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UK and Ireland

[Pregnant Women Living with Obesity: A Cross-Sectional Observational Study of Dietary Quality and Pregnancy Outcomes](#). Charnley M, Newson L, Weeks A, Abayomi J. *Nutrients*. 2021 May 13;13(5):1652. doi: 10.3390/nu13051652.

[Modelling future trajectories of obesity and body mass index in England](#). Cobiac LJ, Scarborough P. *PLoS One*. 2021 Jun 2;16(6):e0252072. doi: 10.1371/journal.pone.0252072.

[Implementing a weight-specific quality-of-life tool for young people in primary healthcare](#). Oluboyede Y, Hill S, McDonald S, Henderson E. *BJGP Open*. 2021 Jun 3;BJGPO.2021.0052. doi: 10.3399/BJGPO.2021.0052.

[Children's Experiences of Their Journey to School: Integrating Behaviour Change Frameworks to Inform the Role of the Built Environment in Active School Travel Promotion](#). Michail N, Ozbil A, Parnell R, Wilkie S. *Int J Environ Res Public Health*. 2021 May 8;18(9):4992. doi: 10.3390/ijerph18094992.

[People with weight-related long-term conditions want support from GPs: A qualitative interview study](#). Talbot A, Salinas M, Albury C, Ziebland S. *Clin Obes*. 2021 Jun 4:e12471. doi: 10.1111/cob.12471.

[Exploring Strategies to Optimise the Impact of Food-Specific Inhibition Training on Children's Food Choices](#). Porter L, Gillison FB, Wright KA, Verbruggen F, Lawrence NS. *Front Psychol*. 2021 May 13;12:653610. doi: 10.3389/fpsyg.2021.653610.

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UK and Ireland: Research related to COVID-19

[Alcohol Consumption Is Associated with Poor Prognosis in Obese Patients with COVID-19: A Mendelian Randomization Study Using UK Biobank](#). Fan X, Liu Z, Poulsen KL, Wu X, Miyata T, Dasarathy S, Rotroff DM, Nagy LE. *Nutrients*. 2021 May 10;13(5):1592. doi: 10.3390/nu13051592.

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International

Sugar Intake: Are All Children Made of Sugar? Diani L, Forchielli ML. *Life (Basel)*. 2021 May 14;11(5):444. doi: 10.3390/life11050444.

Developmental Changes in Food Perception and Preference. Serrano-Gonzalez M, Herting MM, Lim SL, Sullivan NJ, Kim R, Espinoza J, Koppin CM, Javier JR, Kim MS, Luo S. *Front Psychol*. 2021 May 18;12:654200. doi: 10.3389/fpsyg.2021.654200.

Home food environment and associations with weight and diet among U.S. adults: a cross-sectional study. Kegler MC, Hermstad A, Haardörfer R. *BMC Public Health*. 2021 Jun 1;21(1):1032. doi: 10.1186/s12889-021-11102-2.

A Cohort Study Comparing Pediatric Patients with Overweight and Obesity in the Military Health System. Espinola DC, Olsen C, Banaag A, Koehlmoos TP. *Child Obes*. 2021 Jun 2. doi: 10.1089/chi.2021.0040.

Obesity and Metabolic Care of Children of South Asian Ethnicity in Western Society. Sivasubramanian R, Malhotra S, Fitch AK, Singhal V. *Children (Basel)*. 2021 May 25;8(6):447. doi: 10.3390/children8060447.

Eating Speed, Eating Frequency, and Their Relationships with Diet Quality, Adiposity, and Metabolic Syndrome, or Its Components. Garcidueñas-Fimbres TE, Paz-Graniel I, Nishi SK, Salas-Salvadó J, Babio N. *Nutrients*. 2021 May 15;13(5):1687. doi: 10.3390/nu13051687.

Pragmatic Evaluation of a Health System-Based Employee Weight Management Program. JaKa MM, Dinh JM, Rivard RL, Herrmann SD, Spoonheim J, Pronk NP, Ziegenfuss JY. *Int J Environ Res Public Health*. 2021 May 31;18(11):5901. doi: 10.3390/ijerph18115901.

Effects of a 3-Week In-Hospital Multidisciplinary Body Weight Reduction Program in Obese Females: Is Measured Resting Energy Expenditure Essential for Tailoring Adequately the Amount of Energy Intake? Tamini S, Cicolini S, Caroli D, Sartorio A. *Front Nutr*. 2021 May 12;8:678788. doi: 10.3389/fnut.2021.678788.

Time-Restricted Feeding and Metabolic Outcomes in a Cohort of Italian Adults. Currenti W, Buscemi S, Cincione RI, Cernigliaro A, Godos J, Grosso G, Galvano F. *Nutrients*. 2021 May 13;13(5):1651. doi: 10.3390/nu13051651.

Effect of a High-Intensity Dietary Intervention on Changes in Dietary Intake and Eating Pathology during a Multicomponent Adolescent Obesity Intervention. Raynor HA, Mazzeo SE, LaRose JG, Adams EL, Thornton LM, Caccavale LJ, Bean MK. *Nutrients*. 2021 May 28;13(6):1850. doi: 10.3390/nu13061850.

A retrospective case-control cohort analysis of comorbidity and health expenditure in hospitalized adults diagnosed with obesity utilizing ICD-10 diagnostic coding. Bishay RH, Meyerowitz-Katz G, Hng TM, Colaco CMG, Khanna S, Klein R, Sanjeev D, McLean M, Ahlenstiel G, Maberly GF. *Clin Obes*. 2021 May 30:e12469. doi: 10.1111/cob.12469.

Maternal knowledge explains screen time differences 2 and 3.5 years post-intervention in INFANT. Delisle Nyström C, Abbott G, Cameron AJ, Campbell KJ, Löf M, Salmon J, Hesketh KD. *Eur J Pediatr*. 2021 Jun 1. doi: 10.1007/s00431-021-04134-8.

Frequency of self-weighing and weight change: a cohort study on 10,000 smart scale users. Vuorinen AL, Helander E, Pietilä J, Korhonen I. *J Med Internet Res*. 2021 May 17. doi: 10.2196/25529.

Exercise training in the management of overweight and obesity in adults: Synthesis of the evidence and recommendations from the European Association for the Study of Obesity Physical Activity Working Group. Oppert JM, Bellicha A, van Baak MA, Battista F, Beaulieu K, Blundell JE, Carraça EV, Encantado J, Ermolao A, Pramono A, Farpour-Lambert N, Woodward E, Dicker D, Busetto L. *Obes Rev*. 2021 Jun 2:e13273. doi: 10.1111/obr.13273.

Development and Interrater Reliability of an Observational School Environment Checklist: A Practical, Comprehensive Tool to Assess Healthy Eating and Physical Activity Opportunities in Schools. Lane H, Campbell K, Zhang A, Deitch R, Litz A, Shropshire J, Turner L, Hager E. *Health Promot Pract*. 2021 Jun 1:15248399211014501. doi: 10.1177/15248399211014501.

The effects of dietary and lifestyle interventions among pregnant women with overweight or obesity on early childhood outcomes: an individual participant data meta-analysis from randomised trials. Louise J, Poprzeczny AJ, Deussen AR, Vinter C, Tanvig M, Jensen DM, Bogaerts A, Devlieger R, McAuliffe FM, Renault KM, Carlsen E, Geiker N, Poston L, Briley A, Thangaratnam S, Dodd JM. *BMC Med*. 2021 Jun 2;19(1):128. doi: 10.1186/s12916-021-01995-6.

Influence of Body Composition on Physical Literacy in Spanish Children. Mendoza-Muñoz M, Barrios-Fernández S, Adsuar JC, Pastor-Cisneros R, Risco-Gil M, García-Gordillo MÁ, Carlos-Vivas J. *Biology (Basel)*. 2021 May 29;10(6):482. doi: 10.3390/biology10060482.

Sociodemographic and psychological characteristics associated with discrepancy between body satisfaction and weight change among adolescents. Manneville F, Omorou A, Legrand K, Lecomte E, Rydberg JA, Briançon S, Guillemain F; PRALIMAP Trial Group. *Prev Med*. 2021 Jun 1:106668. doi: 10.1016/j.ypmed.2021.106668.

Body Weight, BMI, Percent Fat and Associations with Mortality and Incident Mobility Limitation in Older Men. Cawthon PM, Harrison SL, Rogers-Soeder T, Webber K, Jonnalagadda S, Pereira SL, Lane N, Cauley JA, Shikany JM, Farsijani S, Langsetmo L. *Geriatrics (Basel)*. 2021 May 18;6(2):53. doi: 10.3390/geriatrics6020053.

The Contribution of Foods Prepared Outside the Home to the Diets of 18- to 30-Year-Old Australians: The MYMeals Study. Wellard-Cole L, Davies A, Chen J, Jung J, Bente KB, Kay J, Watson WL, Hughes C, Rangan A, Yacef K, Koprinska I, Chapman K, Wong NT, Gemming L, Ni Mhurchu C, Bauman A, Allman-Farinelli M. *Nutrients*. 2021 May 21;13(6):1761. doi: 10.3390/nu13061761.

Regulatory focus and junk food avoidance: The influence of health consciousness, perceived risk and message framing. Shimul AS, Cheah I, Lou AJ. *Appetite*. 2021 Jun 2:105428. doi: 10.1016/j.appet.2021.105428.

An intervention of sustainable weight change: Influence of self-help group and expectations. Carlén K, Kylberg E. *Health Expect*. 2021 Jun 5. doi: 10.1111/hex.13290.

Temperament and eating self-regulation in young children with or at risk for obesity: An exploratory report. Button A, Faith MS, Berkowitz RI. *Pediatr Obes*. 2021 Jun 2:e12821. doi: 10.1111/ijpo.12821.

Interactions among Reward Sensitivity and Fast-Food Access on Healthy Eating Index Scores in Adolescents: A Cross-Sectional Study. Wang SD, Nicolo M, Yi L, Dunton GF, Mason TB. *Int J Environ Res Public Health*. 2021 May 27;18(11):5744. doi: 10.3390/ijerph18115744.

The Relationship between Bodyweight Status and Weight Perception Explains Differences in Calories Ordered in a Food Choice Exercise. Mbarushimana JC, Gustafson CR, Gitungwa H, Zeballos E. *Nutrients*. 2021 May 25;13(6):1794. doi: 10.3390/nu13061794.

Nutritional Characteristics, Sites of Origin, and Cost of Foods Consumed during School Hours and Their Relationship to Nutritional Status of Schoolchildren in Mexico City. Martínez-Andrade G, González-Unzaga M, Romero-Quechol G, Mendoza E, Vilchis-Gil J, Duque X. *Life (Basel)*. 2021 May 14;11(5):439. doi: 10.3390/life11050439.

Sexual Dimorphism in Body Weight Loss, Improvements in Cardiometabolic Risk Factors and Maintenance of Beneficial Effects 6 Months after a Low-Calorie Diet: Results from the Randomized Controlled DiOGenes Trial. Trouwborst I, Goossens GH, Astrup A, Saris WHM, Blaak EE. *Nutrients*. 2021 May 10;13(5):1588. doi: 10.3390/nu13051588.

Citizen preferences regarding the public funding of projects promoting a healthy body weight among people with a low income. Mulderij LS, Hernández JI, Mouter N, Verkooijen KT, Wagemakers A. *Soc Sci Med*. 2021 May 18;280:114015. doi: 10.1016/j.socscimed.2021.114015

Effects of Substituting Types of Physical Activity on Body Fat Mass and Work Efficiency among Workers. Ma J, Ma D, Kim J, Wang Q, Kim H. *Int J Environ Res Public Health*. 2021 May 12;18(10):5101. doi: 10.3390/ijerph18105101.

How important is current physical fitness for future quality of life? Results from an 8-year longitudinal study on older adults. Gómez-Bruton A, López-Torres O, Gómez-Cabello A, Rodríguez-Gomez I, Pérez-Gómez J, Pedrero-Chamizo R, Gusi N, Ara I, Casajús JA, Gonzalez-Gross M, Vicente-Rodríguez G. *Exp Gerontol*. 2021 Jul 1;149:111301. doi: 10.1016/j.exger.2021.111301.

Policy processes leading to the adoption of 'Jamie's Ministry of Food' programme in Victoria, Australia. Clarke B, Kwon J, Swinburn B, Sacks G. *Health Promot Int*. 2021 Jun 4:daab079. doi: 10.1093/heapro/daab079.

Development and Pilot Testing of a Food Literacy Curriculum for High School-Aged Adolescents. Ruiz LD, Radtke MD, Scherr RE. *Nutrients*. 2021 May 1;13(5):1532. doi: 10.3390/nu13051532.

The roles of experienced and internalized weight stigma in healthcare experiences: Perspectives of adults engaged in weight management across six countries. Puhl RM, Lessard LM, Himmelstein MS, Foster GD. *PLoS One*. 2021 Jun 1;16(6):e0251566. doi: 10.1371/journal.pone.0251566.

International comparisons of weight stigma: addressing a void in the field. Puhl RM, Lessard LM, Pearl RL, Himmelstein MS, Foster GD. *Int J Obes (Lond)*. 2021 Jun 1. doi: 10.1038/s41366-021-00860-z.

Obesity management: at the forefront against disease stigma and therapeutic inertia. Busetto L, Sbraccia P, Vettor R. *Eat Weight Disord*. 2021 May 29. doi: 10.1007/s40519-021-01217-1.

Changes in Motor Competence after a Brief Physical Education Intervention Program in 4 and 5-Year-Old Preschool Children. Navarro-Patón R, Brito-Ballester J, Villa SP, Anaya V, Mecías-Calvo M. *Int J Environ Res Public Health*. 2021 May 7;18(9):4988. doi: 10.3390/ijerph18094988.

Evaluation of a new causal chain model for predicting embedded psychosocial and behavioral relationships in a community-based obesity treatment seeking maintained weight loss. Annesi JJ, Walsh SM. *Scand J Psychol*. 2021 May 31. doi: 10.1111/sjop.12741.

Annual incidence and prevalence of obesity in childhood and young adulthood based on a 30-year longitudinal population-based cohort study in Korea: The Kangwha Study: Running title: Incidence and prevalence of obesity from a cohort in Korea. Suh J, Jeon YW, Lee JH, Song K, Choi HS, Kwon A, Chae HW, Kim HC, Kim HS, Suh I. *Ann Epidemiol*. 2021 May 27;S1047-2797(21)00085-5. doi: 10.1016/j.annepidem.2021.05.002.

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International: Research related to COVID-19

Dietary Habits before and during the COVID-19 Epidemic in Selected European Countries. Skotnicka M, Karwowska K, Kłobukowski F, Wasilewska E, Małgorzewicz S. *Nutrients*. 2021 May 16;13(5):1690. doi: 10.3390/nu13051690.

Children's Health Habits and COVID-19 Lockdown in Catalonia: Implications for Obesity and Non-Communicable Diseases. Ventura PS, Ortigoza AF, Castillo Y, Bosch Z, Casals S, Girbau C, Siurana JM, Arce A, Torres M, Herrero FJ. *Nutrients*. 2021 May 13;13(5):1657. doi: 10.3390/nu13051657.

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Systematic reviews

Prevalence of Metabolic Syndrome in Children and Adolescents with Type 1 Diabetes Mellitus and Possibilities of Prevention and Treatment: A Systematic Review. Grabia M, Markiewicz-Żukowska R, Socha K. *Nutrients*. 2021 May 23;13(6):1782. doi: 10.3390/nu13061782.

Age-related change in sedentary behavior during childhood and adolescence: A systematic review and meta-analysis. Kontostoli E, Jones AP, Pearson N, Foley L, Biddle SJH, Atkin AJ. *Obes Rev*. 2021 Jun 3. doi: 10.1111/obr.13263.

Improving implementation of school-based healthy eating and physical activity policies, practices, and programs: a systematic review. Barnes C, McCrabb S, Stacey F, Nathan N, Yoong SL, Grady A, Sutherland R, Hodder R, Innes-Hughes C, Davies M, Wolfenden L. *Transl Behav Med*. 2021 Jun 3;ibab037. doi: 10.1093/tbm/ibab037.

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