, Kenji; Suzuki, Koji; Date, Chigusa; Iso, Hiroyasu; Hébert, James R; Tamakoshi, Akiko

Source: Journal of Nutrition; Aug 2019; vol. 149 (no. 8); p. 1451-1459

Publication Date: Aug 2019

Publication Type(s): Academic Journal

PubMedID: 31100121

Available at [Journal of Nutrition](#) - from EBSCO (MEDLINE Complete)

Abstract:Background: The Dietary Inflammatory Index (DII) is a comprehensive, literature-derived index for assessing the effect of dietary constituents on inflammatory biomarkers. Several studies have shown an association between DII score and mortality, but there are limited prospective studies in Asian populations.Objectives: The aim of this study was to investigate the association between DII score and risk of all-cause, total cardiovascular disease (CVD), stroke, coronary heart disease (CHD), total cancer, digestive cancer, and noncancer/non-CVD mortality in the Japanese population.Methods: A total of 58,782 Japanese participants aged 40-79 y who were enrolled in the Japan Collaborative Cohort Study during 1988-1990 were included in the analysis. DII scores were calculated based on a food-frequency questionnaire. HRs and 95% CIs for mortality according to DII quintiles were estimated using Cox proportional hazards models.Results: During the median follow-up period of 19.3 y, a total of 11,693 participants died. The multivariable HR for all-cause mortality for the highest compared with the lowest DII quintiles was 1.13 (95% CI: 1.05, 1.21). For CVD mortality, the highest multivariable HRs were 1.30 (95% CI: 1.13, 1.49), 1.29 (95% CI: 1.05, 1.59), and 1.30 (95% CI: 0.96, 1.76) for total CVD, stroke, and CHD, respectively. No significant associations were observed between DII and risk of total cancer, digestive cancer, and noncancer/non-CVD mortality.Conclusion: Our findings suggest that a higher DII was associated with an increased risk of all-cause and CVD mortality among Japanese adults.

Database: CINAHL

ELDERLY:

Health Wire.

Author(s):

Source: Consumer Reports on Health; Dec 2019; vol. 31 (no. 12); p. 3-3

Publication Date: Dec 2019

Publication Type(s): Periodical

Abstract:The article offers information on miscellaneous health care topics. Topics discussed include statistics on older people with serious problems by taking dietary supplements; recommendation for doctor visit if blood pressure medications are changed during a hospital visit for noncardiac causes; and information on report that adults who consumed the plant proteins, including legumes, grains, and nuts were likely to die from heart disease.

Database: CINAHL

Malnutrition and its association with functional, cognitive and psychological status among Palestinian older adults in long-term care houses.

Author(s): Badrasawi, Manal; Badrasawi, Kamal; Hamdan, May; Irshaid, Alma A.

Source: Educational Gerontology; Dec 2019; vol. 45 (no. 12); p. 708-718

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [Educational Gerontology](#) - from Unpaywall

Abstract: Older adults often suffer from psychological, functional and health-related diseases. Literature has documented the relationship between, malnutrition with adverse health outcomes. This study aims to examine the relationship between malnutrition with the cognitive, functional and psychological status of older adults living in long-term care houses. The study employed a cross-sectional approach in which 99 participants were included from seven nursing homes in six different cities across the West Bank, Palestine. The nutritional status of older adults was assessed using anthropometric measurements and meal patterns. Malnutrition risk was assessed using Mini Nutritional Assessment; the cognitive function using Mini Mental Status Examination; the functional status using the Activity of Daily Living. Results: A total of 99 participants (45.5%) men and (54.5%) women were included in the final data analysis. The results revealed 47% of the participants were at risk of malnutrition, while 23% were malnourished. Variables that were significantly associated with malnutrition; male gender, higher score of depressive symptoms, and impaired cognitive function, $p < .05$ using chi square test. However, number of meals and hours of overnight fasting were not associated with being malnourished. Greater dependency level was associated with high risk of malnutrition, $p < .05$ using One Way ANOVA test. Conclusion: Risk of malnutrition was common among the study sample, and it was associated with impaired cognitive, psychological and functional status. Hence, there is a need to provide older adults living in long-term care houses with health programs to enhance their overall health and decrease the level of dependency. These findings are important to design educational programs targeting the stakeholders in the long-term care facilities to improve the residents' nutritional and functional status.

Database: CINAHL

Carbohydrate nutrition variables and risk of disability in instrumental activities of daily living.

Author(s): Gopinath, Bamini; Flood, Victoria M.; Burlutksy, George; Liew, Gerald; Mitchell, Paul

Source: European Journal of Nutrition; Dec 2019; vol. 58 (no. 8); p. 3221-3228

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract: Purpose: We aimed to examine the prospective association between dietary glycemic index (GI) and glycemic load (GL) of foods consumed, intakes of carbohydrates and fiber, and the ability to perform activities of daily living (ADL) in older adults. Methods: A total of 844 participants from the Blue Mountains Eye Study aged 60 years or older were examined from 2002–2004 to 2007–2009. Dietary information was collected using a validated, semi-quantitative food-frequency questionnaire. The Older Americans Resources and Services activities of daily living scale were administered to assess the functional status of participants. Multivariable logistic regression analysis was performed. Results: After multivariable adjustment, participants who were in the second and third quartiles of energy-adjusted total fiber intake compared to those in the first quartile of intake (reference group) at baseline had reduced risk of incident impaired instrumental activities of daily living (IADL) 5 years later: OR, 0.39 (95% CI 0.22–0.70) and OR 0.54 (95% CI 0.30–0.95), respectively. Analyses that involved dichotomized total fiber intake showed that participants in the upper three quartiles of total fiber intake (> 19 g/day), compared to those in the lowest quartile of intake (≤ 19 g/day) or reference group, had reduced IADL

disability risk 5 years later: OR 0.49 (95% CI 0.31–0.79). Non-significant associations were observed with total carbohydrates, GI, and GL and with risk of impaired total and basic ADL at 5-year follow-up. Conclusions: Habitual fiber consumption might be beneficial in leading to improved health status subserving performance of instrumental daily activities, needed to function in the community.

Database: CINAHL

Low-Volume High-Intensity Interval Training Versus Moderate- Intensity Continuous Training on Body Composition, Cardiometabolic Profile, and Physical Capacity in Older Women.

Author(s): Boukabous, Inès; Marcotte-Chénard, Alexis; Amamou, Taha; Boulay, Pierre; Brochu, Martin; Tessier, Daniel; Dionne, Isabelle; Riesco, Eléonor

Source: Journal of Aging & Physical Activity; Dec 2019; vol. 27 (no. 6); p. 879-889

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract: Objectives: To compare the effect of low-volume high-intensity interval training (HIIT) with moderate-intensity continuous training (MICT) on fat mass, cardiometabolic profile, and physical capacity, and confirm its feasibility in older women. Methods: Inactive older women (60–75 years) were randomly assigned to 8 weeks of either HIIT (75 min/week; n = 9) or MICT (150 min/ week; n = 9). Body composition, fasting metabolic profile, cardiovascular risk (Framingham score), and physical capacity (senior fitness test, peak oxygen uptake) were assessed before and after the intervention. Feasibility was evaluated with completion rate (training compliance; dropout rate) and affective response (Feeling Scale; pre- and postexercise). Results: Total cholesterol level, non-high-density lipoprotein cholesterol level, and the Framingham risk score decreased in both groups ($p \leq .03$). Although peak oxygen uptake remained unchanged, the 6-min walk test distance increased ($p < .0001$), irrespective of the group. Completion rate and affective responses were not different between groups ($p \geq .38$). Conclusion: A short-term HIIT program is feasible and provides as much benefits as MICT in older women.

Database: CINAHL

Burden of Premorbid Consumption of Texture Modified Diets in Daily Life on Nutritional Status and Outcomes of Hospitalization.

Author(s): Maeda, Keisuke; Ishida, Y.; Nonogaki, T.; Shimizu, A.; Yamanaka, Y.; Matsuyama, R.; Kato, R.; Mori, N.

Source: Journal of Nutrition, Health & Aging; Dec 2019; vol. 23 (no. 10); p. 973-978

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract: Objectives: Due to the water-rich cooking process required to soften texture modified diets (TMDs), TMDs may have poorer nutrition. The aim of this study was to investigate the associations between daily premorbid TMD consumption and nutritional status at the time of hospitalization, and its burden on hospitalization outcomes. Design: Retrospective observational study. Setting: An academic hospital. Participants: The cohort comprised 3,594 older adult patients aged ≥ 65 years admitted to the hospital.

Measurements: Patients were interviewed on admission using a premorbid daily consumption meal form to determine whether the patient ate a TMD. Nutritional status was examined using nutritional screening tools (Mini-Nutritional Assessment Short Form [MNA-SF], Malnutrition Universal Screening Tool [MUST], Geriatric Nutritional Risk Index [GNRI]) and the European Society of Clinical Nutrition and Metabolism (ESPEN)-defined criteria of malnutrition at admission. Length of hospital stay (LOS) and in-hospital mortality were considered outcomes of hospitalization. Multivariate analyses were performed to detect associations between premorbid TMD consumption and nutritional status and outcomes. Results: The mean age of the subjects was 75.9 ± 7.0 years, including 58% males. Overall, 110 (3.1%) patients consuming a premorbid TMD were identified. They were older ($p < 0.001$), had poor nutritional status (lower MNA-SF score [$p < 0.001$] and GNRI value [$p < 0.001$], higher MUST score [$p < 0.001$], and more prevalent ESPEN-defined malnutrition [61.8% vs. 14.0%, $p < 0.001$] than did patients without a TMD. The mortality rate and LOS of patients with TMD was higher (7.3% vs. 2.9%, $p = 0.017$) and longer (19 days vs. 8 days, $p < 0.001$) than those without TMD. Multivariate analyses showed that TMD consumption was independently associated with poor nutritional status and prolonged LOS after adjusting confounders. Conclusion: Daily consumption of a TMD during the premorbid period affects nutritional status at the time of hospitalization and outcomes. Further studies are necessary to investigate whether nutritional intervention can improve outcomes for people on a TMD.

Database: CINAHL

High Protein Intake Is Associated with Lower Risk of All-Cause Mortality in Community-Dwelling Chinese Older Men and Women.

Author(s): Chan, Ruth; Leung, J.; Woo, J.

Source: Journal of Nutrition, Health & Aging; Dec 2019; vol. 23 (no. 10); p. 987-996

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract: Objectives: To examine the association of the quantity and the source of protein intake with mortality risk in Chinese older adults. Design: Prospective cohort study. Setting: Community. Participants: Community-dwelling Chinese adults aged ≥ 65 (1,480 men, 1,540 women) in Hong Kong. Measurements: Food frequency questionnaire was used to capture baseline dietary intakes including protein, fiber, total grains, vegetables and fruit intakes. Primary outcome measures, identified from the death registry, were death from all causes, cancer and cardiovascular disease (CVD). Other demographic and lifestyle risk factors were also collected. Multivariate Cox proportion hazards regression was used to examine the association of protein intake with mortality risk. Results: During a median of 13.8 follow-up years, 963 all-cause deaths, 336 cancer deaths, and 205 CVD deaths were identified. Among men in the highest quintile of total protein intake, all-cause mortality and cancer mortality decreased by 29% [95% confidence interval (CI): 0.55–0.92, p -trend=0.017] and 38% [95% CI: 0.39–0.97, p -trend=0.041] respectively compared with men in the lowest quintile after adjustment for demographics, lifestyle factors and medical conditions. Men in the highest quintile of animal protein intake showed 20% reduced risk of all-cause mortality than men in the lowest quintile (p -trend=0.042). Women in the highest quintile of plant protein intake showed 39% decreased risk of all-cause mortality [95% CI: 0.44–0.85, p -trend=0.019] than those in the lowest quintile. In women, protein intake was not associated with cancer

mortality. In both men and women, protein intake was not associated with CVD mortality. Further adjustment for other dietary variables attenuated the significant associations. Conclusions: Contrary to findings from Caucasian populations of all ages, among Chinese older adults, higher total protein intake was associated with lower all-cause and cancer mortality in Chinese older men. While higher animal protein intake was associated with reduced all-cause mortality in Chinese older men, higher plant protein intake was protective against all-cause mortality in Chinese women. The attenuated associations between protein intake and mortality risk after adjustment for other dietary variables also highlight the role of whole diet approach in mortality risk reduction among older adults.

Database: CINAHL

Individualized home-based exercise and nutrition interventions improve frailty in older adults: a randomized controlled trial.

Author(s): Hsieh, Tsung-Jen; Su, Shin-Chang; Chen, Chun-Wei; Kang, Yaw-Wen; Hu, Ming-Hsia; Hsu, Li-Lin; Wu, Szu-Yun; Chen, Likwang; Chang, Hsing-Yi; Chuang, Shao-Yuan; Pan, Wen-Harn; Hsu, Chih-Cheng

Source: International Journal of Behavioral Nutrition & Physical Activity; Dec 2019; vol. 16 (no. 1)

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [International Journal of Behavioral Nutrition & Physical Activity](#) - from BioMed Central

Available at [International Journal of Behavioral Nutrition & Physical Activity](#) - from Europe PubMed Central - Open Access

Available at [International Journal of Behavioral Nutrition & Physical Activity](#) - from Unpaywall

Abstract:Background: Frail older adults are predisposed to multiple comorbidities and adverse events. Recent interventional studies have shown that frailty can be improved and managed. In this study, effective individualized home-based exercise and nutrition interventions were developed for reducing frailty in older adults. Methods: This study was a four-arm, single-blind, randomized controlled trial conducted between October 2015 and June 2017 at Miaoli General Hospital in Taiwan. Overall, 319 pre-frail or frail older adults were randomly assigned into one of the four study groups (control, exercise, nutrition, and exercise plus nutrition [combination]) and followed up during a 3-month intervention period and 3-month self-maintenance period. Improvement in frailty scores was the primary outcome. Secondary outcomes included improvements in physical performance and mental health. The measurements were performed at baseline, 1 month, 3 months, and 6 months. Results: At the 6-month measurement, the exercise (difference in frailty score change from baseline: -0.23 ; 95% confidence interval [CI]: $-0.41, -0.05$; $p = 0.012$), nutrition (-0.28 ; 95% CI: $-0.46, -0.11$; $p = 0.002$), and combination (-0.34 ; 95% CI: $-0.52, -0.16$; $p < 0.001$) groups exhibited significantly greater improvements in the frailty scores than the control group. Significant improvements were also observed in several physical performance parameters in the exercise, nutrition, and combination groups, as well as in the 12-Item Short Form Health Survey mental component summary score for the nutrition group. Conclusions: The designated home-based exercise and nutrition interventions can

help pre-frail or frail older adults to improve their frailty score and physical performance. Trial registration: Retrospectively registered at ClinicalTrials.gov (identifier: NCT03477097); registration date: March 26, 2018.

Database: CINAHL

Prevalence and Risk Factors of Postprandial Hypotension among Elderly People Admitted in a Geriatric Evaluation and Management Unit : An Observational Study.

Author(s): Schoevaerds, Didier; Iacovelli, M.; Toussaint, E.; Sibille, F.-X.; De Saint-Hubert, M.; Cremer, G.

Source: Journal of Nutrition, Health & Aging; Dec 2019; vol. 23 (no. 10); p. 1026-1033

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract: Objectives: To explore the prevalence and potential risk factors of postprandial hypotension (PPH) among elderly patients in an acute geriatric ward. Design: A prospective observational study. Setting: Geriatric Unit in a Belgian tertiary-care University Hospital. Participants: Seventy-six hospitalized elderly patients after stabilization of their acute conditions. Measurements: PPH and orthostatic hypotension (OH) measured by a non-invasive automated blood pressure device, demographic data, Katz's Basic Activities of Daily Living (ADL) and Lawton's instrumental ADL, Short Physical Performance Battery, Charlson Comorbidity Index, Mini Nutritional Assessment-Short Form, Timed Up and Go test, Get-up Early test, grip strength and 7 classes of drugs. Results: Overall, the prevalence of PPH was 46% (n=35/76), and it was symptomatic in 31% of the patients (n=11/35). PPH is associated with OH in one-third of the cases (n=12/35). Two-thirds of the patients with PPH had a significant drop in systolic blood pressure within the first 75 minutes after a meal. In univariate analyses, risk factors of PPH were nursing home residence, alpha-blocker consumption, help needed for eating and a good level of global functional status. However, patients with a good functional status were at increased risk of alpha-blocker exposure. In multivariate analyses, only alpha-blocker consumption and help needed for eating remained statistically significant. Conclusion: PPH is frequent among hospitalized elderly people in a Geriatric Evaluation and Management Unit, affecting nearly one out of two people. The use of alpha-blockers is an important risk factor and may alert clinicians to the risk of PPH.

Database: CINAHL

Protein supplementation combined with low-intensity resistance training in geriatric medical patients during and after hospitalisation: a randomised, double-blind, multicentre trial.

Author(s): Gade, Josephine; Beck, Anne Marie; Andersen, Hanne E.; Christensen, Britt; Rønholt, Finn; Klausen, Tobias W.; Vinther, Anders; Astrup, Arne

Source: British Journal of Nutrition; Nov 2019; vol. 122 (no. 9); p. 1006-1020

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract: Sarcopenia (loss of muscle mass/strength) burdens many older adults – hospitalised older adults being particularly vulnerable. Treating the condition, protein

supplementation (PrS) and resistance training (RT) may act synergistically. Therefore, this block-randomised, double-blind, multicentre intervention study, recruiting geriatric patients > 70 years from three medical departments, investigated the effect of PrS combined with RT during hospitalisation and 12 weeks after discharge. Participants were randomly allocated (1:1) to receive PrS (totally 27.5 g whey protein/d, about 2000 kJ/d) or isoenergetic placebo-products (0.05). In conclusion, PrS increasing the total protein intake by 0.4 and 0.2 g/kg per d during hospitalisation and after discharge, respectively, does not seem to increase the adaptive response to low-intensity RT in geriatric medical patients.

Database: CINAHL

Effect of a Resistance Training Program on Sarcopenia and Functionality of the Older Adults Living in a Nursing Home.

Author(s): del Campo Cervantes, J. Martín; Macías Cervantes, M. Habacuc; Monroy Torres, Rebeca

Source: Journal of Nutrition, Health & Aging; Nov 2019; vol. 23 (no. 9); p. 829-836

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract: Importance: There are currently few evidence about resistance training as a treatment for sarcopenia in the nursing home setting. Objective: To evaluate the effect of a resistance training program on the sarcopenia and functionality of the elderly living in a nursing home. Design, Setting, and Participants: A blinded longitudinal intervention study conducted in elderly people living in a nursing home from August to November 2016. Participants included a convenience sample of 19 older adults. Intervention: We prescribed a resistance exercise program three times a week for 12 weeks. The scheme was two to three sets with eight to 15 repetitions per exercise. Main Outcome and Measures: The primary outcome was an increase in muscle strength and an improvement in physical performance of the elderly people living in nursing homes. Results: 19 older adults between 77.7 ± 8.9 years old, completed the 12 week resistance exercise program achieving a significant increase in muscle strength to 5.7 Kg ($p = 0.0001$) as well as nutritional intake for the first four weeks ($p = 0.001$); we found an improvement in physical performance ($p = 0.0001$) in balance ($p = 0.0001$), chair stand ($p = 0.036$) and gait speed ($p = 0.0001$). Of the 47.4% that reached sarcopenia degree, in the end it was 33.3%. A relationship with nutritional status ($p = 0.004$) and age ($p = 0.019$) was found with the initial and final handgrip strength ($p = 0.041$). Conclusions and relevance: The resistance training program improves the functionality (muscle strength and physical performance), with the benefit of the decrease in severe sarcopenia.

Database: CINAHL

Low lean mass and chemotherapy toxicity risk in the elderly: the Fraction study protocol.

Author(s): Steinmeyer, Zara; Gérard, Stéphane; Filleron, Thomas; Lozano, Stéphanie; Brechemier, Delphine; Abellan Van Kan, Gabor; Mourey, Loic; Cristol-Dalstein, Laurence; De Decker, Laure; Rolland, Yves; Balardy, Laurent

Source: BMC Cancer; Nov 2019; vol. 19 (no. 1); p. 1-9

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31775667

Available at [BMC cancer](#) - from BioMed Central

Available at [BMC cancer](#) - from Europe PubMed Central - Open Access

Available at [BMC cancer](#) - from EBSCO (MEDLINE Complete)

Available at [BMC cancer](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMC cancer](#) - from Unpaywall

Abstract:Background: Half of cancer cases occur in patients aged 70 and above. Majority of older patients are eligible for chemotherapy but evidence for treating this population is sparse and severe toxicities affect more than half of them. Determining prognostic biomarkers able to predict poor chemotherapy tolerance remains one of the major issues in geriatric oncology. Ageing is associated with body composition changes (increase of fat mass and loss of lean mass) independently of weight-loss. Previous studies suggest that body composition parameters (particularly muscle mass) may predict poor chemotherapy tolerance. However, studies specifically including older adults on this subject remain sparse and the majority of them study body composition based on computed tomography (CT) scanner (axial L3 section) muscle mass estimation. This method is to date not validated in elderly cancer patients.Methods: This trial (Fraction) will evaluate the discriminative ability of appendicular lean mass measured by dual-energy X-ray absorptiometry (DXA) to predict severe toxicity incidence in older cancer-patients treated with first-line chemotherapy. DXA is considered the gold standard in body composition assessment in older adults. Patient's aged ≥ 70 diagnosed with solid neoplasms or lymphomas at a locally advanced or metastatic stage treated for first-line chemotherapy were recruited. Patients completed a pre-chemotherapy assessment that recorded socio-demographics, tumor/treatment variables, laboratory test results, geriatric assessment variables (function, comorbidity, cognition, social support and nutritional status), oncological risk scores and body composition with DXA. Appendicular lean mass was standardized using evidence based international criteria. Participants underwent short follow-up geriatric assessments within the first 3 months, 6 months and a year after inclusion. Grade 3 to 5 chemotherapy-related toxicities, as defined by the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) were assessed at each chemotherapy cycle.Discussion: The finding that body composition is associated with poor tolerance of chemotherapy could lead to consider these parameters as well as improve current decision-making algorithms when treating older adults.Trial Registration: ClinicalTrials.gov Identifier: NCT02806154 registered on October 2016.

Database: CINAHL

Prevalence of Activity Limitations and Association with Multimorbidity Among US Adults 50 to 64 Years Old.

Author(s): Bowling, C. Barrett; Deng, Luqin; Sakhuja, Swati; Morey, Miriam C.; Jaeger, Byron C.; Muntner, Paul

Source: JGIM: Journal of General Internal Medicine; Nov 2019; vol. 34 (no. 11); p. 2390-2396

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31435766

Abstract:Background: Functional limitations may be more common in middle-aged adults than previously recognized. However, there are few published data on the prevalence of activity limitations, and their association with multimorbidity, among adults 50 to 64 years old.Objective: To describe the prevalence of activity limitations and the association with multimorbidity in middle-aged adults.Design: Cross-sectional analysis of US population-based National Health and Nutrition Examination Survey (NHANES) 2011-2016.Participants: The total number of community-dwelling NHANES participants aged 50-64 years old is 4217.Main Measures: Chronic conditions included hypertension, high cholesterol, diabetes mellitus, obesity, chronic kidney disease, cancer, stroke, coronary heart disease, heart failure, chronic obstructive pulmonary disease/asthma, arthritis, and depression. Activity limitations were defined as any difficulty within each of four International Classification of Functioning (ICF) domains: functional limitations (kneeling, carrying, standing, sitting, reaching, grasping, pulling), mobility (walking ¼ mile, climbing 10 steps), basic activities of daily living (BADLs; walking, transferring, eating, dressing), and instrumental activities of daily living (IADLs; finances, chores, cooking). We calculated prevalence ratios for activity limitations using generalized estimating equations.Key Results: The prevalence of functional limitations, mobility limitations, BADL difficulty, and IADL difficulty was 34%, 11%, 15%, and 17%, respectively. Seventy-two percent of participants had two or more chronic conditions; 23% had two, 18% had three, 15% had four, and 16% had five or more. Multivariable adjusted prevalence ratios (95% CI) for functional limitations among those with 2, 3, 4, and 5 or more chronic conditions, compared with 0-1 conditions, were 1.94 (1.43-2.63), 2.50 (1.93-3.23), 3.26 (2.48-4.27), and 4.54 (3.48-5.93), respectively (p trend < 0.001). Larger prevalence ratios at a higher number of chronic conditions were present for mobility limitations, BADL difficulty, and IADL difficulty.Conclusions: Problems with function are not limited to older adults and multimorbidity may be helpful for identifying middle-aged adults with a high prevalence of activity limitations.

Database: CINAHL

Serum albumin/globulin ratio is associated with cognitive function in community-dwelling older people: The Septuagenarians, Octogenarians, Nonagenarians Investigation with Centenarians study.

Author(s): Maeda, Satomi; Takeya, Yasushi; Oguro, Ryosuke; Akasaka, Hiroshi; Ryuno, Hirochika; Kabayama, Mai; Yokoyama, Serina; Nagasawa, Motonori; Fujimoto, Taku; Takeda, Masao; Onishi-Takeya, Miyuki; Itoh, Norihisa; Takami, Yoichi; Yamamoto, Koichi; Sugimoto, Ken; Inagaki, Hiroki; Ogawa, Madoka; Nakagawa, Takeshi; Yasumoto, Saori; Masui, Yukie

Source: Geriatrics & Gerontology International; Oct 2019; vol. 19 (no. 10); p. 967-971

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Available at [Geriatrics & Gerontology International](#) - from Wiley Online Library

Abstract:Aim: The objective of this study was to clarify the relationship between cognitive function and the serum albumin/globulin ratio (A/G ratio) in community-dwelling Japanese older adults. Methods: Randomly extracted residents in both urban and rural parts of Japan

were enrolled in this study. A total of 1827 participants with a mean age of 70 or 80 years were recruited. A venue survey method was carried out with comprehensive studies, including interviews, blood collection, physical examination and cognitive function tests. Results: Univariate analysis showed a significant positive correlation between the total Japanese version of the Montreal Cognitive Assessment score and the serum A/G ratio at the age of 70 and 80 years, in which better cognitive function was associated with a high serum A/G ratio. Multiple regression analysis with the total Japanese version of the Montreal Cognitive Assessment score as the dependent variable showed that the serum albumin level, serum globulin level, serum A/G ratio, C-reactive protein, years of formal education and sex were related to the Japanese version of the Montreal Cognitive Assessment total score at the age of 70 years, and that the serum albumin level, serum globulin level, serum A/G ratio, C-reactive protein, years of formal education and stroke were related at the age of 80 years. The serum A/G ratio showed a better correlation than the serum globulin levels at the age of 70 and 80 years (70 years: $\beta = 0.131$ vs -0.111 , 80 years: $\beta = 0.108$ vs -0.071). Conclusions: We found a correlation between cognitive function and the serum A/G ratio in community-dwelling older people, suggesting that nutritional status and chronic inflammation might influence cognitive function. *Geriatr Gerontol Int* 2019; 19: 967–971.

Database: CINAHL

Assessment of Sarcopenia Among Community-Dwelling At-Risk Frail Adults Aged 65 Years and Older Who Received Multidomain Lifestyle Interventions: A Secondary Analysis of a Randomized Clinical Trial.

Author(s): Lu, Yanxia; Niti, Mathew; Yap, Keng Bee; Tan, Crystal Tze Ying; Zin Nyunt, Ma Shwe; Feng, Liang; Tan, Boon Yeow; Chan, Gribson; Khoo, Sue Anne; Chan, Sue Mei; Yap, Philip; Larbi, Anis; Ng, Tze Pin

Source: JAMA Network Open; Oct 2019; vol. 2 (no. 10)

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Available at [JAMA Network Open](#) - from Unpaywall

Abstract:Key Points: Question: How is an active lifestyle intervention associated with improvement in muscle mass and function among frail older persons with sarcopenia? Findings: In this secondary analysis of a randomized clinical trial of physical, nutritional, cognitive, or combined interventions among 92 community dwelling at-risk frail adults aged 65 years and older with sarcopenia, the intervention was associated with a significant reduction in sarcopenia and improved muscle mass and strength and gait speed at 3 months and 6 months. Sarcopenia reversal was more likely to happen in men, younger individuals, and those with higher baseline lean muscle mass. Meaning: These findings suggest that multidomain lifestyle interventions may be effective in reversing sarcopenia and improving muscle mass and function in community-dwelling at-risk frail older adults. This secondary analysis of a randomized clinical trial examines the association of a 6-month multidomain active lifestyle intervention with sarcopenia among elderly participants in Singapore. Importance: There is little understanding of the outcomes associated with active lifestyle interventions for sarcopenia among older persons. Objective: To determine the association of 6-month multidomain lifestyle interventions (physical exercise, nutritional

enhancement, cognitive training, combined treatment, and standard care) with change in sarcopenia status and physical function among adults 65 years and older. Design, Setting, and Participants: Post hoc secondary analysis of a parallel-group randomized clinical trial conducted from September 1, 2012, to September 1, 2014, at community centers providing services to elderly individuals in Singapore. Participants included a subsample of 92 community-dwelling prefrail or frail older persons with sarcopenia aged 65 years and older. Data were analyzed from June 1, 2017, to January 1, 2018. Interventions: The 5 intervention groups were a 6-month duration of physical exercise that included resistance and balance training, nutritional enhancement with a commercial oral nutrition supplement formula, cognitive training, a combination of the preceding 3 interventions, and standard care (control). Main Outcomes and Measures: Primary outcomes were changes in sarcopenia status and its components, appendicular skeletal muscle index (ASMI), knee extension strength (KES), and gait speed (GS) at 3 months and 6 months following the intervention. Sarcopenia was defined as the presence of both low ASMI and low KES and/or GS. Results: In 92 participants with sarcopenia, the mean (SD) age was 70.0 (4.7) years and 59 (64.1%) were female. Seventy-eight participants received active interventions and 14 received standard care. Of 92 total participants, the number who remained sarcopenic was reduced to 48 (of 73) after 3 months and 51 (of 75) after 6 months of intervention, indicating that 25 of 92 participants (27.2%) experienced sarcopenia reduction at 3 months and 24 of 92 (26.1%) had sarcopenia reduction at 6 months. Low KES was present in 88 of 92 patients (95.6%), and low GS in 30 of 92 patients (32.6%) at baseline. Among the components of sarcopenia, GS had the greatest change associated with active interventions, with 22 of 30 participants (73.3%) free of low GS at 6 months; in comparison, 17 of 88 participants (19.3%) were free of low KES at 6 months and 7 of 92 participants (7.6%) were free of low ASMI at 6 months. Men experienced greater reduction in sarcopenia than women ($\chi^2 = 5.925$; $P = .02$), as did those with younger age ($t = -2.078$; $P = .04$) or higher ASMI (mean [SD] ASMI, 5.74 [0.77] vs 5.14 [0.77] kg/m²; $P = .002$). Participants in the active intervention group experienced statistically significant decreases in sarcopenia score and its components at 3 months and 6 months from baseline ($F = 14.138$; $P < .001$), but the intervention was not associated with significant differences in ASMI, KES, and GS vs standard care. Conclusions and Relevance: This study suggests that older persons with sarcopenia are responsive to the effects of multidomain lifestyle interventions. Sarcopenia reduction was most pronounced through improved gait speed, and occurred more among those who were male, were younger, or had greater muscle mass.

Database: CINAHL

'It's what you do that makes a difference' An interpretative phenomenological analysis of health care professionals and home care workers experiences of nutritional care for people living with dementia at home.

Author(s): Mole, Louise; Kent, Bridie; Hickson, Mary; Abbott, Rebecca

Source: BMC Geriatrics; Sep 2019; vol. 19 (no. 1)

Publication Date: Sep 2019

Publication Type(s): Academic Journal

PubMedID: 31500576

Available at [BMC Geriatrics](#) - from BioMed Central

Available at [BMC Geriatrics](#) - from Europe PubMed Central - Open Access

Available at [BMC Geriatrics](#) - from EBSCO (MEDLINE Complete)

Available at [BMC Geriatrics](#) - from Unpaywall

Abstract:Background: People living with dementia at home are a group who are at increased risk of malnutrition. Health care professionals and home care workers, are ideally placed to support nutritional care in this vulnerable group. Yet, few, if any studies, have captured the experiences of these workers in respect of treating and managing nutritional issues. This interpretative phenomenological study aimed to explore the experiences and perceptions of the nutritional care of people living with dementia at home from the perspectives of health care professionals and home care workers.Methods: Semi-structured interviews were conducted between December 2017 and March 2018, and supplemented with the use of a vignette outlining a scenario of a husband caring for his wife with dementia. Health care professionals and home care workers were purposively recruited from local care providers in the south west of England, who had experience of working with people with dementia. An Interpretative Phenomenological Analysis (IPA) approach was used throughout.Results: Seven participants took part including two home care workers, a general practitioner, dietitian, occupational therapist, nurse and social worker. The time in their professions ranged from 3 to 15 years (mean = 8.9 years). Following analysis, four superordinate themes were identified: 'responsibility to care', 'practice restrained by policy', 'in it together', and 'improving nutritional care'. This group of health care professionals and home care workers recognised the importance of improving nutritional care for people living with dementia at home, and felt a responsibility for it. However they felt that they were restricted by time and/or knowledge. The importance of supporting the family carer and working collaboratively was highlighted.Conclusions: Health care professionals and home care workers require further training to better equip them to provide nutritional care for people living with dementia at home. Models of care may also need to be adapted to enable a more flexible and tailored approach to incorporate nutritional care. Future work in this area should focus on how health care professionals and home care workers can be better equipped to screen for malnutrition, and support changes to nutritional intake to mitigate malnutrition risk.

Database: CINAHL

Lack of focus on nutrition and documentation in nursing homes, home care- and home nursing: the self-perceived views of the primary care workforce.

Author(s): Håkonsen, S. J.; Pedersen, P. U.; Bygholm, A.; Thisted, C. N.; Bjerrum, M.

Source: BMC Health Services Research; Sep 2019; vol. 19 (no. 1)

Publication Date: Sep 2019

Publication Type(s): Academic Journal

PubMedID: 31492130

Available at [BMC health services research](#) - from BioMed Central

Available at [BMC health services research](#) - from Europe PubMed Central - Open Access

Available at [BMC health services research](#) - from EBSCO (MEDLINE Complete)

Available at [BMC health services research](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMC health services research](#) - from Unpaywall

Abstract:Background: Malnutrition is a comprehensive challenge for the nursing home, home care- and home nursing sector. Nutritional care and the subsequent documentation are a common and multifaceted healthcare practice that requires that the healthcare professionals possess complex combinations of competencies in order to deliver high-quality care and treatment. The purpose of this study was to investigate how a varied group of healthcare professionals' perceive their own competencies within nutrition and documentation and how organizational structures influence their daily work and the quality of care provided.Methods: Two focus groups consisting of 14 healthcare professionals were conducted. The transcribed focus group interviews was analyzed using the qualitative content analysis approach.Results: Six categories were identified: 1) Lack of uniform and systematic communication affect nutritional care practices 2) Experience-based knowledge among the primary workforce influences daily clinical decisions, 3) Different attitudes towards nutritional care lead to differences in the quality of care 4) Differences in organizational culture affect quality of care, 5) Lack of clear nutritional care responsibilities affect how daily care is performed and 6) Lack of clinical leadership and priorities makes nutritional care invisible.Conclusions: The six categories revealed two explanatory themes: 1) Absent inter- and intra-professional collaboration and communication obstructs optimal clinical decision-making and 2) quality deterioration due to poorly-established nutritional care structure. Overall, the two themes explain that from the healthcare professionals' point of view, a visible organization that allocates resources as well as prioritizing and articulating the need for daily nutritional care and documentation is a prerequisite for high-quality care and treatment. Furthermore, optimal clinical decision making among the healthcare professionals are compromised by imprecise and unclear language and terminology in the patients' healthcare records and also a lack of clinical guidelines and standards for collaboration between different healthcare professionals working in nursing homes, home care or home nursing. The findings of this study are beneficial to support organizations within these settings with strategies focusing on increasing nutritional care and documentation competencies among the healthcare professionals. Furthermore, the results advocate for the daily involvement and support of leaders and managers in articulating and structuring the importance of nutritional care and treatment and the subsequent documentation.

Database: CINAHL

Signs and Symptoms of Low-Intake Dehydration Do Not Work in Older Care Home Residents—DRIE Diagnostic Accuracy Study.

Author(s): Bunn, Diane K.; Hooper, Lee

Source: Journal of the American Medical Directors Association; Aug 2019; vol. 20 (no. 8); p. 963-970

Publication Date: Aug 2019

Publication Type(s): Academic Journal

Abstract:To assess the diagnostic accuracy of commonly used signs and symptoms of low-intake dehydration in older care home residents. Prospective diagnostic accuracy study. 56 care homes offering residential, nursing, and/or dementia care to older adults in Norfolk and Suffolk, United Kingdom. 188 consecutively recruited care home residents aged ≥ 65

years, without cardiac or renal failure and not receiving palliative care. Overall, 66% were female, the mean age was 85.7 years (standard deviation 7.8), and the median Mini-Mental State Examination MMSE score was 23 (interquartile range 18-26). Over 2 hours, participants underwent double-blind assessment of 49 signs and symptoms of dehydration and measurement of serum osmolality from a venous blood sample. Signs and symptoms included skin turgor; mouth, skin, and axillary dryness; capillary refill; sunken eyes; blood pressure on resting and after standing; body temperature; pulse rate; and self-reported feelings of thirst and well-being. Serum osmolality, with current dehydration defined as >300 mOsm/kg, and impending dehydration ≥ 295 mOsm/kg. For dichotomous tests, we aimed for sensitivity and specificity $>70\%$, and for continuous tests, an area under the curve in receiver operating characteristic plots of >0.7 . Although 20% of residents had current low-intake dehydration and a further 28% impending dehydration, none of the commonly used clinical signs and symptoms usefully discriminated between participants with or without low-intake dehydration at either cut-off. This study consolidates evidence that commonly used signs and symptoms of dehydration lack even basic levels of diagnostic accuracy in older adults, implying that many who are dehydrated are not being identified, thus compromising their health and well-being. We suggest that these tests be withdrawn from practice and replaced with a 2-stage screening process that includes serum osmolality, calculated from sodium, potassium, urea, and glucose levels (assessed routinely using the Khajuria and Krahn equation), followed by serum osmolality measurement for those identified as high risk (calculated serum osmolality >295 mmol/L).

Database: CINAHL

OTHER:

Dietary choline is positively related to overall and cause-specific mortality: results from individuals of the National Health and Nutrition Examination Survey and pooling prospective data.

Author(s): Mazidi, Mohsen; Katsiki, Niki; Mikhailidis, Dimitri P.; Banach, Maciej

Source: British Journal of Nutrition; Dec 2019; vol. 122 (no. 11); p. 1262-1270

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract: Little is known about the association between dietary choline intake and mortality. We evaluated the link between choline consumption and overall as well as cause-specific mortality by using both individual data and pooling prospective studies by meta-analysis and systematic review. Furthermore, adjusted means of cardiometabolic risk factors across choline intake quartiles were calculated. Data from the National Health and Nutrition Examination Survey (1999–2010) were collected. Adjusted Cox regression was performed to determine the risk ratio (RR) and 95 % CI, as well as random-effects models and generic inverse variance methods to synthesise quantitative and pooling data, followed by a leave-one-out method for sensitivity analysis. After adjustments, we found that individuals consuming more choline had worse lipid profile and glucose homeostasis, but lower C-reactive protein levels ($P < 0.001$ for all comparisons) with no significant differences in anthropometric parameters and blood pressure. Multivariable Cox regression models revealed that individuals in the highest quartile (Q4) of choline consumption had a greater risk of total (23 %), CVD (33 %) and stroke (30 %) mortality compared with the first quartile

(Q1) ($P < 0.001$ for all comparison). These results were confirmed in a meta-analysis, showing that choline intake was positively and significantly associated with overall (RR 1.12, 95 % CI 1.08, 1.17, $I^2 = 2.9$) and CVD (RR 1.28, 95 % CI 1.17, 1.39, $I^2 = 9.6$) mortality risk. In contrast, the positive association between choline consumption and stroke mortality became non-significant (RR 1.18, 95 % CI 0.97, 1.43, $P = 0.092$, $I^2 = 1.1$). Our findings shed light on the potential adverse effects of choline intake on selected cardiometabolic risk factors and mortality risk.

Database: CINAHL

Too much vitamin D may harm bones, not help.

Author(s):

Source: Harvard Women's Health Watch; Dec 2019; vol. 27 (no. 4); p. 1-2

Publication Date: Dec 2019

Publication Type(s): Periodical

Available at [Harvard Women's Health Watch](#) - from EBSCO (MEDLINE Complete)

Available at [Harvard Women's Health Watch](#) - from EBSCO (Biomedical Reference Collection - Comprehensive)

Available at [Harvard Women's Health Watch](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract:The article offers information on a study published in JAMA, found that adverse effects of vitamin D in adults who took large amounts daily. Topics discussed include information on lack of improvement in bone density at the higher doses of vitamin D; meta-analysis published in JAMA Cardiology which showed no benefit from vitamin D supplements in preventing heart attack or stroke; and need to take large doses of vitamin D under the advice of health care provider.

Database: CINAHL

Development and Validation of Novel Dietary and Lifestyle Inflammation Scores.

Author(s): Byrd, Doratha A; Judd, Suzanne E; Flanders, W Dana; Hartman, Terryl J; Fedirko, Veronika; Bostick, Roberd M

Source: Journal of Nutrition; Dec 2019; vol. 149 (no. 12); p. 2206-2218

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31373368

Available at [The Journal of nutrition](#) - from EBSCO (MEDLINE Complete)

Abstract:Background: Chronically higher inflammation, which may partly result from diet and lifestyle, is implicated in risk for multiple chronic diseases. The dietary inflammatory index (DII) and empirical dietary inflammatory pattern (EDIP), developed to characterize dietary contributions to systemic inflammation, have several limitations. There are no scores to characterize contributions of lifestyle to inflammation. Objectives: To reflect dietary/lifestyle contributions to inflammation, we developed novel, inflammation biomarker panel-weighted, dietary (DIS) and lifestyle (LIS) inflammation scores in a subset

(n = 639) of the Reasons for Geographic and Racial Differences in Stroke Study (REGARDS) cohort. Methods: We selected a priori 19 food groups and 4 lifestyle characteristics to comprise the DIS and LIS, respectively. We calculated the components' weights based on their strengths of association with an inflammation biomarker score [comprising high-sensitivity C-reactive protein (hsCRP), IL-6, IL-8, and IL-10] using multivariable linear regression. The sums of the weighted components constitute the scores, such that higher scores reflect, on balance, more proinflammatory exposures. We calculated the DIS, LIS, DII, and EDIP with cross-sectional data from the remaining REGARDS cohort (n = 14,210 with hsCRP measurements) and 2 other study populations with hsCRP and/or an 8-component inflammation biomarker panel, and investigated their associations with circulating inflammation biomarker concentrations using multivariable logistic regression. Results: In REGARDS, those in the highest relative to the lowest DIS, LIS, DII, and EDIP quintiles had statistically significant 1.66-, 4.29-, 1.56-, and 1.32-fold higher odds of a high hsCRP concentration (>3 mg/dL), respectively (all P-trend < 0.001). Those in the highest relative to the lowest joint DIS/LIS quintile had a statistically significant 7.26-fold higher odds of a high hsCRP concentration. Similar findings were noted in the other 2 validation populations. Conclusion: Our results support that dietary and lifestyle exposures collectively contribute substantially to systemic inflammation, and support the use of our novel DIS and LIS.

Database: CINAHL

Cooking Shortcuts.

Author(s): DELZELL, EMILY

Source: Arthritis Today; Dec 2019; vol. 33 (no. 6); p. 14-14

Publication Date: Dec 2019

Publication Type(s): Periodical

Abstract: The article offers cooking shortcuts including use prechopped veggie combinations cooked lightly as a side dish or for a fast stir-fry; combine pre-cut vegetables with rinsed, drained canned beans, a whole grain, like wild rice, low-sodium broth and your favorite seasonings; and keep frozen, precooked grains like brown rice or quinoa on hand or make your own weekly batch.

Database: CINAHL

Predictors of Food Skills in University Students.

Author(s): SEABROOK, JAMIE A.; DWORATZEK, PAULA D. N.; MATTHEWS, JUNE I.

Source: Canadian Journal of Dietetic Practice & Research; Dec 2019; vol. 80 (no. 4); p. 205-208

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [Canadian Journal of Dietetic Practice and Research](#) - from EBSCO (MEDLINE Complete)

Available at [Canadian Journal of Dietetic Practice and Research](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Canadian Journal of Dietetic Practice and Research](#) - from Unpaywall

Abstract: Purpose: To determine predictors of food skills in university students, specifically, the relative effects of a food and nutrition (FN) course; sex, age, and body mass index; food-related behaviours in the parental home; and food-related behaviours in university.

Methods: Undergraduate students (n = 30 310) at Western University were invited to complete an online cross-sectional survey that assessed 7 components of food skills, from mechanical (e.g., peeling/chopping) to conceptual (e.g., weekly meal planning). The primary outcome measure was Total Food Skills Score (TFSS). All variables that were statistically associated with TFSS (P < 0.05) were analyzed hierarchically in 4 regression models. Results: The sample was comprised of 3354 students living independently for 2.6 ± 1.1 years. Students who had taken an FN course had higher food skills than those who had not (B = 30.72; P < 0.001), and this relationship remained significant through all subsequent models. The strongest predictor of food skills was meal preparation as a teen (B = 25.66; P < 0.001). Frequency of using a grocery list, packing a lunch, and time spent preparing meals on weekends were positively associated with food skills (P < 0.001), whereas frequency of buying pre-prepared meals was negatively associated with food skills (P < 0.001).

Conclusions: Food skill development should occur well before young adults begin living independently.

Database: CINAHL

Healthy Teaching Kitchen Programs: Experiential Nutrition Education Across Veterans Health Administration, 2018.

Author(s): Black, Marissa; LaCroix, Robin; Hoerster, Katherine; Chen, Sunny; Ritchey, Katherine; Souza, Melanya; Utech, Anne; Thielke, Stephen

Source: American Journal of Public Health; Dec 2019; vol. 109 (no. 12); p. 1718-1721

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [American Journal of Public Health](#) - from EBSCO (MEDLINE Complete)

Available at [American Journal of Public Health](#) - from EBSCO (Biomedical Reference Collection - Comprehensive)

Available at [American Journal of Public Health](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [American Journal of Public Health](#) - from EBSCO (Psychology and Behavioral Sciences Collection)

Abstract: Traditional clinical interventions yield few positive effects on diet. The Healthy Teaching Kitchen (HTK) program implemented by the Veterans Health Administration at sites across the United States delivers interactive nutrition and culinary education, guided instruction, and social opportunities for patients and caregivers. We report HTK outcomes of veterans' self-reported acceptability, self-efficacy for dietary change, and dietary and cooking habits. The HTK program is acceptable and feasible and may empower participants to improve health.

Database: CINAHL

Getting to the Meat of the Matter.

Author(s):

Source: Tufts University Health & Nutrition Letter; Dec 2019; vol. 37 (no. 10); p. 4-5

Publication Date: Dec 2019

Publication Type(s): Periodical

Available at [Tufts University Health & Nutrition Letter](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract:The article reports on criticism by nutrition experts against a study published in the "Annals of Internal Medicine" on the consumption of red meat and processed meat. Highlights include the link of processed meats to higher risk of colorectal cancer, stroke, and type 2 diabetes, three decisions and methods that caused the study authors to recommend that people continue to eat meat, and tip by the American Institute for Cancer Research to eat no more than three servings of red meats per week.

Database: CINAHL

The impact of maternal nutrition on offspring's risk of non-communicable diseases in adulthood: a systematic review.

Author(s): Pullar, Jessie; Wickramasinghe, Kremlin; Demaio, Alessandro R.; Roberts, Nia; Perez-Blanco, Karla-Maria; Noonan, Katharine; Townsend, Nick

Source: Journal of Global Health; Dec 2019; vol. 9 (no. 2); p. 1-16

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31656604

Available at [Journal of global health](#) - from Europe PubMed Central - Open Access

Available at [Journal of global health](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Journal of global health](#) - from Unpaywall

Abstract:Background: A growing body of evidence suggests the impact of maternal nutrition plays a role in determining offspring's risk of non-communicable diseases (NCDs), including heart disease (CVD), type 2 diabetes (T2DM), cancer and chronic obstructive pulmonary diseases (COPD). We conducted a systematic review to investigate this relationship.Methods: We systematically searched CINAHL, Cochrane Database of Systematic Reviews, Cochrane Register of Controlled Trials, Database of Abstracts of Reviews of Effects, MEDLINE, EMBASE, Web of Science Core Collection and Global Health for papers published before May 2016 (PROSPERO: CRD42016039244, CRD42016039247). Included studies examined the impact of maternal nutrition (diet, vitamin status and weight) on adult offspring's NCD outcomes.Results: Of 23 501 identified citations, 20 met our inclusion criteria. Heterogeneity of papers required narrative synthesis. Included studies involved 1 939 786 participants. CVD: Four papers examined maternal exposure to famine during gestation, 3 identified a resulting increased risk of CVD in offspring. Five identified an increased risk of offspring CVD with increasing maternal weight. T2DM: Six studies investigated maternal exposure to famine during gestation; three identified an increase in offspring's T2DM risk. Three found no increased risk; two of these were in

circumstances where famine states persisted beyond pregnancy. Three papers found an increased risk of T2DM in offspring with increasing maternal BMI. CANCER: Four papers investigated maternal famine exposure during pregnancy - two identified a reduced risk of cancer in male offspring, and two an increased risk in female offspring. COPD: One study found low maternal vitamin D status was associated with reduced use of asthma medication. Conclusions: While there are indications that exposure to both famine (particularly when coupled with exposure to nutritional excess after birth) and maternal overweight during pregnancy is associated with offspring's risk of CVD, T2DM and cancer, currently there is a lack of evidence to confirm this relationship. Despite the lack of conclusive evidence, these findings hold important research and policy implications for a lifecycle approach to the prevention of NCDs.

Database: CINAHL

Selenium Biofortification of Agricultural Crops and Effects on Plant Nutrients and Bioactive Compounds Important for Human Health and Disease Prevention - a Review.

Author(s): Newman, Rachel; Waterland, Nicole; Moon, Youyou; Tou, Janet C.

Source: Plant Foods for Human Nutrition; Dec 2019; vol. 74 (no. 4); p. 449-460

Publication Date: Dec 2019

Publication Type(s): Academic Journal

PubMedID: 31522406

Abstract: Selenium supplementation in humans has been suggested for the prevention of chronic diseases including cardiovascular disease, cancer, and neurodegenerative diseases. Selenium biofortification of plants has been explored as a method for increasing selenium content of food and dietary selenium intake in humans. However, the effects of selenium biofortification on other dietary nutrients is often a secondary discussion. These effects are especially important to explore considering selenium-biofortified foods contain many other nutrients important to human health, such as other minerals and antioxidant compounds, which can make these foods superior to selenium supplementation alone. Investigation of selenium biofortification's effect on these nutrients is necessary for a comprehensive human nutrition perspective on biofortification strategies. This review considers the effects of selenium biofortification on selenium content, other minerals, and antioxidant compounds as they pertain to human health in order to suggest optimal strategies for biofortification. Pre-clinical and clinical studies assessing the effects of consumption of selenium biofortified foods are also discussed.

Database: CINAHL

Curcumin prevents high-fat diet-induced hepatic steatosis in ApoE^{-/-} mice by improving intestinal barrier function and reducing endotoxin and liver TLR4/NF- κ B inflammation.

Author(s): Feng, Dan; Zou, Jun; Su, Dongfang; Mai, Haiyan; Zhang, Shanshan; Li, Peiyang; Zheng, Xiumei

Source: Nutrition & Metabolism; Nov 2019; vol. 16 (no. 1)

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [Nutrition & metabolism](#) - from BioMed Central

Available at [Nutrition & metabolism](#) - from Europe PubMed Central - Open Access

Available at [Nutrition & metabolism](#) - from EBSCO (MEDLINE Complete)

Available at [Nutrition & metabolism](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrition & metabolism](#) - from Unpaywall

Abstract:Background: Non-alcoholic fatty liver disease (NAFLD) is the most common chronic liver disease and has become a public health concern worldwide. The hallmark of NAFLD is hepatic steatosis. Therefore, there is an urgent need to develop new therapeutic strategies that are efficacious and have minimal side effects in hepatic steatosis and NAFLD treatment. The present study aimed to investigate the effect of dietary supplement of curcumin on high-fat diet (HFD)-induced hepatic steatosis and the underlying mechanism. Methods: ApoE^{-/-} mice were fed a normal diet, high-fat diet (HFD) or HFD supplemented with curcumin (0.1% w/w) for 16 weeks. Body and liver weight, blood biochemical parameters, and liver lipids were measured. Intestinal permeability, hepatic steatosis and mRNA and protein expressions of TLR4-related inflammatory signaling molecule were analyzed. Results: The administration of curcumin significantly prevented HFD-induced body weight gain and reduced liver weight. Curcumin attenuated hepatic steatosis along with improved serum lipid profile. Moreover, curcumin up-regulated the expression of intestinal tight junction protein zonula occluden-1 and occludin, which further improved gut barrier dysfunction and reduced circulating lipopolysaccharide levels. Curcumin also markedly down-regulated the protein expression of hepatic TLR4 and myeloid differentiation factor 88 (MyD88), inhibited p65 nuclear translocation and DNA binding activity of nuclear factor- κ B (NF- κ B) in the liver. In addition, the mRNA expression of hepatic tumour necrosis factor- α (TNF- α) and interleukin-1 β (IL-1 β) as well as the plasma levels of TNF- α and IL-1 β were also lowered by curcumin treatment. Conclusion: These results indicated that curcumin protects against HFD-induced hepatic steatosis by improving intestinal barrier function and reducing endotoxin and liver TLR4/NF- κ B inflammation. The ability of curcumin to inhibit hepatic steatosis portrayed its potential as effective dietary intervention for NAFLD prevention.

Database: CINAHL

Differential capability of metabolic substrates to promote hepatocellular lipid accumulation.

Author(s): Hoang, Ngoc Anh; Richter, Friederike; Schubert, Martin; Lorkowski, Stefan; Klotz, Lars-Oliver; Steinbrenner, Holger

Source: European Journal of Nutrition; Dec 2019; vol. 58 (no. 8); p. 3023-3034

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Abstract:Purpose: Excessive storage of triacylglycerides (TAGs) in lipid droplets within hepatocytes is a hallmark of non-alcoholic fatty liver disease (NAFLD), one of the most widespread metabolic disorders in Western societies. For the purpose of exploring molecular pathways in NAFLD development and testing potential drug candidates, well-characterised experimental models of ectopic TAG storage in hepatocytes are needed.

Methods: Using an optimised Oil Red O assay, immunoblotting and real-time qRT-PCR, we compared the capability of dietary monosaccharides and fatty acids to promote lipid accumulation in HepG2 human hepatoma cells. **Results:** Both high glucose and high fructose resulted in intracellular lipid accumulation after 48 h, and this was further augmented (up to twofold, as compared to basal levels) by co-treatment with the lipogenesis-stimulating hormone insulin and the pro-inflammatory cytokine tumour necrosis factor alpha (TNF- α), respectively. The fatty acids palmitic and oleic acid were even more effective than these carbohydrates, inducing significantly elevated TAG storage already after 24 h of treatment. Highest (about threefold) increases in lipid accumulation were observed upon treatment with oleic acid, alone as well as in combinations with palmitic acid or with high glucose and insulin. Increases in protein levels of a major lipid droplet coat protein, perilipin-2 (PLIN2), mirrored intracellular lipid accumulation following different treatment regimens. **Conclusions:** Several treatment regimens of excessive fat and sugar supply promoted lipid accumulation in HepG2 cells, albeit with differences in the extent and rapidity of steatogenesis. PLIN2 is a candidate molecular marker of sustained lipid accumulation in HepG2 cells.

Database: CINAHL

Syringol metabolites as new biomarkers for smoked meat intake.

Author(s): Wedekind, Roland; Keski-Rahkonen, Pekka; Robinot, Nivonirina; Viallon, Vivian; Ferrari, Pietro; Engel, Erwan; Boutron-Ruault, Marie-Christine; Mahamat-Saleh, Yahya; Mancini, Francesca Romana; Kühn, Tilman; Johnson, Theron; Boeing, Heiner; Bergmann, Manuela; Karakatsani, Anna; Trichopoulou, Antonia; Peppas, Heleni; Agnoli, Claudia; Santucci de Magistris, Maria; Palli, Domenico; Sacerdote, Carlotta

Source: American Journal of Clinical Nutrition; Dec 2019; vol. 110 (no. 6); p. 1424-1433

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [The American journal of clinical nutrition](#) - from EBSCO (MEDLINE Complete)

Available at [The American journal of clinical nutrition](#) - from Unpaywall

Abstract: Background Processed meat intake is associated with a higher risk of colorectal and stomach cancers, coronary artery disease, and type 2 diabetes and with higher mortality, but the estimation of intake of different processed meat products in this heterogeneous food group in epidemiological studies remains challenging. Objective This work aimed at identifying novel biomarkers for processed meat intake using metabolomics. Methods An untargeted, multi-tiered metabolomics approach based on LC-MS was applied to 33 meat products digested in vitro and secondly to urine and plasma samples from a randomized crossover dietary intervention in which 12 volunteers consumed successively 3 processed meat products (bacon, salami, and hot dog) and 2 other foods used as controls, over 3 consecutive days. The putative biomarkers were then measured in urine from 474 subjects from the European Prospective Investigation into Cancer and Nutrition (EPIC) cross-sectional study for which detailed 24-h dietary recalls and FFQs were available. Results Syringol and 4 derivatives of syringol were found to be characteristic of in vitro digests of smoked meat products. The same compounds present as sulfate esters in urine increased at 2 and 12 h after consumption of smoked meat products (hot dog, bacon) in the intervention study. The same syringol sulfates were also positively associated with recent or

habitual consumption of smoked meat products in urine samples from participants of the EPIC cross-sectional study. These compounds showed good discriminative ability for smoked meat intake with receiver operator characteristic areas under the curve ranging from 0.78 to 0.86 and 0.74 to 0.79 for short-term and habitual intake, respectively. Conclusions Four novel syringol sulfates were identified as potential biomarkers of smoked meat intake and may be used to improve assessment of smoked meat intake in epidemiological studies. This trial was registered at clinicaltrials.gov as NCT03354130.

Database: CINAHL

Nutrition and Athlete Bone Health.

Author(s): Sale, Craig; Elliott-Sale, Kirsty Jayne

Source: Sports Medicine; Dec 2019; vol. 49 ; p. 139-151

Publication Date: Dec 2019

Publication Type(s): Academic Journal

Available at [Sports Medicine](#) - from Unpaywall

Abstract: Athletes should pay more attention to their bone health, whether this relates to their longer-term bone health (e.g. risk of osteopenia and osteoporosis) or their shorter-term risk of bony injuries. Perhaps the easiest way to do this would be to modify their training loads, although this advice rarely seems popular with coaches and athletes for obvious reasons. As such, other possibilities to support the athletes' bone health need to be explored. Given that bone is a nutritionally modified tissue and diet has a significant influence on bone health across the lifespan, diet and nutritional composition seem like obvious candidates for manipulation. The nutritional requirements to support the skeleton during growth and development and during ageing are unlikely to be notably different between athletes and the general population, although there are some considerations of specific relevance, including energy availability, low carbohydrate availability, protein intake, vitamin D intake and dermal calcium and sodium losses. Energy availability is important for optimising bone health in the athlete, although normative energy balance targets are highly unrealistic for many athletes. The level of energy availability beyond which there is no negative effect for the bone needs to be established. On the balance of the available evidence it would seem unlikely that higher animal protein intakes, in the amounts recommended to athletes, are harmful to bone health, particularly with adequate calcium intake. Dermal calcium losses might be an important consideration for endurance athletes, particularly during long training sessions or events. In these situations, some consideration should be given to pre-exercise calcium feeding. The avoidance of vitamin D deficiency and insufficiency is important for the athlete to protect their bone health. There remains a lack of information relating to the longer-term effects of different dietary and nutritional practices on bone health in athletes, something that needs to be addressed before specific guidance can be provided.

Database: CINAHL

Plant-Based Diets for Personal, Population, and Planetary Health.

Author(s): Hemler, Elena C; Hu, Frank B

Source: Advances in Nutrition; Nov 2019; vol. 10

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31728495

Available at [Advances in nutrition \(Bethesda, Md.\)](#) - from EBSCO (MEDLINE Complete)

Available at [Advances in nutrition \(Bethesda, Md.\)](#) - from Unpaywall

Abstract:Worldwide, the burden of morbidity and mortality from diet-related chronic diseases is increasing, driven by poor diet quality and overconsumption of calories. At the same time, the global food production system is draining our planet's resources, jeopardizing the environment and future food security. Personal, population, and planetary health are closely intertwined and will all continue to be vulnerable to these threats unless action is taken. Fortunately, shifting current global dietary patterns towards high-quality, plant-based diets could alleviate these health and environmental burdens. Compared with typical Western diets with high amounts of animal products, healthy plant-based diets are not only more sustainable, but have also been associated with lower risk of chronic diseases such as obesity, type 2 diabetes, cardiovascular disease, and some cancers. For personalized disease management and prevention, precision nutrition has the potential to offer more effective approaches tailored to individual characteristics such as the genome, metabolome, and microbiome. However, this area of research is in the early stages and is not yet ready for widespread clinical use. Therefore, it must not overshadow public health nutrition strategies, which have the power to improve health and sustainability on a larger scale. If widely implemented, interventions and policy changes that shift the globe towards healthy plant-based dietary patterns could be instrumental in ensuring future personal, population, and planetary health.

Database: CINAHL

Vegetarian Epidemiology: Review and Discussion of Findings from Geographically Diverse Cohorts.

Author(s): Orlich, Michael J; Chiu, Tina H T; Dhillon, Preet K; Key, Timothy J; Fraser, Gary E; Shridhar, Krithiga; Agrawal, Sutapa; Kinra, Sanjay

Source: Advances in Nutrition; Nov 2019; vol. 10

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31728496

Available at [Advances in nutrition \(Bethesda, Md.\)](#) - from EBSCO (MEDLINE Complete)

Abstract:Epidemiologic cohort studies enrolling a large percentage of vegetarians have been highly informative regarding the nutritional adequacy and possible health effects of vegetarian diets. The 2 largest such cohorts are the European Prospective Investigation into Cancer and Nutrition-Oxford (EPIC-Oxford) and the Adventist Health Study-2 (AHS-2). These cohorts are described and their findings discussed, including a discussion of where findings appear to diverge. Although such studies from North America and the United Kingdom have been important, the large majority of the world's vegetarians live in other regions, particularly in Asia. Findings from recent cohort studies of vegetarians in East and South Asia are reviewed, particularly the Tzu Chi Health Study and Indian Migration Study. Important considerations for the study of the health of vegetarians in Asia are discussed.

Vegetarian diets vary substantially, as may associated health outcomes. Cohort studies remain an important tool to better characterize the health of vegetarian populations around the globe.

Database: CINAHL

Protein Quantity and Source, Fasting-Mimicking Diets, and Longevity.

Author(s): Brandhorst, Sebastian; Longo, Valter D

Source: Advances in Nutrition; Nov 2019; vol. 10

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31728501

Available at [Advances in nutrition \(Bethesda, Md.\)](#) - from EBSCO (MEDLINE Complete)

Available at [Advances in nutrition \(Bethesda, Md.\)](#) - from Unpaywall

Abstract: Dietary modifications, including caloric restriction, dietary restriction, various intervals of fasting, and even limiting the time when food is consumed can have a pronounced impact on longevity. In addition, dietary modifications are powerful interventions to delay, prevent, or treat many aging-related diseases such as cancer and diabetes. Restricting amino acid and protein intake generally decreases aging-related comorbidities and thereby increases health and longevity. However, chronic dietary interventions are likely not feasible for most people due to low adherence to dietary protocols or resistance to drastic changes to lifestyle, and might even cause detrimental effects, possibly by negatively affecting the immune system and wound healing. The periodic use of low-protein, low-calorie fasting-mimicking diets (FMDs) has the potential to promote health benefits, while minimizing the burden of chronic restriction. Protein restriction and FMDs together have the potential to play an important complementary role in medicine by promoting disease prevention and treatment, and by delaying the aging process at least in part by stimulating stem cell-based regeneration in periods of normal food intake after periodic FMD cycles. The aim of this narrative review is to summarize research on the impact of protein restriction on health and longevity in model organisms and to discuss the implementation of an FMD in mice and in human clinical trials and its effects on biomarkers of healthy aging. Taking into account the importance of sex on aging and diet, we include this information in all discussed studies. Whereas for some model organisms of aging, such as rodents, many studies are available, results are more limited for primates and/or humans.

Database: CINAHL

RISE ABOVE THE FRAY: 5 tips to help lower stress levels.

Author(s): Boudreau, Erik

Source: Alive: Canada's Natural Health & Wellness Magazine; Nov 2019 (no. 445); p. 40-41

Publication Date: Nov 2019

Publication Type(s): Periodical

Abstract: The article discusses some techniques for lowering stress levels. These include getting a sufficient sleep, having regular physical exercise, and taking slow and deep

breaths. Also mentioned are the importance of nutrition for overall health, and the benefits of taking natural supplements, such as magnesium.

Database: CINAHL

Tart cherry consumption with or without prior exercise increases antioxidant capacity and decreases triglyceride levels following a high-fat meal.

Author(s): Polley, Kristine R.; Oswell, Natalie J.; Pegg, Ronald B.; Cooper, Jamie A.

Source: Applied Physiology, Nutrition & Metabolism; Nov 2019; vol. 44 (no. 11); p. 1209-1218

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract: Exercise and high-phytonutrient foods may lower oxidative stress and increase antioxidant levels, which could combat the negative effects associated with a high-fat (HF) meal. The objective of this study is to test the effects of Montmorency tart cherry (*Prunus cerasus* L.) consumption, with or without aerobic exercise, on antioxidant responses to an HF meal. Twelve normal-weight men (aged 22 ± 3 years), participated in a randomized crossover design comprising 4 trials: (i) HF meal with Montmorency tart cherry consumption (MC), (ii) HF meal with placebo (P), (iii) exercise prior to HF meal with MC (E+MC), and (iv) exercise prior to HF meal with P (E+P). The HF meal contained 60 g of fat and was consumed with MC or P. For exercise trials, a 30-min bout of submaximal treadmill exercise was performed the afternoon prior to HF meal consumption. Antioxidant capacity and triglycerides (TG) levels were measured at baseline and at 1, 2, and 3 h postprandially. Postprandial antioxidant capacity as assessed by oxygen radical absorbance capacity was significantly higher after MC and E+MC compared with E+P (incremental area under the curve (iAUC): 2.95 ± 2.19 and 4.87 ± 1.45 vs. -1.02 ± 1.72 mmol Trolox equivalents/L for MC and E+MC vs. E+P, respectively; $p < 0.01$). Postprandial TG levels were significantly lower after E+MC compared with P (iAUC: 58.99 ± 19.46 vs. 107.46 ± 22.66 mmol Trolox equivalents/L for E+MC vs. P, respectively; $p < 0.05$). These results indicate that MC consumption alone, and in combination with prior exercise, leads to greater antioxidant capacity following an HF meal compared with prior exercise with placebo. Further, MC consumption with prior exercise led to more favorable postprandial TG levels compared with placebo.

Database: CINAHL

Patients' views on a new treatment for Bulimia nervosa and binge eating disorder combining physical exercise and dietary therapy (the PED-t). A qualitative study.

Author(s): Bakland, Maria; Rosenvinge, Jan H.; Wynn, Rolf; Sundgot-Borgen, Jorunn; Fostervold Mathisen, Therese; Liabo, Kristin; Hanssen, Tove Aminda; Pettersen, Gunn

Source: Eating Disorders; Nov 2019; vol. 27 (no. 6); p. 503-520

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract: A new group based treatment for patients with bulimia nervosa (BN) and binge eating disorder (BED), combining guided Physical Exercise and Dietary therapy (PED-t), has

shown the capacity to alleviate BN and BED symptoms. The PED-t is run by therapists with a professional background in sport sciences and nutrition, which in many clinical settings is an uncommon group of professionals. The symptom reduction effects using the PED-t need validation from patients who have been given this kind of treatment, as negative experiences may impinge further clinical implementation. To explore such experiences, semistructural interviews were conducted with 15 participants. The interviews were transcribed and analyzed using a systematic text condensation approach. Overall, patients experienced the format and content of the PED-t as beneficial and as providing tools to manage BN- and BED symptoms. The patients' experiences of therapist credibility was enhanced by their appreciation of the therapists' professional background. Finally, some treatment modifications were suggested. Overall, the PED-t may thus be offered to patients with BN and BED, by a new set of professionals, and in uncommon settings. This possibility calls for future effectiveness studies integrating both parametric and experiential data.

Database: CINAHL

Persistent Symptoms in People With Celiac Disease Despite Gluten-Free Diet: A Concern?

Author(s): Roos, Susanne; Liedberg, Gunilla M.; Hellström, Ingrid; Wilhelmsson, Susan

Source: Gastroenterology Nursing; Nov 2019; vol. 42 (no. 6); p. 496-503

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract: Studies show that people with celiac disease have reduced well-being and have persistent symptoms, mainly related to the gastrointestinal tract. The aim of this study was to analyze how persons in a celiac disease member association report their symptoms, health, and life satisfaction. A questionnaire, with both open and closed questions, was distributed to all members (n = 726) of a celiac association in the southeast of Sweden. The response rate was 74.5%, of which 524 (72%) said they had received a celiac disease diagnosis and were thus included in the study. Almost half of the participants (40.7%–42.2%) stated that they had persistent celiac disease symptoms despite following a gluten-free diet. Diarrhea, abdominal pain, and congestion were persistent symptoms reported and could contribute to a lower health status compared with people without persistent symptoms. The life satisfaction scale (LiSat-9) showed differences in 5 of 9 variables between the groups. Living with celiac disease is far from easy when you have persistent symptoms. People with celiac disease require follow-up by healthcare services, and a new treatment needs to be developed because following the gluten-free diet alone does not seem to alleviate symptoms in everyone.

Database: CINAHL

Snacking Calories Add Up.

Author(s): KADEY, MATTHEW

Source: IDEA Fitness Journal; Nov 2019; vol. 16 (no. 10); p. 43-48

Publication Date: Nov 2019

Publication Type(s): Periodical

Abstract:The article offers information on studies related to calories from snacking. Topics discussed include information on study related to weight gain from positive energy balance created by extra snacking calories; information on study in the Journal of Consumer Research which found that posture influences our taste perception; and information on report which alls out the dangers to female athletes of low energy availability when calorie intake is too low to support training.

Database: CINAHL

Acute Enhancement of Jump Performance, Muscle Strength, and Power in Resistance-Trained Men After Consumption of Caffeinated Chewing Gum.

Author(s): Venier, Sandro; Grgic, Jozo; Mikulic, Pavle

Source: International Journal of Sports Physiology & Performance; Nov 2019; vol. 14 (no. 10); p. 1415-1421

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract:Purpose: To explore the acute effects of caffeinated chewing gum on vertical-jump performance, isokinetic knee-extension/flexion strength and power, barbell velocity in resistance exercise, and whole-body power. Methods: Nineteen resistance-trained men consumed, in randomized counterbalanced order, either caffeinated chewing gum (300 mg of caffeine) or placebo and completed exercise testing that included squat jump; countermovement jump; isokinetic knee extension and knee flexion at angular velocities of 60 and 180°·s⁻¹; bench-press exercise with loads corresponding to 50%, 75%, and 90% of 1-repetition maximum (1RM); and an "all-out" rowing-ergometer test. Results: Compared with placebo, caffeinated chewing gum enhanced (all Ps < .05) (1) vertical-jump height in the squat jump (effect size [ES] = 0.21; +3.7%) and countermovement jump (ES = 0.27; +4.6%); (2) knee-extension peak torque (ES = 0.21; +3.6%) and average power (ES = 0.25; +4.5%) at 60°·s⁻¹ and knee-extension average power (ES = 0.30; +5.2%) at 180°·s⁻¹, and knee-flexion peak torque at 60°·s⁻¹ (ES = 0.22; +4.1%) and 180°·s⁻¹ (ES = 0.31; +5.9%); (3) barbell velocity at 50% of 1RM (ES = 0.30; +3.2%), 75% of 1RM (ES = 0.44; +5.7%), and 90% of 1RM (ES = 0.43; +9.1%); and (4) whole-body peak power on the rowing-ergometer test (ES = 0.41; +5.0%). Average power of the knee flexors did not change at either angular velocity with caffeine consumption. Conclusions: Caffeinated chewing gum with a dose of caffeine of 300 mg consumed 10 min preexercise may acutely enhance vertical-jump height, isokinetic strength and power of the lower-body musculature, barbell velocity in the bench-press exercise with moderate to high loads, and whole-body power.

Database: CINAHL

Oral health of adults with intellectual disabilities: a systematic review.

Author(s): Ward, L. M.; Cooper, S. A.; Hughes-McCormack, L.; Macpherson, L.; Kinnear, D.

Source: Journal of Intellectual Disability Research; Nov 2019; vol. 63 (no. 11); p. 1359-1378

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [Journal of Intellectual Disability Research](#) - from Wiley Online Library

Available at [Journal of Intellectual Disability Research](#) - from Unpaywall

Abstract:Background: There have been several past reports that adults with intellectual disabilities experience poor oral health (tooth loss, periodontal health and untreated dental caries). Loss of a functional dentition has serious consequences, including problems with chewing, swallowing, nutrition, speech, temporomandibular joint osteoarthritis and pain and systemic health conditions. Poor oral health is largely preventable through proactive oral care support. In recent years, social care provision for adults has changed, with deinstitutionalisation and home-based personalised care now being the typical provision in high income countries. Hence, oral health inequalities might be reducing. However, there is limited recent evidence-synthesis on the topic. We aimed to address this. Method: PROSPERO registration number: CRD42018089880. We conducted a preferred reporting items for systematic reviews and meta-analyses systematic review of publications since 2008. Four databases were searched with a clear search strategy, strict inclusion criteria for selection of papers, double scoring (two raters), systematic data extraction and quality appraisal of included papers. Results: A total of 33/3958 retrieved articles were included, of which 14 were drawn from dental service users and 10 from Special Olympic athletes, therefore not necessarily being representative of the wider population with intellectual disabilities. Despite this limitation, adults with intellectual disabilities were still shown to experience poor oral health. High levels of poor oral hygiene and gingivitis were found, with many also affected by periodontitis and untreated dental decay. There is clear unmet need relating to both periodontal (gum) and tooth health, leading to tooth loss. Conclusions: Despite reports in the past of poor oral health amongst adults with intellectual disabilities, and despite it being preventable, there remains a high burden of poor oral health. This highlights the need to raise awareness, and for policies on effective daily oral care, and appropriate service provision. The importance of oral health and its possible negative sequelae needs to be elevated amongst carers and professionals.

Database: CINAHL

Excessive dietary supplement use and blood pressure among Brazilian male resistance training practitioners and bodybuilders.

Author(s): Gomes Gonçalves e Silva, Daniela Conceição; Bavaresco Gambassi, Bruno; Dantas, Milla Gabriela Belarmino; Lima-Oliveira, Jhonatan; Vieira de Carvalho, Sílvia Lorena; Morais, Priscilla Alencar de Oliveira; Sá, Camila Almeida; Cotrim, Helma Pinchemel; Santos, Azenildo Moura; Sobral Filho, Dário Celestino; Schwingel, Paulo Adriano

Source: Journal of Substance Use; Nov 2019; vol. 24 (no. 6); p. 619-625

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Abstract:Objective: The aims of the present research were to determine the prevalence of the use of dietary supplements and anabolic-androgenic steroids (AAS) without professional guidance in the countryside of Northeastern Brazil, and to compare blood pressure (BP) between nonusers of dietary supplements, thermogenic supplement users and AAS users. Methods: The sample consisted of 346 resistance training (RT) practitioners and bodybuilders. The participants answered a questionnaire on the use of dietary supplements and/or AAS. In addition, the participants underwent BP assessment. Results: 76.9% of the sample consumed dietary supplements and AAS at some point in their lives.

66.8% (95%CI: 61.5–71.7) of our sample used only food supplements without any guidance from a qualified professional. AAS and cosmetic doping was reported by 8.1% (95%CI: 5.6–11.2%) and 2.0% (95%CI: 1.0–4.2%) of the sample, respectively. Regarding BP, a significant difference was observed for systolic BP when nonusers of dietary supplements were compared to users of thermogenic supplements (126.5 ± 15.1 mmHg s. 134.7 ± 14.5 mmHg; $p=.034$) and when compared to AAS users (126.5 ± 15.1 mmHg vs. 136.6 ± 12.2 mmHg; $p=.010$). Conclusions: Our findings point to excessive consumption of dietary supplements and AAS (without professional guidance) by RT practitioners and bodybuilders. In addition, we observed high systolic blood pressure in users of thermogenic supplements and AAS users.

Database: CINAHL

Adherence to a healthy lifestyle and all-cause and cause-specific mortality in Chinese adults: a 10-year prospective study of 0.5 million people.

Author(s): Zhu, Nanbo; Yu, Canqing; Guo, Yu; Bian, Zheng; Han, Yuting; Yang, Ling; Chen, Yiping; Du, Huaidong; Li, Huimei; Liu, Fang; Chen, Junshi; Chen, Zhengming; Lv, Jun; Li, Liming; on behalf of the China Kadoorie Biobank Collaborative Group; Clarke, Robert; Collins, Rory; Peto, Richard; Walters, Robin; Avery, Daniel

Source: International Journal of Behavioral Nutrition & Physical Activity; Nov 2019; vol. 16 (no. 1)

Publication Date: Nov 2019

Publication Type(s): Academic Journal

Available at [International Journal of Behavioral Nutrition and Physical Activity](#) - from BioMed Central

Available at [International Journal of Behavioral Nutrition and Physical Activity](#) - from Europe PubMed Central - Open Access

Available at [International Journal of Behavioral Nutrition and Physical Activity](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [International Journal of Behavioral Nutrition and Physical Activity](#) - from Unpaywall

Abstract:Background: Adherence to a healthy lifestyle is associated with substantially lower risks of mortality from all causes, cardiovascular diseases, and cancer in white populations. However, little is known about the health benefits among non-white populations. Also, no previous studies have focused on respiratory disease mortality in both white and non-white populations. We assessed the relationships between a combination of healthy lifestyle factors and multiple death outcomes in Chinese adults. Methods: This study included 487,198 adults aged 30–79 years from the China Kadoorie Biobank without heart disease, stroke, and cancer at study enrolment. We defined five healthy lifestyle factors as never smoking or smoking cessation not due to illness; non-daily drinking or moderate alcohol drinking; median or higher level of physical activity; a diet rich in vegetables, fruits, legumes and fish, and limited in red meat; a body mass index of 18.5 to 27.9 kg/m² and a waist circumference < 90 cm (men)/85 cm (women). Cox regression was used to produce adjusted hazard ratios (HRs) relating these healthy lifestyle factors to all-cause and cause-specific mortality. Results: During a median follow-up of 10.2 years (IQR 9.2–11.1), we

documented 37,845 deaths. After multivariable adjustment, the number of healthy lifestyle factors exhibited almost inverse linear relationships with the risks of all-cause and cause-specific mortality. Compared with participants without any healthy factors, the hazard ratio of participants with five healthy factors was 0.32 [95% confidence interval (CI): 0.28, 0.37] for all-cause mortality. The corresponding HRs in specific cause of death were 0.42 (95% CI: 0.26, 0.67) for ischaemic heart disease, 0.21 (95% CI: 0.09, 0.49) for ischaemic stroke, 0.37 (95% CI: 0.22, 0.60) for haemorrhage stroke, 0.36 (95% CI: 0.29, 0.45) for cancer, 0.26 (95% CI: 0.14, 0.48) for respiratory diseases, and 0.29 (95% CI: 0.22, 0.39) for other causes. Theoretically, 38.5% (95% CI: 33.0, 43.8%) of all-cause mortality was attributable to nonadherence to a healthy lifestyle, and the proportions of preventable deaths through lifestyle modification ranged from 26.9 to 47.9% for cause-specific mortality. Conclusions: Adherence to a healthy lifestyle was associated with substantially lower risks of all-cause, cardiovascular, respiratory, and cancer mortality in Chinese adults. Promotion of a healthy lifestyle may considerably reduce the burden of non-communicable diseases in China.

Database: CINAHL

A check on blood pressure.

Author(s):

Source: Harvard Men's Health Watch; Nov 2019; vol. 24 (no. 4); p. 6-6

Publication Date: Nov 2019

Publication Type(s): Periodical

Available at [Harvard Men's Health Watch](#) - from EBSCO (MEDLINE Complete)

Available at [Harvard Men's Health Watch](#) - from EBSCO (Biomedical Reference Collection - Comprehensive)

Available at [Harvard Men's Health Watch](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract:The article looks at some strategies that men should consider when monitoring blood pressure. Topics mentioned include lifestyle changes as first-line treatment for lowering and managing blood pressure, the use of a home blood pressure monitor to track blood pressure numbers, and the adoption of the Mediterranean or Dietary Approaches to Stop Hypertension diet to reduce the risk of heart disease, stroke, and other cardiovascular diseases.

Database: CINAHL

A diet rich in taurine, cysteine, folate, B12 and betaine may lessen risk for Alzheimer's disease by boosting brain synthesis of hydrogen sulfide.

Author(s): McCarty, Mark F.; O'Keefe, James H.; DiNicolantonio, James J.

Source: Medical Hypotheses; Nov 2019; vol. 132

Publication Date: Nov 2019

Publication Type(s): Academic Journal

PubMedID: 31450076

Abstract:The gaseous physiological modulator hydrogen sulfide (H₂S) has recently been shown to exert a variety of neuroprotective effects. In particular, the treatment of transgenic mouse models of Alzheimer's disease (AD) with agents that release H₂S aids preservation of cognitive function, suppresses brain production of amyloid beta, and decreases tau phosphorylation. The possible physiological relevance of these findings is suggested by the finding that brain and plasma levels of H₂S are markedly lower in AD patients than matched controls. Hence, nutraceutical strategies which boost brain synthesis or levels of H₂S may have potential for prevention of AD. The chief enzyme which synthesizes H₂S in brain parenchyma, cystathionine beta-synthase (CBS), employs cysteine as its rate-limiting substrate, and is allosterically activated by S-adenosylmethionine (SAM). Supplemental taurine has been shown to boost expression of this enzyme, as well as that of another H₂S source, cystathionine gamma-lyase, in vascular tissue, and to enhance plasma H₂S levels; in rats subjected to hemorrhagic stroke, co-administration of taurine has been shown to blunt a marked reduction in brain CBS expression. Brain levels of SAM are about half as high in AD patients as in controls, and this is thought to explain the reduction of brain H₂S in these patients. These considerations suggest that supplementation with cysteine, taurine, and agents which promote methyl group availability - such as SAM, folate, vitamin B12, and betaine - may have potential for boosting brain synthesis of H₂S and thereby aiding AD prevention. Indeed, most of these agents have already demonstrated utility in mouse AD models - albeit the extent to which increased H₂S synthesis contributes to this protection remains unclear. Moreover, prospective epidemiology has associated low dietary or plasma levels of folate, B12, and taurine with increased dementia risk. Rodent studies suggest that effective nutraceutical strategies for boosting brain H₂S synthesis may in fact have broad neuroprotective utility, possibly aiding prevention and/or control not only of AD but also Parkinson's disease and glaucoma, while diminishing the neuronal damage associated with brain trauma or stroke.

Database: CINAHL

Voluntary Stopping of Eating and Drinking in the Terminally Ill #379.

Author(s): Chargot, Jane; Rosielle, Drew A.; Marks, Adam

Source: Journal of Palliative Medicine; Oct 2019; vol. 22 (no. 10); p. 1281-1282

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Abstract:The article talks about the voluntary stopping of eating and drinking (VSED), which is defined as a competent individual deciding to stop taking hydration and nutrition with the intention of hastening death. Topics discussed include providing counseling or managing symptoms is tantamount to assisting with an immoral act; patient pursuing VSED should be prepared that coordinating ethical, legal, and psychiatric input is needed; and importance of eating and drinking with careful attention.

Database: CINAHL

A Review of the Potential Benefits of Increasing Vitamin D Status in Mongolian Adults through Food Fortification and Vitamin D Supplementation.

Author(s): Grant, William B.; Boucher, Barbara J.

Source: Nutrients; Oct 2019; vol. 11 (no. 10); p. 2452-2452

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Available at [Nutrients](#) - from Europe PubMed Central - Open Access

Available at [Nutrients](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nutrients](#) - from Unpaywall

Abstract: Serum 25-hydroxyvitamin D (25(OH)D) concentrations are low in Mongolia, averaging 22 ng/mL in summer and only 8 ng/mL in winter. Mongolians have high incidence and/or prevalence of several diseases linked to low 25(OH)D concentrations, including ischemic heart disease, malignant neoplasms, cirrhosis of the liver, ischemic stroke, lower respiratory tract infections, preterm birth complications, and diabetes mellitus. Fortifying regularly consumed foods such as flour, milk, and edible oils with vitamin D3 could raise 25(OH)D concentrations by about 10 ng/mL. However, to achieve 25(OH)D concentrations of 30–40 ng/mL in adults, vitamin D intakes of 1000 to 4000 IU/day would be required, making personal supplement use necessary. On the basis of prospective observational studies and clinical trials of disease incidence or known mortality rates and adverse pregnancy and birth outcomes, raising mean serum 25(OH)D concentrations to 40 ng/mL would likely reduce incidence and mortality rates for those and other diseases, reduce the rate of adverse pregnancy and birth outcomes, and increase mean life expectancy by one year or more.

Database: CINAHL

The experiences of family members witnessing the diminishing drinking of a dying relative: An adapted meta-narrative literature review.

Author(s): Pettifer, Annie; Froggatt, Katherine; Hughes, Sean

Source: Palliative Medicine; Oct 2019; vol. 33 (no. 9); p. 1146-1157

Publication Date: Oct 2019

Publication Type(s): Academic Journal

Abstract: Background: Addressing the concerns of family members is an important aspect of palliative and end-of-life care. One aspect that commonly causes family caregivers concern is the decline of patients' oral fluid intake in the last few days of life. Aim: To map the narratives in which family members' experiences of witnessing the diminishing drinking of a dying relative have been researched, review the findings within each narrative and consider directions for future research. Design: An adapted meta-narrative review approach. Data Sources: The Cumulative Index of Nursing and Applied Health Literature, Medline, PsycINFO, Psycharticles and Scopus databases were searched for relevant research published between January 1982 and December 2017. Quality was assessed using the Quality Assessment and Review Instrument. Results: A total of 22 papers met the inclusion criteria. No study focused specifically on the experiences of family members when witnessing the diminishing drinking of dying relatives. However, research about diminishing drinking was identified within studies broadly focusing on cancer cachexia, clinical decision-making about hydration and/or nutrition and support in a hospice context. The research indicates that family members' experiences of diminishing drinking vary with their views about the significance of drinking, dying well and their expectations of themselves and

healthcare professionals. Conclusion: While some understanding of the topic can be inferred from research in related areas, there is a paucity of information specifically about family members' experiences when witnessing the diminishing drinking of a dying relative.

Database: CINAHL

Associations between coffee consumption and all-cause and cause-specific mortality in a Japanese city: the Takayama study.

Author(s): Yamakawa, Michiyo; Wada, Keiko; Goto, Yuko; Mizuta, Fumi; Koda, Sachi; Uji, Takahiro; Nagata, Chisato

Source: Public Health Nutrition; Oct 2019; vol. 22 (no. 14); p. 2561-2568

Publication Date: Oct 2019

Publication Type(s): Periodical

PubMedID: 31107195

Abstract:Objective: Epidemiological studies suggest that coffee consumption is inversely associated with all-cause and cause-specific mortality. Evidence from studies targeting non-white, non-Western populations is still sparse, although coffee is popular and widely consumed in Asian countries.Design: Population-based, prospective cohort study. We used Cox proportional hazards models with adjustment for dietary and lifestyle factors to estimate associations between coffee consumption and all-cause and cause-specific mortality. Dietary intake including coffee consumption was assessed only at baseline using a validated FFQ.Setting: A Japanese city.Participants: Individuals aged 35 years or older without cancer, CHD and stroke at baseline (n 29 079) and followed from 1992 to 2008.Results: From 410 352 person-years, 5339 deaths were identified (mean follow-up = 14.1 years). Coffee consumption was inversely associated with mortality from all causes and CVD among all participants, but not from cancer. Compared with the category of 'none', the multivariate hazard ratio (95 % CI) for all-cause mortality was 0.93 (0.86, 1.00) for <1 cup/d, 0.84 (0.76, 0.93) for 1 cup/d and 0.81 (0.71, 0.92) for 2-3 cups/d. The multivariate hazard ratio (95 % CI) for cardiovascular mortality were 0.87 (0.77, 0.99) for <1 cup/d, 0.76 (0.63, 0.92) for 1 cup/d and 0.67 (0.50, 0.89) for 2-3 cups/d. Inverse associations were also observed for mortality from other causes, specifically infectious and digestive diseases.Conclusion: Drinking coffee, even 1 cup/d, was inversely associated with all-cause mortality and mortality from cardiovascular, infectious and digestive diseases.

Database: CINAHL

Potatoes and risk of chronic disease: a systematic review and dose–response meta-analysis.

Author(s): Schwingshackl, Lukas; Schwedhelm, Carolina; Hoffmann, Georg; Boeing, Heiner

Source: European Journal of Nutrition; Sep 2019; vol. 58 (no. 6); p. 2243-2251

Publication Date: Sep 2019

Publication Type(s): Academic Journal

Available at [European Journal of Nutrition](#) - from Unpaywall

Abstract:Purpose: We aimed to synthesize the evidence on the relation between different types of potato consumption with risk of all-cause mortality, coronary heart disease (CHD),

stroke, type 2 diabetes (T2D), colorectal cancer (CRC), and hypertension. Methods: Systematic searches until May 2018 were conducted in PubMed, Scopus, and Web of Science. Random effects meta-analyses comparing extreme categories, linear and non-linear dose–response analyses were conducted. Results: Twenty-eight reports were identified. Only total potato consumption was available for some endpoints which showed no associations with all-cause mortality (RR: 0.88, 95% CI 0.69–1.12), CHD (RR: 1.03, 95% CI 0.96–1.09), stroke (RR: 0.98, 95% CI 0.93–1.03), and CRC (RR: 1.05, 95% CI 0.92–1.20) per one daily/serving (150 g/day) increase. Consumption of one daily serving of boiled/baked/mashed-potatoes was not associated with risk of hypertension (RR: 1.08, 95% CI 0.96–1.21), but slightly with the risk of T2D (RR: 1.09, 95% CI 1.01–1.18). Positive associations for the risk of T2D (RR: 1.66, 95% CI 1.43–1.94) and hypertension (RR: 1.37, 95% CI 1.15–1.63) were observed for each 150 g/day increase in French-fries consumption. The quality of evidence was rated mostly low (moderate quality of evidence for the risk-associations of French-fries). Conclusion: Total potato consumption is not related to risk for many chronic diseases but could pose a small increase in risk for T2D if consumed boiled. A clear risk relation was found between French-fries consumption and risk of T2D and hypertension. For several outcomes, the impact of different preparation procedures could not be assessed.

Database: CINAHL

Prevalence of Malnutrition Risk and the Impact of Nutrition Risk on Hospital Outcomes: Results From nutritionDay in the U.S.

Author(s): Sauer, Abby C.; Goates, Scott; Malone, Ainsley; Mogensen, Kris M.; Gewirtz, Gail; Sulz, Isabella; Moick, Sigrid; Laviano, Alessandro; Hiesmayr, Michael

Source: JPEN Journal of Parenteral & Enteral Nutrition; Sep 2019; vol. 43 (no. 7); p. 918-926

Publication Date: Sep 2019

Publication Type(s): Academic Journal

PubMedID: 30666659

Abstract:Background: Malnutrition risk estimates vary greatly, and no robust data on the association between food intake and outcomes exist for hospitals in the United States (U.S.). This study aimed to determine the prevalence of malnutrition risk and to evaluate the impact of food intake on mortality using the nutritionDay in the U.S. dataset. Methods: This study analyzed data from 2009 to 2015 for all adult patients from participating hospitals. Prevalence of malnutrition risk was determined by mapping self-reported nutritionDay survey questions to the Malnutrition Screening Tool (MST). Fine and Gray competing-risk analysis with clustering was used to evaluate the impact of nutrition risk and food intake on patients' 30-day in-hospital mortality, while controlling for age, mobility, and other disease-related factors. Results: Analysis included data from 9959 adult patients from 601 wards. The overall prevalence of malnutrition risk (MST score ≥ 2) was 32.7%. On nutritionDay, 32.1% of patients ate a quarter of their meal or less. Hospital mortality hazard ratio was 3.24 (95% CI: [1.73, 6.07]; P-value < 0.001) for patients eating a quarter compared with those who ate all their meal and increased to 5.99 (95% CI: [3.03, 11.84]; P-value < 0.0001) for patients eating nothing despite being allowed to eat. Conclusion: This study provides the most robust estimate of malnutrition risk in U.S. hospitalized patients to date, finding that approximately 1 in 3 are at risk. Additionally, patients who have diminished

meal intake experience increased mortality risk. These results highlight the ongoing issue of malnutrition in the hospital setting.

Database: CINAHL

Potato consumption is prospectively associated with risk of hypertension: An 11.3-year longitudinal cohort study.

Author(s): Huang, Mengmeng; Zhuang, Pan; Jiao, Jingjing; Wang, Jun; Chen, Xinyu; Zhang, Yu

Source: Clinical Nutrition; Aug 2019; vol. 38 (no. 4); p. 1936-1944

Publication Date: Aug 2019

Publication Type(s): Academic Journal

Abstract:Government has popularized potatoes as the staple food in China. Potatoes as a potassium-rich food show high glycemic responses after consumption. Whether potato consumption is prospectively linked with the risk of hypertension remains unclear in oriental populations. In this study, we aimed to investigate the association of potato consumption with the risk of hypertension among Chinese people. A total of 11,763 adults (≥ 20 years old) who were free of hypertension at baseline were enrolled from China Health and Nutrition Survey (CHNS) Cohort study in 1989–2011. Participants were excluded if they were < 20 years old, identified to be pregnant, and previously diagnosed with hypertension, cancers, infarction, apoplexy and diabetes at baseline. Cox proportional hazards regression models were used to estimate the associations after adjusting for potential confounders. During average 11.3 years of follow-up, 4033 incident cases of hypertension were ascertained. People who consumed more amounts of total potatoes, stir-fried potatoes, and non stir-fried potatoes had higher risk of hypertension (P for trend = 0.1225, 0.2168 and 0.0456, respectively). Multivariable hazard ratios (HRs) for increased consumption of total potatoes were 1.402 (95% confidence interval [CI], 1.270–1.548), 1.198 (95% CI, 1.014–1.415), and 1.120 (95% CI, 0.929–1.349) compared with non-consumers. However, the participants with higher intake of potato consumption were inclined to have lower risk of hypertension when excluding the non-consumers of total potatoes or stir-fried potatoes (P for trend = 0.0271 and 0.0001). In addition, a positive association of sweet potatoes intake with hypertension risk was only found in urban residents (P for trend = 0.0239). Our results showed that potato consumption was prospectively associated with hypertension in Chinese population. As the urbanization process continues along with the transition to Western-style diets, more consideration should be taken before the formulation of potato popularization is promoted in China. Image 1 • People who consumed potatoes had higher hypertension risk than the non-consumers. • Potato intake was inversely related to hypertension when excluding non-consumers. • Sweet potato intake was positively associated with hypertension in urban residents. • Promotion of potato popularization in China needs more epidemiological evidence.

Database: CINAHL

Pain and distress management in palliative neonatal care.

Author(s): Garten, Lars; Bühner, Christoph

Source: Seminars in Fetal & Neonatal Medicine; Aug 2019; vol. 24 (no. 4)

Publication Date: Aug 2019

Publication Type(s): Academic Journal

PubMedID: 31056417

Abstract: Palliative care concentrates on preventing and relieving suffering by reducing the severity of disease symptoms. Consistent treatment of pain and distress must therefore be an integral component of every palliative care concept. In this review non-pharmacological and pharmacological measures for pain and distress management in the context of palliative neonatal care are summarised. Furthermore, recommendations are given focusing on two special palliative neonatal care settings: compassionate extubation and withdrawing artificial nutrition and hydration.

Database: CINAHL

A defined, plant-based diet as a potential therapeutic approach in the treatment of heart failure: A clinical case series.

Author(s): Najjar, Rami S.; Montgomery, Baxter D.

Source: Complementary Therapies in Medicine; Aug 2019; vol. 45 ; p. 211-214

Publication Date: Aug 2019

Publication Type(s): Academic Journal

PubMedID: 31331563

Abstract: Background: Individuals diagnosed with congestive heart failure (CHF) have a 50% five-year mortality rate and approximately 650,000 new cases of CHF are diagnosed annually. Plant-based diets are known to improve plasma lipid concentrations, reduce blood pressure, and as part of a lifestyle intervention, lead to the regression of atherosclerotic lesions. However, a paucity of data exists with regards to plant-based diets in the treatment of CHF. Methods: Three patients diagnosed with CHF opted to undergo a dietary intervention consisting of a defined plant-based diet as an adjunct to standard medical treatment for CHF. Cardiac magnetic resonance imaging was performed. Patients' consumed the defined plant-based diet for an average of ~79 days. Results: Follow-up cardiac magnetic resonance images revealed a 92% increase in ejection fraction [mean \pm standard deviation for all data] ($22.0 \pm 6.9\%$ vs $42.2 \pm 18.4\%$), 21% reduction in left ventricular mass (214 ± 90 g vs 170 ± 102 g), 62% increase in stroke volume (55.8 ± 24.3 cc vs 90.3 ± 30.6 cc) and a 17% increase in cardiac output (3.6 ± 1.2 L/min vs 4.2 ± 1.6 L/min). In patient 1, 90-95% ostial stenosis of the left anterior descending artery nearly completely regressed following the dietary intervention. All patients subjectively reported significant clinical improvements, including less angina, shortness of breath and fatigue. Conclusion: As an adjunct treatment, a defined plant-based diet may contribute to the reversal of cardiac morphological and functional abnormalities in the setting of CHF.

Database: CINAHL

Food patterns in relation to weight change and incidence of type 2 diabetes, coronary events and stroke in the Malmö Diet and Cancer cohort.

Author(s): Ericson, Ulrika; Brunkwall, Louise; Alves Dias, Joana; Drake, Isabel; Hellstrand, Sophie; Gullberg, Bo; Sonestedt, Emily; Nilsson, Peter M.; Wirfält, Elisabet; Orho-Melander, Marju

Source: European Journal of Nutrition; Aug 2019; vol. 58 (no. 5); p. 1801-1814

Publication Date: Aug 2019

Publication Type(s): Academic Journal

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Abstract: Purpose: We examined if data-driven food-patterns associate with weight change, incidence of type 2 diabetes (T2D), coronary events (CE) and stroke. Methods: The study included 20,487 individuals (61% women) from the Malmö Diet and Cancer cohort, 45–74 years, without diabetes and CVD at baseline (1991–1996) and who did not report dietary changes. Diet was measured with a modified diet history method. During 15 years follow-up, 2206 T2D, 1571 CE and 1332 stroke cases were identified. Data on weight change after 16.7 years were available in 2627 individuals. Results: From principal component analysis, we identified six food-patterns which were similar in women and men. The first pattern, explaining 7% of the variance, was characterized by high intake of fibre-rich bread, breakfast cereals, fruits, vegetables, fish and low-fat yoghurt, and by low intake of low-fibre bread. This health conscious pattern was associated with lower T2D risk (HR comparing highest quintile with lowest: 0.75; 95% CI 0.61–0.92, 0.82; 95% CI 0.68–1.00 in women and men, respectively, P trends = 0.003, 0.01) and CE (HR 0.77; 95% CI 0.58–1.02, HR 0.83; 95% CI 0.68–1.01, P trends = 0.05, 0.07), and in men also with lower risk of ischemic stroke (HR 0.69; 95% CI 0.54–0.88; P trend = 0.001) and less pronounced weight gain (0.93 kg/10 years, P trend = 0.03). A low-fat product pattern was associated with increased T2D risk in gender combined analyses (P trend = 0.03) and a pattern characterized by dressing and vegetables with lower CE risk in men (P trend = 0.02). Conclusions: Our main finding was that a dietary pattern indicating health conscious food choices was associated with lower risk of cardiometabolic diseases in both genders.

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