

# Dietetics Update

March 2024



Welcome to the latest copy of the Dietetics Update. The aim of this publication is to bring together a range of recently published research and guidance that will help you make evidence-based decisions.

## Accessing Articles

The following abstracts are taken from a selection of recently published articles.

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Please contact Holly if you would like more information, or further evidence searches: [holly.cook3@nhs.net](mailto:holly.cook3@nhs.net).

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## NICE Guidance updated (or to be so) in the last/next 6 months

### **Digital technologies for delivering specialist weight-management services to manage weight-management medicine: early value assessment**

Health technology evaluation

Reference number: HTE14

Published: 26 October 2023

<https://www.nice.org.uk/guidance/hte14>

### **Digital technologies for providing specialist weight-management services: early value assessment**

In development [GID-HTE10023]

Expected publication date: 28 February 2024

<https://www.nice.org.uk/guidance/indevelopment/gid-hte10023>

### **Overweight and obesity management**

In development [GID-NG10182]

Expected publication date: 27 March 2024

<https://www.nice.org.uk/guidance/indevelopment/gid-ng10182>

### **Tirzepatide for managing overweight and obesity [ID6179]**

In development [GID-TA11156]

Expected publication date: 29 May 2024

<https://www.nice.org.uk/guidance/indevelopment/gid-ta11156>

### **Maternal and child nutrition**

In development [GID-NG10191]

Expected publication date: 13 November 2024

<https://www.nice.org.uk/guidance/indevelopment/gid-ng10191>

### **Semaglutide for managing overweight and obesity**

Technology appraisal guidance

Reference number:TA875

Published: 08 March 2023

Last updated: 04 September 2023

<https://www.nice.org.uk/guidance/ta875>

## 1. The Role of Diet in the Prevention of Hypertension and Management of Blood Pressure: An Umbrella Review of Meta-Analyses of Interventional and Observational Studies

**Item Type:** Journal Article

**Authors:** Aljuraiban, Ghadeer S.;Gibson, Rachel;Chan, Doris Sm;Van Horn, Linda and Chan, Queenie

**Publication Date:** 2024

**Journal:** Advances in Nutrition (Bethesda, Md.) 15(1), pp. 100123

**Abstract:** High blood pressure (BP) is a major pathological risk factor for the development of several cardiovascular diseases. Diet is a key modifier of BP, but the underlying relationships are not clearly demonstrated. This is an umbrella review of published meta-analyses to critically evaluate the wide range of dietary evidence from bioactive compounds to dietary patterns on BP and risk of hypertension. PubMed, Embase, Web of Science, and Cochrane Central Register of Controlled Trials were searched from inception until October 31, 2021, for relevant meta-analyses of randomized controlled trials or meta-analyses of observational studies. A total of 175 publications reporting 341 meta-analyses of randomized controlled trials (145 publications) and 70 meta-analyses of observational studies (30 publications) were included in the review. The methodological quality of the included publications was assessed using Assessment of Multiple Systematic Reviews 2 and the evidence quality of each selected meta-analysis was assessed using NutriGrade. This umbrella review supports recommended public health guidelines for prevention and control of hypertension. Dietary patterns including the Dietary Approaches to Stop Hypertension and the Mediterranean-type diets that further restrict sodium, and moderate alcohol intake are advised. To produce high-quality evidence and substantiate strong recommendations, future research should address areas where the low quality of evidence was observed (for example, intake of dietary fiber, fish, egg, meat, dairy products, fruit juice, and nuts) and emphasize focus on dietary factors not yet conclusively investigated.; Competing Interests: Conflict of interest None of the authors report a conflict of interest related to research presented in this article. QC is an employee and shareholder of Amgen Inc. The work presented here was conducted while QC was an employee of Imperial College London. Amgen Inc. was not involved in this study. (Copyright © 2023 The Authors. Published by Elsevier Inc. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.advnut.2023.09.011>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37783307&custid=ns023446>

## 2. The use of diet for preventing and treating depression in young men: current evidence and existing challenges

**Item Type:** Journal Article

**Authors:** Bayes, Jessica;Schloss, Janet and Sibbritt, David

**Publication Date:** 2024

**Journal:** British Journal of Nutrition 131(2), pp. 214-218

**Abstract:** Emerging evidence suggests that diet therapy (nutrients, foods and dietary patterns) could be

effective as a potential adjunctive treatment option for major depressive disorder. Numerous mechanisms have been proposed, including the role inflammation, oxidative stress, brain-derived neurotrophic factor, the gastrointestinal tract microbiome and tryptophan/serotonin metabolism. Despite known differences in depression characteristics and treatment responses between males and females, there are limited sex-specific studies examining the role of diet in young men specifically. This is important as young men are often reluctant to seek mental health support, so finding treatment strategies which appeal to this demographic is crucial. This brief report provides an overview of the most recent advances in the use of diet for preventing and treating depression in young men, highlighting existing challenges and opportunities for future research. We recommend that clinicians discuss the role of diet with depressed young men, so that diet may be used alongside current treatment options.

**Access or request full text:** <https://libkey.io/10.1017/S000711452300168X>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=174446855&custid=ns023446>

### 3. Commercial provider staff experiences of the NHS low calorie diet programme pilot: a qualitative exploration of key barriers and facilitators

**Item Type:** Journal Article

**Authors:** Jones, Susan;Brown, Tamara J.;Watson, Patricia;Homer, Catherine;Freeman, Charlotte;Bakhai, Chirag and Ells, Louisa

**Publication Date:** 2024

**Journal:** BMC Health Services Research 24(1), pp. 53

**Abstract: Background:** The National Health Service Type 2 Diabetes Path to Remission programme in England (known as the NHS Low Calorie Diet programme when piloted) was established to support people living with excess weight and Type 2 Diabetes to lose weight and improve their glycaemic control. A mixed method evaluation was commissioned to provide an enhanced understanding of the long-term cost effectiveness of the pilot programme, its implementation, equity and transferability across broad and diverse populations. This study provided key insights on implementation and equity from the service providers' perspective.; **Methods:** Thirteen focus groups were conducted with commercial providers of the programme, during the initial pilot rollout. Participants were purposively sampled across all provider organisations and staff roles involved in implementing and delivering the programme. Normalisation Process Theory (NPT) was used to design the topic schedule, with the addition of topics on equity and person-centredness. Data were thematically analysed using NPT constructs with additional inductively created codes. Codes were summarised, and analytical themes generated.; **Results:** The programme was found to fulfil the requirements for normalisation from the providers' perspective. However, barriers were identified in engaging GP practices and receiving sufficient referrals, as well as supporting service users through challenges to remain compliant. There was variation in communication and training between provider sites. Areas for learning and improvement included adapting systems and processes and closing the gap where needs of service users are not fully met.; **Conclusions:** The evaluation of the pilot programme demonstrated that it was workable when supported by effective primary care engagement, comprehensive training, and effective internal and external communication. However, limitations were identified in relation to programme specifications e.g. eligibility criteria, service specification and local commissioning decisions e.g. pattern of roll out, incentivisation of general practice. A person-centred approach to care is fundamental and should include cultural adaptation(s), and the assessment and signposting to additional support and services where required. (© 2024. The Author(s).)

**Access or request full text:** <https://libkey.io/10.1186/s12913-023-10501-y>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38200539&custid=ns023446>

#### 4. Evaluate the Effects of Different Types of Preoperative Restricted Calorie Diets on Weight, Body Mass Index, Operation Time and Hospital Stay in Patients Undergoing Bariatric Surgery: a Systematic Review and Meta Analysis Study

**Item Type:** Journal Article

**Authors:** Khalooeifard, Razieh; Rahmani, Jamal; Ghoreishy, Seyed Mojtaba; Tavakoli, Aryan; Najjari, Khosrow and Talebpour, Mohammad

**Publication Date:** 2024

**Journal:** Obesity Surgery 34(1), pp. 236-249

**Abstract:** Previous studies investigated low-calorie diets (LCD), very-low-calorie diets (VLCD), and very-low-calorie ketogenic diets (VLCKD) in relation to weight loss and outcomes for bariatric surgery patients. However, the overall effects of these diets on various outcomes remain unclear. This study aimed to assess the impact of preoperative restricted calorie diets on weight, body mass index (BMI), operation time (OT), and hospital stay (HS) in bariatric surgery patients. Seventeen articles were analyzed, revealing the highest weight loss (-8.62) and BMI reduction (-5.75) with VLCKD. Due to insufficient data, the impact of these diets on OT and HS could not be determined. Further interventional studies are required to determine the ideal preoperative diet that achieves optimal weight loss, patient compliance, tolerance, acceptance, and surgical outcomes. (© 2023. The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature.)

**Access or request full text:** <https://libkey.io/10.1007/s11695-023-06973-w>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38052747&custid=ns023446>

#### 5. Efficacy and safety of a smartphone application-based treatment of ketogenic diet in pediatric refractory epilepsy

**Item Type:** Journal Article

**Authors:** Li, Wei; Gu, Wei; Liang, Chao; Tu, Fulai; Ding, Le; Lu, Xiaopeng; Guo, Hu; Zheng, Guo and Wu, Chunfeng

**Publication Date:** 2024

**Journal:** Epilepsia Open 9(1), pp. 278-286

**Abstract: Objective:** We aimed to find predictors for smartphone application-based ketogenic diet (KD) treatment effectiveness and safety.; **Methods:** The efficacy was evaluated according to the reduction in seizure frequency after the intervention of KD; safety was evaluated based on adverse effects. The ordinal logistic regression analysis was used to explore the influencing factors of efficacy.; **Results:** The study sample included 116 males and 65 females with a median age of 2.27 years. The baseline frequency of seizure was more than five times/day in 123 children, 50.83% of them received three or more antiepileptic drugs (AEDs). Seventy-two



patients' KD initiation mode was outpatient, and 73 completed the 12-month follow-up. A total of 88 (48.62%) patients had reported a reduction in seizure  $\geq 50\%$ . Compared with 12 months, those who had received KD therapy for only 3 ( $P = 0.009$ ) and 6 months ( $P = 0.005$ ) were more likely to show negative outcomes. Outpatient initiation had better outcomes ( $P = 0.029$ ) than inpatient initiation. For the number of AEDs applied, patients on two AEDs were more likely to achieve better outcomes ( $P = 0.001$ ). Adverse events had been noted among 77 patients; BMI Z-score at KD initiation was associated with adverse effects ( $P = 0.003$ ).; **Significance:** Our study suggested that outpatient initiation and long-term treatment of KD should be encouraged.; **Plain Language Summary:** Our research shows that the KD is a helpful treatment for children with refractory epilepsy, reducing seizures by more than 50% in nearly half of the cases, with some experiencing complete seizure freedom. We used a smartphone app to improve communication between patients and their healthcare teams, resulting in a high retention, and app usage was linked to reduced adverse effects. We recommend early consideration of KD treatment for patients failing two AED, encourage outpatient initiation, and advocate for longer-term KD use. (© 2023 The Authors. Epilepsia Open published by Wiley Periodicals LLC on behalf of International League Against Epilepsy.)

**Access or request full text:** <https://libkey.io/10.1002/epi4.12867>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37969060&custid=ns023446>

## 6. Association of five diet scores with severe NAFLD incidence: A prospective study from UK Biobank

**Item Type:** Journal Article

**Authors:** Petermann-Rocha, Fanny;Carrasco-Marin, Fernanda;Boonpor, Jirapitcha;Parra-Soto, Solange;Shannon, Oliver;Malcomson, Fiona;Phillips, Nathan;Jain, Mahek;Deo, Salil;Livingstone, Katherine M.;Dingle, Sara E.;Mathers, John C.;Forrest, Ewan;Ho, Frederick K.;Pell, Jill P. and Celis-Morales, Carlos

**Publication Date:** 2024

**Journal:** Diabetes, Obesity & Metabolism 26(3), pp. 860-870

**Abstract:** **Aim:** This study aimed to contrast the associations of five common diet scores with severe non-alcoholic fatty liver disease (NAFLD) incidence.; **Materials and Methods:** In total, 162 999 UK Biobank participants were included in this prospective population-based study. Five international diet scores were included: the 14-Item Mediterranean Diet Adherence Screener (MEDAS-14), the Recommended Food Score (RFS), the Healthy Diet Indicator (HDI), the Mediterranean Diet Score and the Mediterranean-DASH Intervention for Neurodegenerative Delay score. As each score has different measurements and scales, all scores were standardized and categorized into quartiles. Cox proportional hazard models adjusted for confounder factors investigated associations between the standardized quartiles and severe NAFLD incidence.; **Results:** Over a median follow-up of 10.2 years, 1370 participants were diagnosed with severe NAFLD. When the analyses were fully adjusted, participants in quartile 4 using the MEDAS-14 and RFS scores, as well as those in quartiles 2 and 3 using the HDI score, had a significantly lower risk of severe incident NAFLD compared with those in quartile 1. The lowest risk was observed in quartile 4 for the MEDAS-14 score hazard ratio (HR): 0.76 (95% confidence interval (CI): 0.62-0.94)] and the RFS score HR: 0.82 (95% CI: 0.69-0.96)] and as well as in quartile 2 in the HDI score HR: 0.80 (95% CI: 0.70-0.91)].; **Conclusion:** MEDAS-14, RFS and HDI scores were the strongest diet score predictors of severe NAFLD. A healthy diet might protect against NAFLD development irrespective of the specific approach used to assess diet. However, following these score recommendations could represent optimal dietary approaches to mitigate NAFLD risk. (© 2023 The Authors. Diabetes, Obesity and Metabolism published by John Wiley & Sons Ltd.)



**Access or request full text:** <https://libkey.io/10.1111/dom.15378>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37997550&custid=ns023446>

## 7. Clinical trial: A Mediterranean diet is feasible and improves gastrointestinal and psychological symptoms in irritable bowel syndrome

**Item Type:** Journal Article

**Authors:** Staudacher, Heidi M.;Mahoney, Sophie;Canale, Kim;Opie, Rachelle S.;Loughman, Amy;So, Daniel;Beswick, Lauren;Hair, Chris and Jacka, Felice N.

**Publication Date:** 2024

**Journal:** Alimentary Pharmacology & Therapeutics 59(4), pp. 492-503

**Abstract: Background:** Diet is fundamental to the care of irritable bowel syndrome (IBS). However, some approaches are not appropriate for individuals experiencing psychological symptoms.; **Aims:** To assess feasibility of a Mediterranean diet in IBS and its impact on gastrointestinal and psychological symptoms.; **Methods:** We recruited adults with Rome IV IBS and mild or moderate anxiety and/or depressive symptoms to an unblinded 6-week randomised controlled trial. Patients were randomised to Mediterranean diet counselling or habitual diet. We collected gastrointestinal and psychological symptom data, dietary data and stool samples for metagenomic sequencing.; **Results:** We randomised 59 individuals (29 Mediterranean diet, 30 control); 48 completed the study. The Mediterranean Diet Adherence Screener score was higher in the Mediterranean diet group than controls at week 6 (7.5 95% CI: 6.9-8.0] vs. 5.7 5.2-6.3],  $p < 0.001$ ), and there was a greater score increase than controls (2.1 95% CI: 1.3-2.9] vs. 0.5 95% CI: 0.1-1.0],  $p = 0.004$ ), demonstrating Mediterranean diet feasibility. There was a greater proportion of gastrointestinal symptom responders in the Mediterranean diet group than controls (24/29, 83% vs. 11/30, 37%,  $p < 0.001$ ) and depression responders (15/29, 52% vs. 6/30 20%,  $p = 0.015$ ). There was no difference in FODMAP intake at week 6 ( $p = 0.51$ ). Gastrointestinal adverse events were similar ( $p = 0.588$ ). There were no differences in change in microbiome parameters between groups.; **Conclusions:** A Mediterranean diet is feasible in IBS and leads to improvement in gastrointestinal and psychological symptoms. Although this study was unblinded, these findings together with the broader benefits of the Mediterranean diet, provide strong impetus for future research in IBS. Australia New Zealand Clinical Trials Registry: ACTRN12620001362987. (© 2023 The Authors. Alimentary Pharmacology & Therapeutics published by John Wiley & Sons Ltd.)

**Access or request full text:** <https://libkey.io/10.1111/apt.17791>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37969059&custid=ns023446>

## 8. Clinical effectiveness and cost-impact after 2 years of a ketogenic diet and virtual coaching intervention for patients with diabetes

**Item Type:** Journal Article

**Authors:** Strombotne, Kiersten L.;Lum, Jessica;Pizer, Steven D.;Figueroa, Stuart;Frakt, Austin B. and Conlin, Paul R.

**Publication Date:** 2024

**Journal:** Diabetes, Obesity & Metabolism 26(3), pp. 1016-1022

**Abstract: Aim:** We previously evaluated the impacts at 5 months of a digitally delivered coaching intervention in which participants are instructed to adhere to a very low carbohydrate, ketogenic diet. With extended follow-up (24 months), we assessed the longer-term effects of this intervention on changes in clinical outcomes, health care utilization and costs associated with outpatient, inpatient and emergency department use in the Veterans Health Administration.; **Materials and Methods:** We employed a difference-in-differences model with a waiting list control group to estimate the 24-month change in glycated haemoglobin, body mass index, blood pressure, prescription medication use, health care utilization rates and associated costs. The analysis included 550 people with type 2 diabetes who were overweight or obese and enrolled in the Veterans Health Administration for health care. Data were obtained from electronic health records from 2018 to 2021.; **Results:** The virtual coaching and ketogenic diet intervention was associated with significant reductions in body mass index -1.56 (SE 0.390)] and total monthly diabetes medication usage -0.35 (SE 0.054)]. No statistically significant differences in glycated haemoglobin, blood pressure, outpatient visits, inpatient visits, or emergency department visits were observed. The intervention was associated with reductions in per-patient, per-month outpatient spending -USD286.80 (SE 97.175)] and prescription drug costs (-USD105.40 (SE 30.332)]]; **Conclusions:** A virtual coaching intervention with a ketogenic diet component offered modest effects on clinical and cost parameters in people with type 2 diabetes and with obesity or overweight. Health care systems should develop methods to assess participant progress and engagement over time if they adopt such interventions, to ensure continued patient engagement and goal achievement. (© 2023 John Wiley & Sons Ltd.)

**Access or request full text:** <https://libkey.io/10.1111/dom.15401>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38082469&custid=ns023446>

## 9. Mediterranean diet associated with lower frailty risk: A large cohort study of 21,643 women admitted to hospitals

**Item Type:** Journal Article

**Authors:** Zhang, Huifeng;Li, Weimin;Wang, Youfa;Dong, Yuanyuan;Greenwood, Darren C.;Hardie, Laura J. and Cade, Janet E.

**Publication Date:** 2024

**Journal:** The Journal of Nutrition, Health & Aging 28(1), pp. 100001

**Abstract: Background:** Mediterranean diet is traditionally considered as a healthy dietary pattern, while its association with frailty has not been confirmed. This study investigated associations between Mediterranean diet and risk of frailty among women admitted to hospitals in England from an older-aged women's cohort study.; **Methods:** A modified Mediterranean diet was evaluated from a validated 217-item food frequency questionnaire. Incident frailty was determined using a hospital frailty risk score based on linkage to Hospital Episode Statistics up to March 2019. Cox proportional hazard models were conducted to estimate hazard ratios (HR) and 95% confidence intervals (CI). Further subgroup analyses stratified by age and body mass index (BMI), and sensitivity analyses were additionally explored.; **Results:** Over a mean follow-up of 13 years, there were 14,838 (68.6%) cases of frailty out of 21,643 individuals included in this study. Compared with low adherence to Mediterranean diet, moderate adherence was associated with 5% (HR = 0.95, 95%CI: 0.91, 0.99) lower risk of

frailty, with high adherence associated with even lower risk (HR = 0.89, 95%CI: 0.85, 0.94). The magnitude of above associations remained consistent in subgroups stratified by age and BMI, except the association between moderate adherence and risk of frailty was attenuated in the  $\geq 60$ -year (HR = 0.99, 95%CI: 0.93, 1.06) and the BMI > 24.9 kg/m<sup>2</sup> (HR = 0.97, 95%CI: 0.91, 1.03) subgroups.; **Conclusions:** Adherence to Mediterranean diet was associated with lower risk of frailty. The better the adherence, the greater the magnitude of the protective association. Older and overweight women may potentially benefit from greater adherence to the Mediterranean diet regarding frailty prevention. (Copyright © 2023 The Author(s). Published by Elsevier Masson SAS.. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.jnha.2023.100001>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38267161&custid=ns023446>

## 10. Assessing the feasibility of using the ketogenic diet in autism spectrum disorder

**Item Type:** Journal Article

**Authors:** Albers, Jacob;Kraja, Gearta;Eller, Danielle;Eck, Karen;McBrian, Danielle and Bain, Jennifer M.

**Publication Date:** 2023

**Journal:** Journal of Human Nutrition and Dietetics : The Official Journal of the British Dietetic Association 36(4), pp. 1303-1315

**Abstract: Background:** Evidence demonstrating efficacy of dietary interventions for autism spectrum disorder (ASD) remains inconsistent. Recent research on the ketogenic diet (KD) for the treatment of ASD has suggested a benefit. Children with ASD often demonstrate ritualised food-specific behaviours, taste and texture aversions, and an increased prevalence of food restrictions and allergies. There is a need to investigate how these features contribute to initiation and adherence of the KD. Two surveys were administered to assess the feasibility of utilising the KD for ASD.; **Methods:** First, paper surveys were given to caregivers of children presenting to outpatient neurology clinics. Next, experienced clinicians were recruited and surveyed online using Qualtrics. Chi-squared analysis was used to compare ASD and non-ASD caregiver responses. Descriptive metrics were used to present clinician responses. Responses to each question were evaluated individually.; **Results:** One hundred and fourteen surveys were collected from caregivers. There were no significant differences in (1) stated feasibility of adopting a new diet, (2) a carbohydrate restricted diet, (3) diet restrictions, (4) documented allergies or (5) personal/cultural restrictions between groups with and without ASD. Seventy clinician responses were collected. The majority (67.4%) indicated that feasibility for a child with ASD to adopt a KD for any reason depends on ASD severity. Some respondents 73% rated adherence to the KD as more difficult compared to age-matched controls, whereas 26% considered it similar. Multiple familial and child characteristics were rated as increasing the difficulty of successful KD.; **Conclusions:** The results of the present study suggest that it is feasible for children with ASD to adopt a KD, and success is highly individualised to child and family. (© 2022 The British Dietetic Association Ltd.)

**Access or request full text:** <https://libkey.io/10.1111/jhn.13115>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36478324&custid=ns023446>

## 11. Identification of the Most Suitable Mobile Apps to Support Dietary Approaches to Stop Hypertension (DASH) Diet Self-Management: Systematic Search of App Stores and Content Analysis

**Item Type:** Journal Article

**Authors:** Alnooh, Ghadah;Alessa, Tourkiah;Noorwali, Essra;Albar, Salwa;Williams, Elizabeth;de Witte, Luc,P. and Hawley, Mark S.

**Publication Date:** 2023

**Journal:** Nutrients 15(15)

**Abstract:** Smartphone apps might provide an opportunity to support the Dietary Approaches to Stop Hypertension (DASH) diet, a healthy diet designed to help lower blood pressure. This study evaluated DASH diet self-management apps based on their quality, likely effectiveness, and data privacy/security to identify the most suitable app(s). A systematic search and content analysis were conducted of all DASH diet apps available in Google Play and the Apple App Store in the UK in November 2022. Apps were included if they provided DASH diet tracking. A previous systematic literature review found some commercial apps not found in the app store search, and these were also included in this review. Three reviewers used the App Quality Evaluation Tool (AQEL) to assess each app's quality across seven domains: knowledge acquisition, skill development, behaviour change, purpose, functionality, and appropriateness for adults with hypertension. Domains with a score of 8 or higher were considered high-quality. Two reviewers assessed the apps' data privacy and security and then coded Behaviour change techniques (BCTs) linked to the Theoretical Domain Framework (TDF) underpinning the likely effectiveness of the apps. Seven DASH diet apps were assessed, showing the limited availability of apps supporting DASH diet self-management. The AQEL assessment showed that three apps scored higher than eight in most of the AQEL domains. Nineteen BCTs were used across the apps, linked to nine TDF action mechanisms that may support DASH diet self-management behaviours. Four apps met standards for privacy and security. All seven apps with self-monitoring functionality had sufficient theoretical basis to demonstrate likely effectiveness. However, most had significant quality and data security shortcomings. Only two apps, NOOM and DASH To TEN, were found to have both adequate quality and security and were thus deemed suitable to support DASH diet self-management.

**Access or request full text:** <https://libkey.io/10.3390/nu15153476>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37571413&custid=ns023446>

## 12. Availability of palliative parenteral nutrition to patients with advanced cancer: A national survey of service provision

**Item Type:** Journal Article

**Authors:** Baker, James;Smith, Philip J.;White, Simon J. and Gifford, Alison J.

**Publication Date:** 2023

**Journal:** Journal of Human Nutrition & Dietetics 36(4), pp. 1225-1233

**Abstract: Background:** Patients with advanced malignancy who are unable to meet their nutritional requirements orally or enterally as a result of intestinal failure may be considered for parenteral nutrition

support. Current UK guidance recommends that patients with a 3-month prognosis and good performance status (i.e., Karnofsky performance status >50) should be considered for this intervention at home (termed Home Parenteral Nutrition; HPN). However, HPN is a nationally commissioned service by National Health Service (NHS) England and Improvement that can only be initiated at specific NHS centres and so may not be easily accessed by patients outside of these centres. This survey aimed to identify current clinical practice across UK hospitals about how palliative parenteral nutrition is initiated. **Methods:** Clinical staff associated with Nutrition Support Teams at NHS Organisations within the UK were invited to complete an electronically administered survey of national clinical practice through advertisements posted on relevant professional interest groups. **Results:** Sixty clinicians responded to the survey administered between September and November 2020. The majority of respondents responded positively that decisions made to initiate palliative parenteral nutrition were conducted in alignment with current national guidance in relation to decision-making and formulation of parenteral nutrition. Variation was observed in relation to the provision of advance care planning in relation to nutrition support prior to discharge, as well as the consideration of venting gastrostomy placement in patients with malignant bowel obstruction unsuitable for surgical intervention. **Conclusions:** Adherence to current national guidance in relation to the provision of palliative parenteral nutrition is variable for some aspects of care. Further work is required particularly in relation to maximising the opportunity for the provision of advance care planning prior to discharge in this patient cohort. **Key points:** The provision of home parenteral nutrition to patients diagnosed with intestinal failure secondary to advanced cancer is recommended for patients with  $\geq 3$  months prognosis and good performance status. Home parenteral nutrition in the UK requires the patient to be registered for a home parenteral nutrition service that can only be performed by specialist centres. This survey of UK clinical practice identified that the provision of home parenteral nutrition to this cohort of patients is variable for some aspects of care.

**Access or request full text:** <https://libkey.io/10.1111/jhn.13174>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=164935905&custid=ns023446>

### 13. Patient and carer perspectives on the use of video consultations in the management of the ketogenic diet for epilepsy

**Item Type:** Journal Article

**Authors:** Bara, Vanessa Bh;Schoeler, Natasha;Carroll, Jennifer H.;Simpson, Zoe and Cameron, Tracy

**Publication Date:** 2023

**Journal:** Epilepsy & Behavior : E&B 145, pp. 109280

**Abstract: Background:** The COVID-19 pandemic resulted in a significant change in the way healthcare was delivered worldwide. During this time, a survey of Ketogenic Dietitians Research Network (KDRN) members found that all respondents expected digital platforms for clinics and/or education to continue post-pandemic. As a follow-up to this, we surveyed views about video consultations (VCs) of patients and carers of those following the ketogenic diet for drug-resistant epilepsy.; **Methods:** The SurveyMonkey TM survey was distributed on Matthews' Friends and KDRN social media platforms and emailed from five United Kingdom ketogenic diet centers to their patients/carers.; **Results:** Forty eligible responses were received. More than half of the respondents (23, 57.5%) had attended a VC. Eighteen respondents (45%) would like to have VCs for most (categorized as approximately 75%) or all of their consultations. Half as many (9, 22.5%) would not like video consultations. The most common benefits selected were saving travel time (32, 80%), less stress of finding somewhere to park and not having to take time off work (22, 55% each). Twelve (30%) responded that VCs lessened environmental impact. The most common disadvantages selected were not being able to get blood

tests/having to make a separate consultation for blood tests (22, 55% overall), not being able to get weight or height checked/having to make a separate consultation for this and it is less personal/preferring face-to-face (17, 42.5% each). Three-quarters (30 respondents) felt it would be very easy or easy to accurately weigh the patient when not attending an in-person consultation.; **Conclusion:** Our results suggest that many patients and carers would welcome the option of VCs as well as face-to-face consultations. Where possible and appropriate patients and their families should be offered both options. This is in line with the NHS Long-Term Plan and the NHS response to climate change.; **Competing Interests:** Declaration of Competing Interest The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Matthew's Friends Charity, Nutricia Advanced Medical Nutrition, and Vitaflo (International) Ltd sponsored meetings for the Ketogenic Dietitians Research Network (KDRN). VBHB has received honoraria from Nutricia Advanced Medical Nutrition. NS was previously supported for a research post by Vitaflo (International) Ltd, she has received grants from Nutricia Advanced Medical Nutrition, Vitaflo (International) Ltd and Matthew's Friends Charity, and honoraria from Nutricia Advanced Medical Nutrition and Vitaflo (International) Ltd. JHC has received personal fees, speaker honoraria, and grant funding from Nutricia Advanced Medical Nutrition. ZS has received honoraria from Vitaflo (International) Ltd. TC has received honoraria from Nutricia Advanced Medical Nutrition. (Copyright © 2023 Elsevier Inc. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.yebch.2023.109280>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37315407&custid=ns023446>

## 14. The role of diet and nutrition in the management of COPD

**Item Type:** Journal Article

**Authors:** Beijers, Rosanne J. H. C. G.;Steiner, Michael C. and Schols, Annemie M. W. J.

**Publication Date:** 2023

**Journal:** European Respiratory Review : An Official Journal of the European Respiratory Society 32(168)

**Abstract:** In 2014, the European Respiratory Society published a statement on nutritional assessment and therapy in COPD. Since then, increasing research has been performed on the role of diet and nutrition in the prevention and management of COPD. Here, we provide an overview of recent scientific advances and clinical implications. Evidence for a potential role of diet and nutrition as a risk factor in the development of COPD has been accumulating and is reflected in the dietary patterns of patients with COPD. Consuming a healthy diet should, therefore, be promoted in patients with COPD. Distinct COPD phenotypes have been identified incorporating nutritional status, ranging from cachexia and frailty to obesity. The importance of body composition assessment and the need for tailored nutritional screening instruments is further highlighted. Dietary interventions and targeted single or multi-nutrient supplementation can be beneficial when optimal timing is considered. The therapeutic window of opportunity for nutritional interventions during and recovering from an acute exacerbation and hospitalisation is underexplored.; **Competing Interests:** Conflicts of interest: All authors have no conflicts of interest to declare. (Copyright ©The authors 2023.)

**Access or request full text:** <https://libkey.io/10.1183/16000617.0003-2023>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37286221&custid=ns023446>



## 15. Ketogenic Diet and Ketone Bodies as Clinical Support for the Treatment of SARS-CoV-2-Review of the Evidence

**Item Type:** Journal Article

**Authors:** Bolesławska, Izabela;Kowalówka, Magdalena;Bolesławska-Król, Natasza and Przysławski, Juliusz

**Publication Date:** 2023

**Journal:** Viruses 15(6)

**Abstract:** One of the proposed nutritional therapies to support drug therapy in COVID-19 is the use of a ketogenic diet (KD) or ketone bodies. In this review, we summarized the evidence from tissue, animal, and human models and looked at the mechanisms of action of KD/ketone bodies against COVID-19. KD/ketone bodies were shown to be effective at the stage of virus entry into the host cell. The use of  $\beta$ -hydroxybutyrate (BHB), by preventing the metabolic reprogramming associated with COVID-19 infection and improving mitochondrial function, reduced glycolysis in CD4+ lymphocytes and improved respiratory chain function, and could provide an alternative carbon source for oxidative phosphorylation (OXPHOS). Through multiple mechanisms, the use of KD/ketone bodies supported the host immune response. In animal models, KD resulted in protection against weight loss and hypoxemia, faster recovery, reduced lung injury, and resulted in better survival of young mice. In humans, KD increased survival, reduced the need for hospitalization for COVID-19, and showed a protective role against metabolic abnormalities after COVID-19. It appears that the use of KD and ketone bodies may be considered as a clinical nutritional intervention to assist in the treatment of COVID-19, despite the fact that numerous studies indicate that SARS-CoV-2 infection alone may induce ketoacidosis. However, the use of such an intervention requires strong scientific validation.

**Access or request full text:** <https://libkey.io/10.3390/v15061262>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37376562&custid=ns023446>

## 16. Association of Mediterranean diet with survival after breast cancer diagnosis in women from nine European countries: results from the EPIC cohort study

**Item Type:** Journal Article

**Authors:** Castro-Espin, Carlota;Bonet, Catalina;Crous-Bou, Marta;Nadal-Zaragoza, N.;Tjønneland, Anne;Mellekjær, Lene;Hajji-Louati, Mariem;Truong, Thérèse;Katzke, Verena;Le Cornet, Charlotte;Schulze, Matthias B.;Jannasch, Franziska;Masala, Giovanna;Sieri, Sabina;Panico, Salvatore;Di Girolamo, Chiara;Skeie, Guri;Borch, Kristin Benjaminsen;Olsen, Karina Standahl;Sánchez, Maria-Jose, et al

**Publication Date:** 2023

**Journal:** BMC Medicine 21(1), pp. 225

**Abstract: Background:** The Mediterranean diet has been associated with lower risk of breast cancer (BC) but evidence from prospective studies on the role of Mediterranean diet on BC survival remains sparse and conflicting. We aimed to investigate whether adherence to Mediterranean diet prior to diagnosis is associated with overall and BC-specific mortality.; **Methods:** A total of 13,270 incident breast cancer cases were identified from an initial sample of 318,686 women in 9 countries from the European Prospective Investigation into Cancer and Nutrition (EPIC) study. Adherence to Mediterranean diet was estimated through the adapted relative Mediterranean diet (arMED), a 16-point score that includes 8 key components of the Mediterranean



diet and excludes alcohol. The degree of adherence to arMED was classified as low (score 0-5), medium (score 6-8), and high (score 9-16). Multivariable Cox proportional hazards models were used to analyze the association between the arMED score and overall mortality, and Fine-Gray competing risks models were applied for BC-specific mortality.; **Results:** After a mean follow-up of 8.6 years from diagnosis, 2340 women died, including 1475 from breast cancer. Among all BC survivors, low compared to medium adherence to arMED score was associated with a 13% higher risk of all-cause mortality (HR 1.13, 95%CI 1.01-1.26). High compared to medium adherence to arMED showed a non-statistically significant association (HR 0.94; 95% CI 0.84-1.05). With no statistically significant departures from linearity, on a continuous scale, a 3-unit increase in the arMED score was associated with an 8% reduced risk of overall mortality (HR 3-unit 0.92, 95% CI: 0.87-0.97). This result sustained when restricted to postmenopausal women and was stronger among metastatic BC cases (HR 3-unit 0.81, 95% CI: 0.72-0.91).; **Conclusions:** Consuming a Mediterranean diet before BC diagnosis may improve long-term prognosis, particularly after menopause and in cases of metastatic breast cancer. Well-designed dietary interventions are needed to confirm these findings and define specific dietary recommendations. (© 2023. The Author(s).)

**Access or request full text:** <https://libkey.io/10.1186/s12916-023-02934-3>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37365585&custid=ns023446>

## 17. A low-fat diet improves fatigue in multiple sclerosis: Results from a randomized controlled trial

**Item Type:** Journal Article

**Authors:** Chase, Emma;Chen, Vicky;Martin, Kayla;Lane, Michael;Wooliscroft, Lindsey;Adams, Claire;Rice, Jessica;Silbermann, Elizabeth;Hollen, Christopher;Fryman, Allison;Purnell, Jonathan Q.;Vong, Carly;Orban, Anna;Horgan, Angela;Khan, Akram;Srikanth, Priya and Yadav, Vijayshree

**Publication Date:** 2023

**Journal:** Multiple Sclerosis (Houndmills, Basingstoke, England) 29(13), pp. 1659-1675

**Abstract: Background:** Fatigue can be a disabling multiple sclerosis (MS) symptom with no effective treatment options.; **Objective:** Determine whether a low-fat diet improves fatigue in people with MS (PwMS).; **Methods:** We conducted a 16-week randomized controlled trial (RCT) and allocated PwMS to a low-fat diet (active, total daily fat calories not exceeding 20%) or wait-list (control) group. Subjects underwent 2 weeks of baseline diet data collection (24-hour diet recalls (24HDRs)), followed by randomization. The active group received 2 weeks of nutrition counseling and underwent a 12-week low-fat diet intervention. One set of three 24HDRs at baseline and week 16 were collected. We administered a food frequency questionnaire (FFQ) and Modified Fatigue Impact Scale (MFIS) every 4 weeks. The control group continued their pre-study diet and received diet training during the study completion.; **Results:** We recruited 39 PwMS (20-active; 19-control). The active group decreased their daily caloric intake by 11% (95% confidence interval (CI): -18.5%, -3.0%) and the mean MFIS by 4.0 (95% CI: -12.0, 4.0) compared to the control (intent-to-treat). Sensitivity analysis strengthened the association with a mean MFIS difference of -13.9 (95% CI: -20.7, -7.2).; **Conclusions:** We demonstrated a significant reduction in fatigue with a low-fat dietary intervention in PwMS.; **Competing Interests:** Declaration of Conflicting InterestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**Access or request full text:** <https://libkey.io/10.1177/13524585231208330>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37941305&custid=ns>

[023446](#)

## 18. Association of Alternative Dietary Patterns with Osteoporosis and Fracture Risk in Older People: A Scoping Review

**Item Type:** Journal Article

**Authors:** Chen, Huiyu and Avgerinou, Christina

**Publication Date:** 2023

**Journal:** Nutrients 15(19)

**Abstract: Purpose:** Although the Mediterranean diet has been associated with a lower risk of hip fracture, the effect of other dietary patterns on bone density and risk of fracture is unknown. This scoping review aims to investigate the association between adherence to alternative dietary patterns (other than the traditional Mediterranean diet) and osteoporosis or osteoporotic fracture risk in older people.; **Methods:** A systematic search was carried out on three electronic databases (Medline, EMBASE, and Scopus) to identify original papers studying the association between alternative dietary patterns (e.g., Baltic Sea Diet (BSD), modified/alternative Mediterranean diet in non-Mediterranean populations, Dietary Approaches to Stop Hypertension (DASH)) assessed using 'prior' methods (validated scores) and the risk of osteoporotic fracture or Bone Mineral Density (BMD) in people aged  $\geq 50$  (or reported average age of participants  $\geq 60$ ). Results from the included studies were presented in a narrative way.; **Results:** Six observational (four prospective cohort and two cross-sectional) studies were included. There was no significant association between BMD and BSD or DASH scores. Higher adherence to DASH was associated with a lower risk of lumbar spine osteoporosis in women in one study, although it was not associated with the risk of hip fracture in another study with men and women. Higher adherence to aMED (alternative Mediterranean diet) was associated with a lower risk of hip fracture in one study, whereas higher adherence to mMED (modified Mediterranean diet) was associated with a lower risk of hip fracture in one study and had no significant result in another study. However, diet scores were heterogeneous across cohort studies.; **Conclusions:** There is some evidence that a modified and alternative Mediterranean diet may reduce the risk of hip fracture, and DASH may improve lumbar spine BMD. Larger cohort studies are needed to validate these findings.

**Access or request full text:** <https://libkey.io/10.3390/nu15194255>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37836538&custid=ns023446>

## 19. Adherence to a Mediterranean Diet, Body Composition and Energy Expenditure in Outpatients Adolescents Diagnosed with Anorexia Nervosa: A Pilot Study

**Item Type:** Journal Article

**Authors:** Cinelli, Giulia;Crocì, Ileana;De Santis, Gemma Lou;Chianello, Ilenia;Miller, Kiersten Pilar;Gualtieri, Paola;Di Renzo, Laura;De Lorenzo, Antonino;Tozzi, Alberto Eugenio and Zanna, Valeria

**Publication Date:** 2023

**Journal:** Nutrients 15(14)

**Abstract:** Weight restoration is the primary goal of treatment for patients with Anorexia Nervosa (AN). This observational pilot study aims to describe adherence to the Mediterranean Diet (MD) and the consequent

process of weight and functional recovery in outpatient adolescents diagnosed with AN. Eight patients with a median age of 15.1 (14.0-17.1) years were seen at baseline and after six months. Anthropometrics, body composition, and resting energy expenditure (REE) were assessed. The KIDMED questionnaire, the 24 h recall, and a quantitative food frequency questionnaire were used to evaluate adherence to the MD. The median KIDMED score increased from 5.5 (T0) to 10 (T1), which was not significant. Intakes of grams of carbohydrates, lipids, mono-unsaturated fatty acids, and fiber increased ( $p = 0.012$ ,  $p = 0.036$ ,  $p = 0.036$ ,  $p = 0.025$ ). Weight significantly increased ( $p = 0.012$ ) as well as lean body mass ( $p = 0.036$ ), with a resulting improvement of the REE ( $p = 0.012$ ). No association between anthropometrics and body composition and the KIDMED score was found. The MD could represent an optimal dietary pattern for weight gain and nutritional restoration in patients with AN, and it could lead to an improvement in body composition and resting energy expenditure.

**Access or request full text:** <https://libkey.io/10.3390/nu15143223>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37513641&custid=ns023446>

## 20. A dietitian-led coeliac service helps to identify and reduce involuntary gluten ingestion with subsequent reduction in the frequency of repeat endoscopies

**Item Type:** Journal Article

**Authors:** Costas-Batlle, Cristian;Trott, Nick;Jeanes, Yvonne;Seamark, Leah and Gardiner, Claire

**Publication Date:** 2023

**Journal:** Journal of Human Nutrition and Dietetics : The Official Journal of the British Dietetic Association 36(5), pp. 1751-1759

**Abstract: Background:** Dietitian-led coeliac clinics have the potential to be a cost-effective way of monitoring patients living with coeliac disease (CD). The aim of this service evaluation was to explore the impact of a dietitian-led coeliac clinic on gluten-free diet (GFD) adherence and the frequency of endoscopies with repeat duodenal biopsies.; **Methods:** Adults with biopsy-proven CD were transferred to a new dietitian-led coeliac clinic where data were collected from medical records and analysed using SPSS. GFD adherence was assessed by a specialist dietitian, specialist nurse, consultant gastroenterologists and a validated GFD adherence questionnaire. Repeat duodenal biopsy findings were compared with the most recent dietitian GFD adherence assessment. Project and ethics approval was granted by the hospital trust and affiliated university.; **Results:** Data from 170 patients (White: 51%, South Asian: 45%) are presented, with most being 35-64 years old (61%). Specialist dietitian assessments identified 67 (39%) of patients were adhering to the GFD, whereas prior gastroenterologist or coeliac nurse assessments identified 122 (72%) ( $p < 0.001$ ) and the validated GFD adherence questionnaire identified 97 (57%) ( $p < 0.001$ ). Dietitian assessments identified involuntary gluten consumption in 39/104 (38%) of those who self-reported GFD adherence, consequently avoiding the need for nine endoscopies with repeat duodenal biopsies once patients had received dietary education from the dietitian. On follow-up, within the dietitian-led coeliac clinic, significantly fewer patients consumed gluten involuntarily (14%,  $p < 0.001$ ). In addition, a reduction in voluntary gluten consumption was observed from three to five to one to two times per month ( $p < 0.001$ ) in 66 patients.; **Conclusions:** The dietitian-led coeliac clinic helped to identify involuntary gluten ingestion, avoid repeat endoscopies with duodenal biopsies and was associated with significantly improved GFD adherence. (© 2023 British Dietetic Association.)

**Access or request full text:** <https://libkey.io/10.1111/jhn.13206>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37497810&custid=ns>

[023446](#)

## 21. Feasibility and impact of ketogenic dietary interventions in polycystic kidney disease: KETO-ADPKD-a randomized controlled trial

**Item Type:** Journal Article

**Authors:** Cukoski, Sadrija;Lindemann, Christoph Heinrich;Arjune, Sita;Todorova, Polina;Brecht, Theresa;Kühn, Adrian;Oehm, Simon;Strubl, Sebastian;Becker, Ingrid;Kämmerer, Ulrike;Torres, Jacob Alexander;Meyer, Franziska;Schömig, Thomas;Hokamp, Nils Große;Siedek, Florian;Gottschalk, Ingo;Benzing, Thomas;Schmidt, Johannes;Antczak, Philipp;Weimbs, Thomas, et al

**Publication Date:** 2023

**Journal:** Cell Reports.Medicine 4(11), pp. 101283

**Abstract:** Ketogenic dietary interventions (KDIs) are beneficial in animal models of autosomal-dominant polycystic kidney disease (ADPKD). KETO-ADPKD, an exploratory, randomized, controlled trial, is intended to provide clinical translation of these findings (NCT04680780). Sixty-six patients were randomized to a KDI arm (ketogenic diet KD] or water fasting WF]) or the control group. Both interventions induce significant ketogenesis on the basis of blood and breath acetone measurements. Ninety-five percent (KD) and 85% (WF) report the diet as feasible. KD leads to significant reductions in body fat and liver volume. Additionally, KD is associated with reduced kidney volume (not reaching statistical significance). Interestingly, the KD group exhibits improved kidney function at the end of treatment, while the control and WF groups show a progressive decline, as is typical in ADPKD. Safety-relevant events are largely mild, expected (initial flu-like symptoms associated with KD), and transient. Safety assessment is complemented by nuclear magnetic resonance (NMR) lipid profile analyses.; Competing Interests: Declaration of interests R.-U.M. is a member of the scientific advisory board of Santa Barbara Nutrients and chair of the working group “Genes&Kidney” of the European Renal Association (ERA). T.W. is an inventor on issued and pending patents filed by the University of California, Santa Barbara related to the topic of this article. T.W. is a shareholder of Santa Barbara Nutrients, Inc., and holds a managerial position. T.W. is a scientific advisor and shareholder of Chinook Therapeutics and received research funding from Chinook Therapeutics. The Department II of Internal Medicine (University Hospital Cologne) received research funding from Otsuka Pharmaceuticals not directly related to the study at hand. (Copyright © 2023 The Author(s). Published by Elsevier Inc. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.xcrm.2023.101283>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37935200&custid=ns023446>

## 22. Correlation between Mediterranean diet, bowel function, and isolated posterior vaginal defect: A cross-sectional study

**Item Type:** Journal Article

**Authors:** Daykan, Yair;Ovadia, Michal;Dokic, Dragana;Cohen, Gal;Schonman, Ron;Arbib, Nissim;Klein, Zvi and O'Reilly, Barry,A.

**Publication Date:** 2023

**Journal:** International Journal of Gynaecology and Obstetrics: The Official Organ of the International Federation of Gynaecology and Obstetrics 161(3), pp. 847-853

**Abstract: Objective:** Isolated posterior prolapse is a unique entity that was previously linked to chronic obstructive defecation. Our objective is to evaluate the relationship of low adherence to a Mediterranean diet (LAMMD) with bowel dysfunction and isolated posterior compartment prolapse (IPCP).; **Methods:** This multicenter, cross-sectional study compared the dietary outcomes (validated Mediterranean diet MD] questionnaire) of women who underwent pelvic organ prolapse (POP) repair surgery between August 2020 and October 2021.; **Results:** Among 204 patients enrolled, 108 (52.9%) patients adhered to the MD and 96 (47.0%) did not. Among the LAMMD patients, increased symptoms of constipation ( $P = 0.047$ ) and higher body mass index ( $P < 0.001$ ) were more prevalent. Surgical repairs of the posterior compartment, combined ( $P = 0.033$ ) and isolated ( $P = 0.021$ ), were more prevalent in the LAMMD group. Prolapse of all compartments except the apical compartment was found to be more prevalent in the LAMMD group. Multivariate logistic regression analysis was found to be significant as a protective factor for the primary outcome (IPCP).; **Conclusion:** Low adherence to a Mediterranean diet displays a higher prevalence of posterior vaginal defects, both isolated and combined. Hence, we can conclude that LAMMD and subsequent bowel dysfunction are significant contributory factors to the prolapse of the posterior vaginal compartment. (© 2023 The Authors. International Journal of Gynecology & Obstetrics published by John Wiley & Sons Ltd on behalf of International Federation of Gynecology and Obstetrics.)

**Access or request full text:** <https://libkey.io/10.1002/ijgo.14685>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36662747&custid=ns023446>

## 23. Systematic review and meta-analysis of iodine nutrition in modern vegan and vegetarian diets

**Item Type:** Journal Article

**Authors:** Eveleigh, Elizabeth Rose;Coneyworth, Lisa and Welham, Simon J. M.

**Publication Date:** 2023

**Journal:** The British Journal of Nutrition 130(9), pp. 1580-1594

**Abstract:** Vegan and vegetarian diets are widely supported and adopted, but individuals following such diets remain at greater risk of iodine deficiency. This systematic review and meta-analysis was conducted to assess the iodine intake and status in adults following a vegan or vegetarian diet in the modern day. A systematic review and quality assessment were conducted from October 2020 to December 2022 according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) and Meta-analysis of Observational Studies in Epidemiology (MOOSE) guidance. Studies were identified in Ovid MEDLINE, Web of Science, PubMed, and Scopus. Eleven articles were eligible for review containing 4421 adults (aged  $\geq 18$  years). Vegan groups had the lowest median urinary iodine concentration (mUIC) (12.2/I). None of the dietary groups had mUIC within the optimal range for iodine status (100-200  $\mu\text{g/I}$ ) (WHO). Vegan diets had the poorest iodine intake (17.3  $\mu\text{g/d}$ ) and were strongly associated with lower iodine intake ( $P = < 0.001$ ) compared with omnivorous diets. Lower intake in vegan diets was influenced by sex ( $P = 0.007$ ), the presence of voluntary or absence of Universal Salt Iodisation (USI) programmes ( $P = 0.01$  &  $P = < 0.001$ ), and living in a country with adequate iodine nutrition ( $P = < 0.001$ ). Vegetarians and particularly vegans living in countries with no current USI programme continue to have increased risk of low iodine status, iodine deficiency and inadequate iodine intake. Further research into the usefulness of mandatory fortification of vegan appropriate foods is required.

**Access or request full text:** <https://libkey.io/10.1017/S000711452300051X>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36912094&custid=ns023446>

## 24. DASH vs. Mediterranean diet on a salt restriction background in adults with high normal blood pressure or grade 1 hypertension: A randomized controlled trial

**Item Type:** Journal Article

**Authors:** Filippou, Christina; Thomopoulos, Costas; Konstantinidis, Dimitrios; Siafi, Eirini; Tatakis, Fotis; Manta, Eleni; Droghkaris, Sotiris; Polyzos, Dimitrios; Kyriazopoulos, Konstantinos; Grigoriou, Kalliopi; Tousoulis, Dimitrios and Tsioufis, Konstantinos

**Publication Date:** 2023

**Journal:** Clinical Nutrition (Edinburgh, Scotland) 42(10), pp. 1807-1816

**Abstract: Background & Aims:** Non-pharmacological measures are recommended as the first-line treatment for individuals with high-normal blood pressure (BP) or mild hypertension. Studies directly comparing the BP effects of the Dietary Approaches to Stop Hypertension (DASH) vs. the Mediterranean diet (MedDiet) on a salt restriction background are currently lacking. Thus, our purpose was to assess the BP effects of a 3-month intensive dietary intervention implementing salt restriction either alone or in the context of the DASH, and the MedDiet compared to no/minimal intervention in adults with high normal BP or grade 1 hypertension.;

**Methods:** We randomly assigned never drug-treated individuals to a control group (CG, n = 60), a salt restriction group (SRG, n = 60), a DASH diet with salt restriction group (DDG, n = 60), or a MedDiet with salt restriction group (MDG, n = 60). The primary outcome was the attained office systolic BP difference among the randomized arms during follow-up.;

**Results:** A total of 240 patients were enrolled, while 204 (85%) completed the study. According to the intention-to-treat analysis, compared to the CG, office and 24 h ambulatory systolic and diastolic BP were reduced in all intervention groups. A greater reduction in the mean office systolic BP was observed in the MDG compared to all other study groups (MDG vs. CG: mean difference = -15.1 mmHg; MDG vs. SRG: mean difference = -7.5 mmHg, and MDG vs. DDG: mean difference = -3.2 mmHg, all P-values <0.001). The DDG and the MDG did not differ concerning the office diastolic BP and the 24 h ambulatory systolic and diastolic BP; however, both diets were more efficient in BP-lowering compared to the SRG.;

**Conclusions:** On a background of salt restriction, the MedDiet was superior in office systolic BP-lowering, but the DASH and MedDiet reduced BP to an extent higher than salt restriction alone.;

Competing Interests: Conflicts of Interest None related to the present work for all authors. (Copyright © 2023 Elsevier Ltd and European Society for Clinical Nutrition and Metabolism. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.clnu.2023.08.011>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37625311&custid=ns023446>

## 25. Starving cancer and other dangerous dietary misconceptions

**Item Type:** Journal Article

**Authors:** Grimes, David Robert and O'Riordan, Elizabeth



**Publication Date:** 2023

**Journal:** The Lancet.Oncology 24(11), pp. 1177-1178

**Abstract: Competing Interests:** DRG has received payments for advising on cancer screening and health modelling from The National Screening service of Ireland; receives book royalties from Simon & Schuster UK, and Experiment; and has received honoraria for talks from Princeton University, Chalmers University of Technology, American Institute for Cancer Research, the Irish Health Sciences Libraries Group, and the Irish Epilepsy Nurse Group. EO receives book royalties from Taylor and Francis Group, Penguin Random House, and Unbound; holds stock options for Vinehealth; and has received honoraria for talk from Sheffield Children's NHS Foundation Trust, UK Chemotherapy Board Annual Conference, American Society of Breast Surgeons, American College of Sports Medicine, Exact Sciences, UK Oncology Nursing Society, British Institute of Radiology, Northern Devon Healthcare Trust, Royal College of Surgeons of Edinburgh, Intelligent Health UK, Royal College of Surgeons of England, Pfizer, Kings University – King's Undergraduate Medical Education in the Community, Real Chemistry, Involve Community Cancer Support Network, NHS Wales, Canada College of Health Leaders, Royal College of Physicians and Surgeons of Glasgow, Royal Free London NHS Foundation Trust, Centre for Disease Control Foundation, UK Department for Environment, Food, and Rural Affairs, Greenwich Hospital Yale New Haven Health, Women in Medicine in Ireland Network, University of Birmingham, Cancer.Je, Merck Sharp & Dohme UK, NHS England, The Investment Association, Society of Cardiothoracic Surgeons, Royal College of Physicians of Ireland, British Association of Head and Neck Oncologists, and Versus Arthritis.

**Access or request full text:** [https://libkey.io/10.1016/S1470-2045\(23\)00483-7](https://libkey.io/10.1016/S1470-2045(23)00483-7)

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37922928&custid=ns023446>

## 26. Diet therapy along with nutrition education can improve renal function in people with stages 3–4 chronic kidney disease who do not have diabetes: a randomised controlled trial

**Item Type:** Journal Article

**Authors:** Hamidianshirazi, Maryam;Shafiee, Maryam;Ekramzadeh, Maryam;Torabi Jahromi, Mahsa and Nikaein, Farzad

**Publication Date:** 2023

**Journal:** British Journal of Nutrition 129(11), pp. 1877-1887

**Abstract:** The current trial investigates the effect of renal diet therapy and nutritional education on the estimated glomerular filtration rate (eGFR), blood pressure (BP) and depression among patients with chronic kidney disease (CKD). A total of 120 CKD patients (stages 3–4) ( $15 \leq \text{eGFR} < 60$ ) were randomised into an intensive nutrition intervention group (individualised renal diet therapy plus counselling:  $0.75 \text{ g protein/kg d}$  and  $30\text{--}35 \text{ kcal}$  with sodium restriction) and a control (routine standard care) for 24 weeks. The primary outcome was change in eGFR. Secondary outcomes included changes in anthropometric measures, biochemistry (serum creatinine (Cr), uric acid, albumin, electrolytes, calcium, vitamin D, ferritin, blood urea nitrogen (BUN), haemoglobin (Hb), blood pressure), nutritional status, depression, quality of life. eGFR increased significantly compared ( $p = 0.001$ ). Moreover, serum levels of Cr, systolic and diastolic blood pressure decreased relative to  $0.001$ ,  $p = 0.001$  respectively). Also, hindered increase in BUN level score. Furthermore, reduction in intake was greater. Treatment along with supportive education and counselling contributed



improvements="" function,="" adherence="" recommendations.="" significant="" difference="" mean="" between="" groups="" confirmed="" at="" end="" study="" using="" ancova="" ( $\beta = -5.06$ ; 95% CI =  $-8.203$ ,  $-2.999$ )).

**Access or request full text:** <https://libkey.io/10.1017/S0007114522002094>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=163546633&custid=ns023446>

## 27. A Mediterranean Diet Pattern Improves Intestinal Inflammation Concomitant with Reshaping of the Bacteriome in Ulcerative Colitis: A Randomised Controlled Trial

**Item Type:** Journal Article

**Authors:** Haskey, Natasha;Estaki, Mehrbod;Ye, Jiayu;Shim, Rachel K.;Singh, Sunny;Dieleman, Levinus A.;Jacobson, Kevan and Gibson, Deanna L.

**Publication Date:** 2023

**Journal:** Journal of Crohn's & Colitis 17(10), pp. 1569-1578

**Abstract: Background and Aims:** Dietary patterns are important in managing ulcerative colitis UC], given their influence on gut microbiome-host symbiosis and inflammation. We investigated whether the Mediterranean Diet Pattern MDP] vs the Canadian Habitual Diet Pattern CHD] would affect disease activity, inflammation, and the gut microbiome in patients with quiescent UC.; **Methods:** We performed a prospective, randomised, controlled trial in adults 65% female; median age 47 years] with quiescent UC in an outpatient setting from 2017 to 2021. Participants were randomised to an MDP n = 15] or CHD n = 13] for 12 weeks. Disease activity Simple Clinical Colitis Activity Index] and faecal calprotectin FC] were measured at baseline and week 12. Stool samples were analysed by 16S rRNA gene amplicon sequencing.; **Results:** The diet was well tolerated by the MDP group. At week 12, 75% 9/12] of participants in the CHD had an FC >100 µg/g, vs 20% 3/15] of participants in the MDP group. The MDP group had higher levels of total faecal short chain fatty acids SCFAs] p = 0.01], acetic acid p = 0.03], and butyric acid p = 0.03] compared with the CHD. Furthermore, the MDP induced alterations in microbial species associated with a protective role in colitis Alistipes finegoldii and Flavonifractor plautii], as well as the production of SCFAs Ruminococcus bromii].; **Conclusions:** An MDP induces gut microbiome alterations associated with the maintenance of clinical remission and reduced FC in patients with quiescent UC. The data support that the MDP is a sustainable diet pattern that could be recommended as a maintenance diet and adjunctive therapy for UC patients in clinical remission. ClinicalTrials.gov no: NCT0305371. (© The Author(s) 2023. Published by Oxford University Press on behalf of European Crohn's and Colitis Organisation.)

**Access or request full text:** <https://libkey.io/10.1093/ecco-jcc/ijad073>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37095601&custid=ns023446>

## 28. Effects of a low FODMAP diet on gut microbiota in individuals with treated coeliac disease having persistent gastrointestinal symptoms – a randomised controlled trial

**Item Type:** Journal Article

**Authors:** Herfindal, Anne Mari;van Megen, Frida;Gilde, Mari K. O.;Valeur, Jørgen;Rudi, Knut;Skodje, Gry I.;Lundin, Knut E. A.;Henriksen, Christine and Bøhn, Siv Kjølrsrud

**Publication Date:** 2023

**Journal:** British Journal of Nutrition 130(12), pp. 2061-2075

**Abstract:** Individuals with coeliac disease (CeD) often experience gastrointestinal symptoms despite adherence to a gluten-free diet (GFD). While we recently showed that a diet low in fermentable oligo-, di-, monosaccharides and polyols (FODMAP) successfully provided symptom relief in GFD-treated CeD patients, there have been concerns that the low FODMAP diet (LFD) could adversely affect the gut microbiota. Our main objective was therefore to investigate whether the LFD affects the faecal microbiota and related variables of gut health. In a randomised controlled trial GFD-treated CeD adults, having persistent gastrointestinal symptoms, were randomised to either consume a combined LFD and GFD (n 39) for 4 weeks or continue with GFD (controls, n 36). Compared with the control group, the LFD group displayed greater changes in the overall faecal microbiota profile (16S rRNA gene sequencing) from baseline to follow-up (within-subject  $\beta$ -diversity,  $P < 0.001$ ), characterised by lower and higher follow-up abundances (%) of genus *Anaerostipes* ( $P$  group  $< 0.001$ ) and class *Erysipelotrichia* ( $P$  group = 0.02), respectively. Compared with the control group, the LFD led to lower follow-up concentrations of faecal propionic and valeric acid (GC-FID) in participants with high concentrations at baseline ( $P$  interaction  $\leq 0.009$ ). No differences were found in faecal bacterial  $\alpha$ -diversity ( $P$  group  $\geq 0.20$ ) or in faecal neutrophil gelatinase-associated lipocalin (ELISA), a biomarker of gut integrity and inflammation ( $P$  group = 0.74), between the groups at follow-up. The modest effects of the LFD on the gut microbiota and related variables in the CeD patients of the present study are encouraging given the beneficial effects of the LFD strategy to treat functional GI symptoms (Registered at clinicaltrials.gov as NCT03678935).

**Access or request full text:** <https://libkey.io/10.1017/S0007114523001253>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=173721213&custid=ns023446>

## 29. The Modified Atkins Diet for Epilepsy: Two Decades of an "Alternative" Ketogenic Diet Therapy

**Item Type:** Journal Article

**Authors:** Kossoff, Eric H.

**Publication Date:** 2023

**Journal:** Pediatric Neurology 147, pp. 82-87

**Abstract:** In 2003, the first case series of six patients treated with an Atkins diet for epilepsy was published in the journal Neurology. The concept was a simple, outpatient-initiated diet in which ketosis could be maintained by eating high-fat foods while tracking and limiting daily carbohydrate counts based on food ingredient labels. Twenty years later, after dozens of studies encompassing hundreds of patients, including several randomized controlled trials, the Modified Atkins Diet is a proven method of providing ketogenic dietary therapy for epilepsy. It is a diet therapy of choice for adolescents and adults, is being investigated for new-onset epilepsy, and is researched for neurological conditions other than epilepsy. Adverse effects do exist but may be less common than the classic ketogenic diet. This review will cover the history, clinical trials, implementation, current utilization, and future directions of this "alternative" ketogenic diet therapy on its 20-year anniversary.; Competing Interests: Declaration of competing interest Dr. Kossoff is a consultant and member of the Scientific

Advisory Board for Simply Good Foods, Inc., who has ownership rights to Atkins Nutritionals, Inc. He is also a consultant to Nutricia, Bloom Science, Cerecin, LivaNova, and Aquestive. He has received book royalties from Springer, UpToDate, Oxford University Press, Johns Hopkins University Press, and Elsevier. (Copyright © 2023 Elsevier Inc. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.pediatrneurol.2023.07.014>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37591065&custid=ns023446>

### 30. Low-Carbohydrate Diet Macronutrient Quality and Weight Change

**Item Type:** Journal Article

**Authors:** Liu, Binkai;Hu, Yang;Rai, Sharan K.;Wang, Molin;Hu, Frank B. and Sun, Qi

**Publication Date:** 2023

**Journal:** JAMA Network Open 6(12), pp. e2349552

**Abstract: Importance:** The associations of low-carbohydrate diets (LCDs) with long-term weight management remains unclear, and the source and quality of macronutrients within LCDs are less explored.; **Objectives:** To prospectively examine associations between changes in LCD indices and weight change among US adults.; **Design, Setting, and Participants:** This prospective cohort study included initially healthy participants at baseline from the Nurses' Health Study (NHS; 1986-2010), Nurses' Health Study II (NHSII; 1991-2015), and Health Professionals Follow-up Study (HPFS; 1986-2018). Data analysis was performed between November 2022 and April 2023.; **Exposures:** Five LCD indices were examined: (1) a total LCD (TLCD) emphasizing overall lower carbohydrate intake; (2) an animal-based LCD (ALCD) that emphasized animal-sourced protein and fat; (3) a vegetable-based LCD (VLCD) that emphasized plant-sourced protein and fat; (4) a healthy LCD (HLCD) emphasizing less refined carbohydrates, more plant protein, and healthy fat; and (5) an unhealthy LCD (ULCD) emphasizing less healthful carbohydrates, more animal protein, and unhealthy fat.; **Main Outcomes and Measures:** The outcome of interest was 4-year changes in self-reported body weight.; **Results:** A total of 123 332 participants (mean SD] age, 45.0 9.7] years; 103 320 83.8%] female) were included in this study. The median carbohydrate intake (as a percentage of energy) of the highest quintiles of TLCD score at baseline ranged from 38.3% in HPFS to 40.9% in NHSII. Mean weight gain over 4-year intervals among participants varied from 0.8 kg in the HPFS to 1.8 kg in the NHSII. After adjusting for demographics and baseline and concomitant changes of selected lifestyle factors, each 1-SD increase in TLCD score was associated with 0.06 (95% CI, 0.04-0.08) kg more weight gain over the 4-year periods. Similarly, participants gained 0.13 (95% CI, 0.11 to 0.14) kg per each 1-SD increase in ALCD score and 0.39 (95% CI, 0.37 to 0.40) kg per each 1-SD change in ULCD score. In contrast, each 1-SD increase in VLCD score was associated with 0.03 (95% CI, 0.01 to 0.04) kg less weight gain, and each 1-SD increase in HLCD score was associated with 0.36 (95% CI, 0.35 to 0.38) kg less weight gain. The associations were more pronounced among obese individuals (per 1-SD increase in HLCD score: BMI ≥30, 0.88 95% CI, 0.80, 0.97] kg less weight gain; BMI <25, 0.23 95% CI, 0.20, 0.26] kg less weight gain; P for interaction < .001).; **Conclusions and Relevance:** These findings suggest that the quality of LCDs may play a critical role in modulating long-term weight change. Only LCDs that emphasized high-quality protein, fat, and carbohydrates from whole grains and other plant-based foods were associated with less weight gain.

**Access or request full text:** <https://libkey.io/10.1001/jamanetworkopen.2023.49552>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38150249&custid=ns>

[023446](#)

### 31. Greater adherence to a mediterranean diet is associated with lower C-reactive protein (CRP) levels, but not to lower odds of having dry eye disease

**Item Type:** Journal Article

**Authors:** Magno, Morten Schjerven;Moschowits, Emily;Morthen, Mathias Kaurstad;Beining, Marie Wangen;Jansonius, Nomdo M.;Hammond, Christopher J.;Utheim, Tor P. and Vehof, Jelle

**Publication Date:** 2023

**Journal:** The Ocular Surface 30, pp. 196-203

**Abstract: Purpose:** To investigate the hypothesis that a Mediterranean diet is associated with a lower risk of having dry eye disease (DED) in the general population.; **Methods:** DED was assessed using the Women's Health Study (WHS) dry eye questionnaire in 58,993 participants from the Dutch Lifelines Cohort with complete available dietary data (20-94 years, 60% female). Level of adherence to a traditional Mediterranean diet was assessed using the modified Mediterranean Diet Score (mMDS). High-sensitivity C-reactive Protein (hsCRP) was included as a marker of whole-body inflammation. Logistic regressions were used to examine the relationship between WHS-defined DED and mMDS, corrected for age, sex, BMI, education, income, and 48 potentially confounding comorbidities. The association between mMDS and hsCRP, and hsCRP and DED, was further explored in separate regressions.; **Results:** Of all participants, 9.1% had DED. In contrast to the hypothesis, higher mMDS levels were associated with greater odds of DED, corrected for demographics, smoking status, BMI, and comorbidities (OR 1.034, 95%CI: 1.015 to 1.055, P = 0.001). Moreover, there was a highly significant relationship between increasing mMDS and lower circulating hsCRP levels; however, there was no significant relationship between hsCRP and DED.; **Conclusions:** Stronger adherence to a Mediterranean diet does not appear to be associated with lower odds of having DED in the general population. Furthermore, there was no association between hsCRP and DED in this study. However, the previously described link between a Mediterranean diet and lower hsCRP was confirmed in this large population-based study.; **Competing Interests:** Declaration of competing interest The authors have no conflicts of interest to disclose. (Copyright © 2023 The Authors. Published by Elsevier Inc. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.jtos.2023.09.013>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37783428&custid=ns023446>

### 32. Hydration and nutrition care practices in stroke: findings from the UK and Australia

**Item Type:** Journal Article

**Authors:** Miller, Colette;Jones, Stephanie P.;Bangee, Munirah;Martinez-Garduno, Cintia;Brady, Marian C.;Cadilhac, Dominique A.;Dale, Simeon;McInnes, Elizabeth;Middleton, Sandy;Watkins, Caroline L. and Lightbody, C. E.

**Publication Date:** 2023

**Journal:** BMC Nursing 22(1), pp. 1-10

**Abstract: Background:** Dehydration and malnutrition are common in hospitalised patients following stroke leading to poor outcomes including increased mortality. Little is known about hydration and nutrition care practices in hospital to avoid dehydration or malnutrition, and how these practices vary in different countries. This study sought to capture how the hydration and nutrition needs of patients' post-stroke are assessed and managed in the United Kingdom (UK) and Australia (AUS). **Aim:** To examine and compare current in-hospital hydration and nutrition care practice for patients with stroke in the UK and Australia. **Methods:** A cross-sectional survey was conducted between April and November 2019. Questionnaires were mailed to stroke specialist nurses in UK and Australian hospitals providing post-stroke inpatient acute care or rehabilitation. Non-respondents were contacted up to five times. **Results:** We received 150/174 (86%) completed surveys from hospitals in the UK, and 120/162 (74%) in Australia. Of the 270 responding hospitals, 96% reported undertaking assessment of hydration status during an admission, with nurses most likely to complete assessments (85%). The most common methods of admission assessment were visual assessment of the patient (UK 62%; AUS 58%), weight (UK 52%; AUS 52%), and body mass index (UK 47%; AUS 42%). Almost all (99%) sites reported that nutrition status was assessed at some point during admission, and these were mainly completed by nurses (91%). Use of standardised nutrition screening tools were more common in the UK (91%) than Australia (60%). Similar proportions of hydration management decisions were made by physicians (UK 84%; AUS 83%), and nutrition management decisions by dietitians (UK 98%; AUS 97%). **Conclusion:** Despite broadly similar hydration and nutrition care practices after stroke in the UK and Australia, some variability was identified. Although nutrition assessment was more often informed by structured screening tools, the routine assessment of hydration was generally not. Nurses were responsible for assessment and monitoring, while dietitians and physicians undertook decision-making regarding management. Hydration care could be improved through the development of standardised assessment tools. This study highlights the need for increased implementation and use of evidence-based protocols in stroke hydration and nutrition care to improve patient outcomes.

**Access or request full text:** <https://libkey.io/10.1186/s12912-023-01575-4>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=173270965&custid=ns023446>

### 33. Healthcare professionals' perspectives on dietary advice provided to people with an ileostomy

**Item Type:** Journal Article

**Authors:** Mitchell, Alexandra;Herbert, Georgia;England, Clare;Atkinson, Charlotte and Searle, Aidan

**Publication Date:** 2023

**Journal:** Journal of Human Nutrition and Dietetics : The Official Journal of the British Dietetic Association 36(3), pp. 716-728

**Abstract: Background:** Diet is a common concern among people with an ileostomy as it can be associated with serious and burdensome complications, for example, dehydration and obstruction, and dietary advice is often unsatisfactory. In this study, we explored healthcare professionals' (HCPs) perspectives on dietary advice for ileostomy management.; **Methods:** Semi-structured interviews were conducted with HCPs, from multiple professions, who provide dietary advice to patients with an ileostomy. A framework approach to thematic analysis was used to understand and compare HCPs' experiences, beliefs and attitudes that influence how dietary advice is provided and the effectiveness of dietary management.; **Results:** Findings from interviews with 21 HCPs, across 3 hospitals, related to 7 key themes: tailoring of dietary advice to the patient, patient autonomy and communication, HCP knowledge and understanding, patient pathway, mixed messages, access to formal and social support and patient understanding and relationship with dietary advice. Profession was a strong

determinator of what and how dietary advice is provided; however, closer team working increased consistency in dietary advice. Lack of scientific research and consensus contributes to mixed messages and reduced confidence in dietary advice for people with an ileostomy. Due to individual differences between patients, experiential learning with diet is key to self-management and is encouraged in a controlled way by HCPs; however, a lack of 'one-size-fits-all' guidance can be difficult for some.; **Conclusion:** The study findings should inform HCPs caring for patients with an ileostomy, and researchers designing and evaluating interventions, to improve how patients receive dietary advice for ileostomy management. (© 2023 The Authors. Journal of Human Nutrition and Dietetics published by John Wiley & Sons Ltd on behalf of British Dietetic Association.)

**Access or request full text:** <https://libkey.io/10.1111/jhn.13169>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36944550&custid=ns023446>

### 34. The Effects of Ketogenic Diet on Insulin Sensitivity and Weight Loss, Which Came First: The Chicken or the Egg?

**Item Type:** Journal Article

**Authors:** Paoli, Antonio;Bianco, Antonino;Moro, Tatiana;Mota, Joao Felipe and Coelho-Ravagnani, Christianne

**Publication Date:** 2023

**Journal:** Nutrients 15(14)

**Abstract:** The ketogenic diet (KD) is, nowadays, considered an interesting nutritional approach for weight loss and improvement in insulin resistance. Nevertheless, most of the studies available in the literature do not allow a clear distinction between its effects on insulin sensitivity per se, and the effects of weight loss induced by KDs on insulin sensitivity. In this review, we discuss the scientific evidence on the direct and weight loss mediated effects of KDs on glycemic status in humans, describing the KD's biochemical background and the underlying mechanisms.

**Access or request full text:** <https://libkey.io/10.3390/nu15143120>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37513538&custid=ns023446>

### 35. Association of Mediterranean Diet Adherence with Disease Progression Characteristics, Lifestyle Factors and Overall Survival in Gastric Cancer Patients

**Item Type:** Journal Article

**Authors:** Pavlidou, Eleni;Papadopoulou, Sousana K.;Tolia, Maria;Mentzelou, Maria;Tsoukalas, Nikolaos;Alexatou, Olga;Tsiouda, Theodora;Tsourouflis, Gerasimos;Psara, Evmorfia;Bikos, Vasileios;Kavantzias, Nikolaos;Kotta-Loizou, Ioly;Dakanalis, Antonios;Vorvolakos, Theofanis and Giaginis, Constantinos

**Publication Date:** 2023

**Journal:** Medical Sciences (Basel, Switzerland) 11(4)

**Abstract: Background:** The Mediterranean diet (MD) exerts a protective effect against cancer development and progression; however, the evaluation of its impact on gastric cancer still remains quite scarce. The present



study aims to evaluate the association of MD adherence during the lifespan with disease progression characteristics, lifestyle factors and overall survival in gastric carcinoma patients.; **Methods:** This is an observational, cross-sectional study conducted on 186 gastric cancer patients followed up for a median time interval of 57 months or until death due to cancer disease. Tumor histopathological characteristics were retrieved from patients' medical records, while validated questionnaires assessing, immediately after the time of diagnosis, health-related quality of life, physical activity levels, sleep quality, depression, anxiety and MD adherence during the lifespan were used.; **Results:** Higher MD adherence during the lifespan was significantly associated with younger patients ( $p = 0.0106$ ), regular smoking ( $p < 0.0001$ ), abnormal BMI status ( $p < 0.0001$ ), intestinal-type gastric carcinoma ( $p = 0.0111$ ), high tumor histopathological grade ( $p < 0.0001$ ) and earlier disease stage ( $p < 0.0001$ ). Moreover, patients with elevated MD adherence during their lifespan showed significantly better health-related quality of life ( $p < 0.0001$ ), higher physical activity levels ( $p < 0.0001$ ), more adequate sleep quality ( $p < 0.0001$ ) and lower prevalence of depression ( $p = 0.0003$ ) and anxiety ( $p = 0.0006$ ) compared to those with reduced MD adherence. In multiple regression analysis, elevated MD compliance during the lifespan was independently correlated with longer overall patient survival after adjustment for several confounders (Cox regression analysis,  $p = 0.0001$ ).; **Conclusions:** Higher MD adherence during the lifespan was associated with less advanced tumor histopathology characteristics and favorable mental and physical lifestyle factors. Moreover, higher MD adherence during the lifespan was also independently correlated with longer overall survival in gastric carcinoma patients. Thus, adopting a healthy dietary pattern like the MD during the lifespan may act as a preventive agent in combination with a healthy lifestyle against gastric cancer development and progression.

**Access or request full text:** <https://libkey.io/10.3390/medsci11040074>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37987329&custid=ns023446>

### 36. Impact of an Okinawa/Nordic based diet on endocrinological and periodontal conditions in individuals with type 2 diabetes. A randomized case-control study

**Item Type:** Journal Article

**Authors:** Persson, G. R.;Widén, Cecilia;Wohlfart, Björn;Sjöberg, Klas;Steen, Stig;Coleman, Michael D. and Holmer, Helene

**Publication Date:** 2023

**Journal:** BMC Oral Health 23(1), pp. 544

**Abstract: Objectives:** To assess if the results following intake of a diet using an Okinawan-based Nordic diet (OBND) over one month differs in endocrinological, periodontal clinical outcome, and serum cytokine levels compared to a standard hospital care diet in individuals with diabetes type 2 (T2D) (control group).;

**Background:** Scientific evidence suggests that the use of diet for individuals with T2D may be beneficial.;

**Methods:** Participating individuals with T2D were randomly assigned to a test (OBND) ( $n = 14$ ), or control group ( $n = 16$ ). Anthropometric data, blood glucose levels, HbA1c levels, lipids, serum inflammation markers (CRP, and a routine panel of 24 cytokines), blood pressure, gingival bleeding on probing (BOP), probing pocket depths (PPD), and clinical attachment levels (CAL) were studied.; **Results:** Statistical analyses of baseline study data failed to demonstrate study group differences. The mean weight reduction was greater in the OBND group (4.1 kg) versus the control group (1.3 kg) ( $p < 0.01$ ). The reduction in BMI was 1.4 kg/m<sup>2</sup> in OBND ( $p < 0.001$ ) and 0.5 kg/m<sup>2</sup> in the control group, respectively ( $p < 0.01$ ). Diastolic and systolic blood pressure reductions were greater in the OBND group than in the control group ( $p < 0.01$ ). Periodontal study parameters (BOP % scores) and (PPD values) decreased ( $p < 0.001$ ) overall with no between group differences. The OBND resulted in



**reduction of serum levels of IFN $\gamma$ , Eotaxin IL-9, IP10, IL17a, MCP-1, and PDFBB compared to the control diet.; Conclusions:** A strict T2D- diet provides an association between reduction in serum HbA1c and BOP scores. Serum levels decreases in IFN $\gamma$ , Eotaxin IL-9, IP-10, IL17a. MCP-1, and PDFBB were only found in the test group. (© 2023. BioMed Central Ltd., part of Springer Nature.)

**Access or request full text:** <https://libkey.io/10.1186/s12903-023-03272-9>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37553617&custid=ns023446>

### 37. Associations between an inflammatory diet index and severe non-alcoholic fatty liver disease: a prospective study of 171,544 UK Biobank participants

**Item Type:** Journal Article

**Authors:** Petermann-Rocha, Fanny; Wirth, Michael D.; Boonpor, Jirapitcha; Parra-Soto, Solange; Zhou, Ziyi; Mathers, John C.; Livingstone, Katherine; Forrest, Ewan; Pell, Jill P.; Ho, Frederick K.; Hébert, James, R. and Celis-Morales, Carlos

**Publication Date:** 2023

**Journal:** BMC Medicine 21(1), pp. 123

**Abstract: Background:** Although non-alcoholic fatty liver disease (NAFLD) is linked to inflammation, whether an inflammatory diet increases the risk of NAFLD is unclear. This study aimed to examine the association between the Energy-adjusted Diet Inflammatory Index (E-DII) score and severe NAFLD using UK Biobank.; **Methods:** This prospective cohort study included 171,544 UK Biobank participants. The E-DII score was computed using 18 food parameters. Associations between the E-DII and incident severe NAFLD (defined as hospital admission or death) were first investigated by E-DII categories (very/moderately anti-inflammatory E-DII  $\leq -1$ ) using Cox proportional hazard models. Nonlinear associations were investigated using penalised cubic splines fitted into the Cox proportional hazard models. Analyses were adjusted for sociodemographic, lifestyle and health-related factors.; **Results:** Over a median follow-up of 10.2 years, 1489 participants developed severe NAFLD. After adjusting for confounders, individuals in the very/moderately pro-inflammatory category had a higher risk (HR: 1.19 95% CI: 1.03 to 1.38) of incident severe NAFLD compared with those in the very/moderately anti-inflammatory category. There was some evidence of nonlinearity between the E-DII score and severe NAFLD.; **Conclusions:** Pro-inflammatory diets were associated with a higher risk of severe NAFLD independent of confounders such as the components of the metabolic syndrome. Considering there is no recommended treatment for the disease, our findings suggest a potential means to lower the risk of NAFLD. (© 2023. The Author(s).)

**Access or request full text:** <https://libkey.io/10.1186/s12916-023-02793-y>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37013578&custid=ns023446>

### 38. Experience and perceptions among rheumatoid arthritis patients following a telehealth-delivered dietary intervention: a qualitative study

**Item Type:** Journal Article

**Authors:** Raad, Tala;Griffin, Anne;George, Elena S.;Larkin, Louise;Fraser, Alexander;Kennedy, Norelee and Tierney, Audrey

**Publication Date:** 2023

**Journal:** Rheumatology International 43(10), pp. 1913-1924

**Abstract:** The effects of dietary modifications have been assessed in people living with rheumatoid arthritis (RA) with consistent benefits reported from clinical trials. However, the lived experience of making and sustaining positive dietary changes for people with RA remains unknown. The aim of this qualitative study was to explore the experiences of adults with RA and their perceptions of a 12-week telehealth-delivered dietary intervention and to assess the acceptability of the programme. Qualitative data was collected via four online focus groups with participants who had just completed a 12-week dietary intervention programme delivered through telehealth methods. Thematic analysis was used to code and summarize the identified key themes. Twenty-one adults with RA (47.5 ± 12.3 years, 90.5% females) were included in this qualitative study. Overarching themes included: (a) motivation to join the programme, (b) benefits of the programme, (c) factors influencing adherence to dietary prescription, and (d) advantages and disadvantages of telehealth. The study demonstrated that a dietary intervention delivered through telehealth methods by a Registered Dietitian (RD) appears to be well-accepted and may be used to complement face-to-face care for people with RA. The identified factors influencing the adoption of a healthier eating pattern will aid in the development of future dietary interventions for a RA population. (© 2023. The Author(s).)

**Access or request full text:** <https://libkey.io/10.1007/s00296-023-05382-7>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37418002&custid=ns023446>

### 39. Classic ketogenic diet versus further antiseizure medicine in infants with drug-resistant epilepsy (KIWE): a UK, multicentre, open-label, randomised clinical trial

**Item Type:** Journal Article

**Authors:** Schoeler, Natasha E.;Marston, Louise;Lyons, Laura;Halsall, Sally;Jain, Ruchika;Titre-Johnson, Siobhan;Balogun, Maryam;Heales, Simon J. R.;Eaton, Simon;Orford, Michael;Neal, Elizabeth;Reilly, Colin;Eltze, Christin;Stephen, Elma;Mallick, Andrew A.;O'Callaghan, Finbar;Agrawal, Shakti;Parker, Alasdair;Kirkpatrick, Martin;Brunklaus, Andreas, et al

**Publication Date:** 2023

**Journal:** The Lancet.Neurology 22(12), pp. 1113-1124

**Abstract: Background:** Many infancy-onset epilepsies have poor prognosis for seizure control and neurodevelopmental outcome. Ketogenic diets can improve seizures in children older than 2 years and adults who are unresponsive to antiseizure medicines. We aimed to establish the efficacy of a classic ketogenic diet at reducing seizure frequency compared with further antiseizure medicine in infants with drug-resistant epilepsy.; **Methods:** In this phase 4, open-label, multicentre, randomised clinical trial, infants aged 1-24 months with drug-resistant epilepsy (defined as four or more seizures per week and two or more previous antiseizure medications) were recruited from 19 hospitals in the UK. Following a 1-week or 2-week observation period, participants were randomly assigned using a computer-generated schedule, without stratification, to either a classic ketogenic diet or a further antiseizure medication for 8 weeks. Treatment allocation was masked from research nurses involved in patient care, but not from participants. The primary outcome was the median

number of seizures per day, recorded during weeks 6-8. All analyses were by modified intention to treat, which included all participants with available data. Participants were followed for up to 12 months. All serious adverse events were recorded. The trial is registered with the European Union Drug Regulating Authorities Clinical Trials Database (2013-002195-40). The trial was terminated early before all participants had reached 12 months of follow-up because of slow recruitment and end of funding.; **Findings:** Between Jan 1, 2015, and Sept 30, 2021, 155 infants were assessed for eligibility, of whom 136 met inclusion criteria and were randomly assigned; 75 (55%) were male and 61 (45%) were female. 78 infants were assigned to a ketogenic diet and 58 to antiseizure medication, of whom 61 and 47, respectively, had available data and were included in the modified intention-to-treat analysis at week 8. The median number of seizures per day during weeks 6-8, accounting for baseline rate and randomised group, was similar between the ketogenic diet group (5 IQR 1-16]) and antiseizure medication group (3 IQR 2-11]; IRR 1.33, 95% CI 0.84-2.11). A similar number of infants with at least one serious adverse event was reported in both groups (40 51%] of 78 participants in the ketogenic diet group and 26 45%] of 58 participants in the antiseizure medication group). The most common serious adverse events were seizures in both groups. Three infants died during the trial, all of whom were randomly assigned a ketogenic diet: one child (who also had dystonic cerebral palsy) was found not breathing at home; one child died suddenly and unexpectedly at home; and one child went into cardiac arrest during routine surgery under anaesthetic. The deaths were judged unrelated to treatment by local principal investigators and confirmed by the data safety monitoring committee.; Interpretation: In this phase 4 trial, a ketogenic diet did not differ in efficacy and tolerability to a further antiseizure medication, and it appears to be safe to use in infants with drug-resistant epilepsy. A ketogenic diet could be a treatment option in infants whose seizures continue despite previously trying two antiseizure medications.; **Funding:** National Institute for Health and Care Research.; **Competing Interests:** Declaration of interests NES was supported for a research post by Vitaflo (International) and received grants from Nutricia Advanced Medical Nutrition, Vitaflo (International), and Matthew's Friends charity, and honoraria from Nutricia Advanced Medical Nutrition, Vitaflo (International), and Dr Schaer. SE, SJRH, and JHC report receiving grants from Vitaflo (International) and having a patent nutritional product (WO2013186570) and a patent anticonvulsant compound (WO2016038379A1) issued. JHC reports receiving honoraria from Nutricia and grants from GW Pharmaceuticals, Zogenix, Marinus, and Ovid. SJRH reports receiving consultancy fees and PhD studentship funding from Vitaflo (International). CE reports receiving honorarium from GW Pharmaceuticals/JAZZ Pharmaceuticals. HJT reports receiving honoraria from UCB Pharma, Nutricia, and GW Pharmaceuticals. SA reports receiving honorarium from Nutricia. AP reports receiving honorarium from Biomarin. EN reports receiving honorarium from Vitaflo (International). AD reports receiving consultancy fees from Nutricia and honoraria from Nutricia, GW Pharmaceuticals, and Zogenix. AAM reports receiving honoraria from LivaNova and Danone. NF reports receiving grants from the National Institute for Health and Care Research, the Medical Research Council, Cure Parkinson's Trust, and the European Union, consultancy fees from ALK, Sanofi Aventis, Gedeon Richter, Abbott, Galderma, AstraZeneca, Ipsen, Vertex, Thea, Novo Nordisk, Aimmune, and Ipsen, and honorarium from Abbott Singapore. All other authors declare no competing interests. (Copyright © 2023 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license. Published by Elsevier Ltd.. All rights reserved.)

**Access or request full text:** [https://libkey.io/10.1016/S1474-4422\(23\)00370-8](https://libkey.io/10.1016/S1474-4422(23)00370-8)

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37977712&custid=ns023446>

#### 40. Evidence of a vegan diet for health benefits and risks - an umbrella review of meta-analyses of observational and clinical studies

**Item Type:** Journal Article

**Authors:** Selinger, Eliška;Neuenschwander, Manuela;Koller, Alina;Gojda, Jan;Kühn, Tilman;Schwingshackl, Lukas;Barbaresko, Janett and Schlesinger, Sabrina

**Publication Date:** 2023

**Journal:** Critical Reviews in Food Science and Nutrition 63(29), pp. 9926-9936

**Abstract:** To summarize and evaluate the evidence on the health impact of a vegan diet, we conducted an umbrella review of systematic reviews and meta-analyses. PubMed, Cochrane Library, Web of Science and Epistemonikos were searched up to September 2021. Meta-analyses were recalculated by using a random effects model. The certainty of evidence (CoE) was evaluated by the GRADE approach. For the general healthy population, a vegan diet was effective for reducing body weight MD (95% CI): -2.52 kg (-3.06, -1.98), n = 8 RCTs; moderate CoE] and was associated with further health benefits (with low CoE), including a lower risk of cancer incidence SRR (95% CI): 0.84 (0.75, 0.95), n = 2] and a trend for lower risk of all-cause mortality SRR (95% CI): 0.87 (0.75, 1.01), n = 2], as well as lower ApoB levels MD (95% CI): -0.19  $\mu\text{mol/L}$  (-0.23, -0.15), n = 7 RCTs). The findings suggested adverse associations for a vegan diet with risk of fractures SRR (95% CI): 1.46 (1.03, 2.07), n = 3; low CoE]. For persons with diabetes or at high CVD risk, a vegan diet reduced measures of adiposity, total cholesterol, LDL and improved glycemic control (CoE moderate to low). A vegan diet may have the potential for the prevention of cardiometabolic health, but it may also impair bone health. More well-conducted primary studies are warranted.

**Access or request full text:** <https://libkey.io/10.1080/10408398.2022.2075311>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37962057&custid=ns023446>

#### 41. Major dietary patterns in the United Kingdom Women's Cohort Study showed no evidence of prospective association with pancreatic cancer risk

**Item Type:** Journal Article

**Authors:** Shyam, Sangeetha;Greenwood, Darren C.;Mai, Chun-Wai;Tan, Seok Shin;Yusof, Barakatun-Nisak Mohd;Moy, Foong Ming and Cade, Janet E.

**Publication Date:** 2023

**Journal:** Nutrition Research (New York, N.Y.) 118, pp. 41-51

**Abstract:** Diet is a modifiable risk factor for pancreatic cancer. We hypothesized that specific dietary patterns would increase/decrease pancreatic cancer risk. We evaluated the association of dietary patterns with pancreatic cancer risk in the UK Women's Cohort Study. Dietary patterns were assessed at enrollment using: (1) self-reported practice of vegan/vegetarian dietary habits, (2) diet quality indices (World Health Organization Healthy Diet Indicator and Mediterranean Diet Score), and (3) principal component analysis-derived dietary patterns. The association of dietary patterns with pancreatic cancer incidence was quantified using Cox regression survival analysis. Over a median follow-up of 19 years of 35,365 respondents, there were 136 incident cases of pancreatic cancer. No association between dietary habits/quality and pancreatic cancer incidence was evident after adjustments (hazard ratio (95% confidence interval): self-reported omnivores vs vegan/vegetarian dietary habit: 1.13 (0.73-1.76); per-unit increase in World Health Organization Healthy Diet Indicator scores: 0.99 (0.91-1.09); per-unit increase in Mediterranean Diet Score: 0.92 (0.83-1.02). Similarly, no association of principal component analysis-derived dietary patterns with pancreatic cancer risk was evident ("prudent:" 1.02 0.94-1.10]; "meat-based:" 1.00 0.92-1.09]; "fast-food, sugar-sweetened beverages, and carbohydrate-rich snacks:" 0.96 0.86-1.07]; "cereal and dairy-rich:" 1.04 0.94-1.16], and "low-diversity and lowfat:" 1.00 0.89-1.13]). In this prospective cohort of women, several major dietary patterns were of poor

quality. There was no evidence of a prospective association between any of the dietary patterns explored and pancreatic cancer incidence.; Competing Interests: Declaration of Competing Interest Janet Cade is the Director of Dietary Assessment Ltd. The other authors declare no relationships that could be construed as potential conflicts of interest. (Copyright © 2023 University of Leeds. Published by Elsevier Inc. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.nutres.2023.07.007>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37562156&custid=ns023446>

#### 42. Association of fructose consumption with prevalence of functional gastrointestinal disorders manifestations: results from Hellenic National Nutrition and Health Survey (HNNHS)

**Item Type:** Journal Article

**Authors:** Smiliotopoulos, Theodoros;Zampelas, Antonis;Houliaras, George;Sgouros, Spiros N.;Michas, George;Bamias, George;Panagiotakos, Demosthenes;Cholopoulos, Nikolaos;Chrousos, George P.;Roma, Eleftheria and Magriplis, Emmanuella

**Publication Date:** 2023

**Journal:** British Journal of Nutrition 130(11), pp. 1961-1972

**Abstract:** The study aimed to assess the total prevalence of functional gastrointestinal disorders (FGID), and separately, irritable bowel syndrome (IBS) among adults and to determine their potential association with fructose consumption. Data from the Hellenic National Nutrition and Health Survey were included (3798 adults; 58.9 % females). Information regarding FGID symptomatology was assessed using self-reported physician diagnosis questionnaires the reliability of which were screened using the ROME III, in a sample of the population. Fructose intake was estimated from 24 h recalls, and the MedDiet score was used to assess adherence to the Mediterranean diet. The prevalence of FGID symptomatology was 20.2 %, while 8.2 % had IBS (representing 40.2 % of total FGID). The likelihood of FGID was 28 % higher (95 %CI: 1.03–1.6) and of IBS 49 % (95 %CI: 1.08–2.05) in individuals with higher fructose intake than with lower intake (3rd tertile compared with 1st). When area of residence was accounted for, individuals residing in the Greek islands had a significantly lower probability of FGID and IBS compared with those residing in Mainland and the main Metropolitan areas, with Islanders also achieving a higher MedDiet score and lower added sugar intake, comparatively to inhabitants of the main metropolitan areas. FGID and IBS symptomatology was most prominent among individuals with higher fructose consumption, and this was most conspicuous in areas with a lower Mediterranean diet adherence, suggesting that the dietary source of fructose rather than total fructose should be examined in relation to FGID.

**Access or request full text:** <https://libkey.io/10.1017/S0007114523001198>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=173476451&custid=ns023446>

#### 43. A review of alternative proteins for vegan diets: Sources, physico-chemical properties, nutritional equivalency, and consumer acceptance

**Item Type:** Journal Article

**Authors:** Surya Ulhas, Rutwick;Ravindran, Rajeev;Malaviya, Alok;Priyadarshini, Anushree;Tiwari, Brijesh K. and Rajauria, Gaurav

**Publication Date:** 2023

**Journal:** Food Research International (Ottawa, Ont.) 173, pp. 113479

**Abstract:** Alternate proteins are gaining popularity as a more sustainable and environmentally friendly alternative to animal-based proteins. These proteins are often considered healthier and are suitable for people following a vegetarian or vegan diet. Alternative proteins can be recovered from natural sources like legumes, grains, nuts, and seeds, while single cell proteins (mycoproteins), and algal proteins are being developed using cutting-edge technology to grow fungus, yeast and algal cells in a controlled environment, creating a more sustainable source of protein. Although, the demand for alternative protein products is increasing, there still happens to be a large gap in use among the general consumers mainly stemming from its lower bioavailability, lack of nutritional equivalency and reduced digestibility compared to animal proteins. The focus of the review is to emphasize on various sources and technologies for recovering alternative proteins for vegan diets. The review discusses physicochemical properties of alternative proteins and emphasise on the role of various processing technologies that can change the digestibility and bioavailability of these proteins. It further accentuates the nutritional equivalency and environmental sustainability of alternative protein against the conventional proteins from animals. The food laws surrounding alternative proteins as well as the commercial potential and consumer acceptance of alternative protein products are also highlighted. Finally, key challenges to improve the consumer acceptability and market value of plant-based proteins would be in achieving nutrient equivalency and enhance bioavailability and digestibility while maintaining the same physicochemical properties, taste, texture, as animal proteins, has also been highlighted.; **Competing Interests:** Declaration of Competing Interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. (Copyright © 2023 The Authors. Published by Elsevier Ltd.. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.foodres.2023.113479>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37803803&custid=ns023446>

#### 44. Long-term follow-up in patients with coeliac disease in the pandemic-era: a view from Sheffield the NHS England national centre for adult coeliac disease

**Item Type:** Journal Article

**Authors:** Trott, Nick;Raju, Suneil A.;Rej, Anupam;Hoffman, Olivia;Holland, William;Bebb, James R.;Seamark, Leah;Williams, Marianne;Costas Batlle, Cristian;Jeanes, Yvonne M.;Elli, Luca and Sanders, David S.

**Publication Date:** 2023

**Journal:** Gastroenterology & Hepatology from Bed to Bench 16(2), pp. 158-166

**Abstract:** **Aim:** To explore patients' follow-up preferences. **Background:** Optimal follow-up strategies for patients with coeliac disease remain a subject of debate. Research suggests patients' prefer review by dietitians with a doctor available as required. **Methods:** Patients with coeliac disease under review at our centre, completed a questionnaire assessing their views on what makes follow-up useful based on specific criteria. Bloods tests, symptoms review, dietary assessment, opportunity to ask questions and reassurance. Patients' preferences between follow-up with a hospital doctor, a hospital dietitian, a hospital dietitian with a doctor



available, a general practitioner, no follow-up or access when needed were also evaluated. **Results:** 138 adult patients completed the questionnaire, 80% of patients reported following a strict gluten free diet (mean diagnosis was 7.2 years). Overall, 60% found their follow-up to be 'very useful' valuing their review of blood tests and symptoms (71%) reassurance (60%) and opportunity to ask questions (58%). Follow-up by a dietitian with a doctor available was the most preferred option of review ( $p < 0.001$ ) except when compared to hospital doctor ( $p = 0.75$ ). Novel modalities of follow-up such as telephone and video reviews were regarded as of equal value to face-to-face appointments (65% and 62% respectively). Digital applications were significantly less preferable (38%,  $p < 0.001$ ). **Conclusion:** Follow-up by a dietitian with a doctor available as needed was the most preferred follow-up method. However, in this study follow-up by a dietitian with doctor available and hospital doctor alone was statistically equivalent. Many patients consider telephone and video follow-up of equal value to face-to-face reviews.

**Access or request full text:** <https://libkey.io/10.22037/ghfbb.v16i2.2637>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=166098120&custid=ns023446>

#### 45. Associations of dietary patterns, ultra-processed food and nutrient intake with incident atrial fibrillation

**Item Type:** Journal Article

**Authors:** Tu, Samuel J.;Gallagher, Celine;Elliott, Adrian D.;Bradbury, Kathryn E.;Marcus, Gregory M.;Linz, Dominik;Pitman, Bradley M.;Middeldorp, Melissa E.;Hendriks, Jeroen M.;Lau, Dennis H.;Sanders, Prashanthan and Wong, Christopher X.

**Publication Date:** 2023

**Journal:** Heart (British Cardiac Society) 109(22), pp. 1683-1689

**Abstract: Objective:** To examine the associations between specific dietary patterns and incident atrial fibrillation (AF).; **Methods:** Using data from the UK Biobank, dietary intakes were calculated from 24-hour diet recall questionnaires. Indices representing adherence to dietary patterns (Mediterranean-style, Dietary Approaches to Stop Hypertension (DASH) and plant-based diets) were scored, and ultra-processed food consumption was studied as a percentage of total food mass consumed. Incident AF hospitalisations were assessed in Cox regression models.; **Results:** A total of 121 300 individuals were included, with 4 579 incident AF cases over a median follow-up of 8.8 years. Adherence to Mediterranean-style or DASH diets was associated with a lower incidence of AF in minimally adjusted analyses (HR for highest vs lowest quintile 0.87 (95% CI 0.80-0.96) and HR 0.78 (95% CI 0.71-0.86), respectively). However, associations were no longer significant after accounting for lifestyle factors (HR 0.95 (95% CI 0.87-1.04) and 0.94 (95% CI 0.86-1.04) respectively), with adjustment for body mass index responsible for approximately three-quarters of the effect size attenuation. Plant-based diets were not associated with AF risk in any models. Greatest ultra-processed food consumption was associated with a significant increase in AF risk even in fully adjusted models (HR 1.13 (95% CI 1.02-1.24)), and a 10% increase in absolute intake of ultra-processed food was associated with a 5% increase in AF risk (HR 1.05 (95% CI 1.01-1.08)).; **Conclusion:** With the possible exception of reducing ultra-processed food consumption, these findings suggest that attention to other modifiable risk factors, particularly obesity, may be more important than specific dietary patterns for the primary prevention of AF.; **Competing Interests:** Competing interests: GMM has received research funding from Baylis Medical, is a consultant for Johnson and Johnson and InCarda and holds equity in InCarda. DHL reports that the University of Adelaide has received on his behalf lecture and/or consulting fees from Abbott Medical, Biotronik, Medtronic and MicroPort CRM. JH is an International Advisory Board member for BMJ Heart and reports that Flinders University has received on his



behalf lecture and/or consulting fees from Biotronik. PS reports having served on the Advisory Board of Boston Scientific, CathRx, Medtronic, PaceMate and Abbott Medical. PS also reports that the University of Adelaide has received on his behalf lecture, consulting fees and/or research funding from Medtronic, Boston Scientific, Abbott Medical and LivaNova. CXW reports that the University of Adelaide has received on his behalf lecture, travel and/or research funding from Abbott Medical, Bayer, Boehringer Ingelheim, Medtronic, Novartis, Servier, St Jude Medical and Vifor Pharma. (© Author(s) (or their employer(s)) 2023. No commercial re-use. See rights and permissions. Published by BMJ.)

**Access or request full text:** <https://libkey.io/10.1136/heartjnl-2023-322412>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37460193&custid=ns023446>

#### 46. Ketogenic diet in relapsing multiple sclerosis: Patient perceptions, post-trial diet adherence & outcomes

**Item Type:** Journal Article

**Authors:** Wetmore, Emma;Lehner-Gulotta, Diana;Florenzo, Brian;Banwell, Brenda;Bergqvist, A. G. C.;Coleman, Rachael;Conaway, Mark;Goldman, Myla D. and Brenton, J. N.

**Publication Date:** 2023

**Journal:** Clinical Nutrition (Edinburgh, Scotland) 42(8), pp. 1427-1435

**Abstract: Background:** Ketogenic diets (KDs) are safe and tolerable in people with multiple sclerosis (MS). While many patient-reported and clinical benefits are noted, the sustainability of these diets outside of a clinical trial is unknown.; **Aims:** Evaluate patient perceptions of the KD following intervention, determine the degree of adherence to KDs post-trial, and examine what factors increase the likelihood of KD continuation following the structured diet intervention trial.; **Methods:** Sixty-five subjects with relapsing MS previously enrolled into a 6-month prospective, intention-to-treat KD intervention. Following the 6-month trial, subjects were asked to return for a 3-month post-study follow-up, at which time patient reported outcomes, dietary recall, clinical outcome measures, and laboratory values were repeated. In addition, subjects completed a survey to evaluate sustained and attenuated benefits following completion of the intervention phase of the trial.; **Results:** Fifty-two subjects (81%) returned for the 3-month post-KD intervention visit. Twenty-one percent reported continued adherence to a strict KD and an additional 37% reported adhering to a liberalized, less restrictive form of the KD. Those subjects with greater reductions in body mass index (BMI) and fatigue at 6-months on-diet were more likely to continue on KD following trial completion. Using intention-to-treat analysis, patient-reported and clinical outcomes at 3-months post-trial remained significantly improved from baseline (pre-KD), though the degree of improvement was slightly attenuated relative to outcomes at 6-months on KD. Regardless of diet type following the KD intervention, dietary patterns shifted toward greater protein and polyunsaturated fats and less carbohydrate/added sugar consumption.; **Conclusions:** Following the 6-month KD intervention study, the majority of subjects elected to continue on KD, though many pursued a more liberal limit for carbohydrate restriction. Those who experienced a greater reduction in BMI or fatigue were more likely to continue with strict KD. The 6-month KD intervention induced persistent changes to dietary habits in the months following study completion.; **Trial Registration Information:** Registered on Clinicaltrials.gov under registration number NCT03718247, posted on Oct 24, 2018. First patient enrollment date: Nov 1, 2018. **Link:** [https://clinicaltrials.gov/ct2/show/NCT03718247?term=NCT03718247&draw=2&rank=1](https://clinicaltrials.gov/ct2/show/NCT03718247?term=NCT03718247&draw=2&rank=1;).; **Competing Interests:** Conflict of interest E. Wetmore reports no disclosures relevant to the manuscript. D. Lehner-Gulotta is a consultant for Functional Formularies. B. Florenzo has no disclosures relevant to the manuscript. B. Banwell serves as a consultant to Novartis, Roche, UCB, Teva Neuroscience, Biogen, and Sanofi. AGC Bergqvist serves as

a paid speaker for Nutricia North America. R. Coleman reports no disclosures relevant to the manuscript. M. Conway reports no disclosures relevant to the manuscript. M.D. Goldman has served on the DSMB for Anokion SMC and Immunic. She has received consulting fees from Adamas Pharmaceuticals, Biogen IDEC, Brainstorm Cell Therapeutics Ltd, EMD Serono, Genetec, Greenwich Biosciences, Horizons, Immunic, Merck, Novartis, Sanofi Genzyme, and Vebriilo. J.N. Brenton has served as a consultant to Cycle Pharmaceuticals. JNB's research is funded by the NIH and the National Institute of Neurological Disorders and Stroke (grant number: K23NS116225) and by the iTHRIV Scholars Program through the National Center for Advancing Translational Sciences of the NIH under award numbers UL1TR003015 and KL2TR003016. (Copyright © 2023 Elsevier Ltd and European Society for Clinical Nutrition and Metabolism. All rights reserved.)

**Access or request full text:** <https://libkey.io/10.1016/j.clnu.2023.06.029>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37433230&custid=ns023446>

#### 47. Foods, Nutrients, and Risk of In-Hospital Frailty in Women: Findings from a Large Prospective Cohort Study

**Item Type:** Journal Article

**Authors:** Zhang, Huifeng;Li, Weimin;Wang, Youfa;Dong, Yuanyuan;Greenwood, Darren C.;Hardie, Laura J. and Cade, Janet E.

**Publication Date:** 2023

**Journal:** Nutrients 15(21)

**Abstract:** Frailty is increasingly prevalent worldwide because of aging populations. Diet may play a role as a modifiable risk factor. This study aimed to investigate associations between dietary factors and risk of frailty in the UK Women's Cohort admitted to hospitals in England. Consumption of foods and nutrients was estimated using a validated 217-item food frequency questionnaire at baseline. Incident frailty was assessed via a hospital frailty risk score based on linkage with hospital episode statistics. Out of 25,186 participants admitted to hospitals, 6919 (27%) were identified with frailty and 10,562 (42%) with pre-frailty over a mean follow-up of 12.7 years. After adjustment for confounding, we observed a 12% increase in risk of frailty with each additional 10 g/MJ intake of total meat (HR = 1.12, 95%CI: 1.07, 1.17), with the highest risk observed for processed meats (HR = 1.45, 95%CI: 1.21, 1.73). Similar associations were observed with pre-frailty. Vegetable intake was associated with slightly lower risk of frailty (HR = 0.98, 95%CI: 0.97, 1.00). There was no evidence of association between most nutrient intakes and in-hospital frailty risk. Overall, our findings suggest that reducing consumption of meat, especially processed meat, in adults may be beneficial regarding the development of frailty.

**Access or request full text:** <https://libkey.io/10.3390/nu15214619>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37960271&custid=ns023446>

#### 48. Diet-Related Inflammation Is Associated with Worse COVID-19 Outcomes in the UK Biobank Cohort

**Item Type:** Journal Article

**Authors:** Zhao, Longgang;Wirth, Michael D.;Petermann-Rocha, Fanny;Parra-Soto, Solange;Mathers, John C.;Pell, Jill P.;Ho, Frederick K.;Celis-Morales, Carlos and Hébert, James,R.

**Publication Date:** 2023

**Journal:** Nutrients 15(4)

**Abstract:** Diet, the most important modulator of inflammatory and immune responses, may affect COVID-19 incidence and disease severity. Data from 196,154 members of the UK biobank had at least one 24 h dietary recall. COVID-19 outcomes were based on PCR testing, hospital admissions, and death certificates. Adjusted Poisson regression analyses were performed to estimate the risk ratios (RR) and their 95% confidence intervals (CI) for dietary inflammatory index (DII)/energy-adjusted DII (E-DII) scores. Models were adjusted for sociodemographic factors, comorbidities, smoking status, physical activity, and sleep duration. Between January 2020 and March 2021, there were 11,288 incident COVID-19 cases, 1270 COVID-19-related hospitalizations, and 315 COVID-19-related deaths. The fully adjusted model showed that participants in the highest (vs. lowest) DII/E-DII quintile were at 10-17% increased risk of COVID-19 (DII: RR Q5 vs . Q1 = 1.10, 95% CI 1.04-1.17, P trend < 0.001; E-DII: RR Q5 vs . Q1 = 1.17, 95% CI 1.10-1.24, P trend < 0.001) and ≈40% higher risk was observed for disease severity (DII: RR Q5 vs . Q1 = 1.40, 95% CI 1.18-1.67, P trend < 0.001; E-DII: RR Q5 vs . Q1 = 1.39, 95% CI 1.16-1.66, P trend < 0.001). There was a 43% increased risk of COVID-19-related death in the highest DII quintile (RR Q5 vs . Q1 = 1.43, 95% CI 1.01-2.01, P trend = 0.04). About one-quarter of the observed positive associations between DII and COVID-19-related outcomes were mediated by body mass index (25.8% for incidence, 21.6% for severity, and 19.8% for death). Diet-associated inflammation increased the risk of COVID-19 infection, severe disease, and death.

**Access or request full text:** <https://libkey.io/10.3390/nu15040884>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36839240&custid=ns023446>

## 49. Assessment of Knowledge of Gluten-Free Diet Amongst Food Handlers in Hospitals

**Item Type:** Journal Article

**Authors:** Zhou, Felix, M.D.;Mullen, Tyler,M.D., F.R.C.P.C.;Kulai, Tasha,M.D., F.R.C.P.C. and Rashid, Mohsin, MD,M.Ed, F.R.C.P.C.

**Publication Date:** 2023

**Journal:** Canadian Journal of Dietetic Practice and Research : A Publication of Dietitians of Canada = Revue Canadienne De La Pratique Et De La Recherche En Dietetique : Une Publication Des Dietetistes Du Canada 84(2), pp. 63-68

**Abstract: Purpose:** When admitted to the hospital, individuals with celiac disease rely on food handlers for provision of safe, uncontaminated gluten-free meals. We aimed to assess the knowledge of gluten-free diet (GFD) amongst individuals involved in meal preparation for patients. **Methods:** A questionnaire with 10 demographic and 35 test items to assess knowledge of GFD, including workplace scenarios encountered in meal preparation, was administered to food handlers including cooks, utility workers, dietary technicians, and supervisors in 2 tertiary care, university-affiliated hospitals. A score of ≥28 of 35 (≥80%) was considered a "pass". **Results:** A total of 72 individuals completed the study, mean age 40.3 ± 1.6 years, 75% female. Only 42 (56.8%) scored ≥80% and achieved a pass. The average score was 75.9% ± 13.4%, range 25.7%-100%. The supervisors had significantly higher scores (87.9% ± 11.4%) than utility workers (73.0% ± 11.4%; P = 0.01) and cooks (71.7% ± 14.5%; P = 0.01). Cooks had the lowest scores with 80% scoring <80%. Females scored higher

than males (77.8% vs. 68.8%;  $P = 0.02$ ). **Conclusions:** There are significant differences in GFD knowledge amongst various groups involved in food preparation in hospitals. The gaps identified in knowledge can potentially compromise the safety of patients with celiac disease. Targeted interventions to educate hospital food handlers about GFD are warranted. Registered Dietitians can play an important role in providing this education.

**Access or request full text:** <https://libkey.io/10.3148/cjdpr-2022-029>

**URL:** <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36412507&custid=ns023446>

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