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UK and Ireland

Stakeholder experiences of using online spatial data visualisation tools for local public health decision support: A qualitative study. Armstrong-Moore R, White M, Burgoine T. *Health Place.* 2021 Aug 10;71:102648. doi: 10.1016/j.healthplace.2021.102648.

Geographical heterogeneity across England in associations between the neighbourhood built environment and body mass index. Mason KE, Pearce N, Cummins S. *Health Place.* 2021 Aug 11;71:102645. doi: 10.1016/j.healthplace.2021.102645.

Practice nurse-supported weight self-management delivered within the national child immunisation programme for postnatal women: a feasibility cluster RCT. Daley AJ, Jolly K, Ives N, Jebb SA, Tearne S, Greenfield SM, Yardley L, Little P, Tyldesley-Marshall N, Bensoussane H, Pritchett RV, Frew E, Parretti HM. *Health Technol Assess.* 2021 Aug;25(49):1-130. doi: 10.3310/hta25490.

Impact of cuts to local government spending on Sure Start children's centres on childhood obesity in England: a longitudinal ecological study. Mason KE, Alexiou A, Bennett DL, Summerbell C, Barr B, Taylor-Robinson D. *J Epidemiol Community Health.* 2021 Sep;75(9):860-866. doi: 10.1136/jech-2020-216064.

Factors that facilitate or hinder whole system integrated care for obesity and mental health: a scoping review protocol. Liapi F, Chater A, Randhawa G, Pappas Y. *BMJ Open.* 2021 Aug 10;11(8):e050527. doi: 10.1136/bmjopen-2021-050527.

Weight loss interventions on health-related quality of life in those with moderate to severe obesity: Findings from an individual patient data meta-analysis of randomized trials. Buckell J, Mei XW, Clarke P, Aveyard P, Jebb SA. *Obes Rev.* 2021 Aug 10. doi: 10.1111/obr.13317.

Changes in the nutritional content of children's lunches after the Food Dudes healthy eating programme. Marcano-Olivier M, Sallaway-Costello J, McWilliams L, Horne PJ, Viktor S, Erjavec M. *J Nutr Sci.* 2021 May 31;10:e40. doi: 10.1017/jns.2021.31.

UK and Ireland: Research related to COVID-19

Obesity as a Risk Factor for Severe COVID-19: Summary of the Best Evidence and Implications for Health Care. Sattar N, Valabhji J. *Curr Obes Rep.* 2021 Aug 10:1-8. doi: 10.1007/s13679-021-00448-8.

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International

Sustaining Regular Exercise During Weight Loss Maintenance: The Role of Consistent Exercise Timing. Schumacher LM, Thomas JG, Wing RR, Raynor HA, Rhodes RE, Bond DS. *J Phys Act Health.* 2021 Aug 14:1-8. doi: 10.1123/jpah.2021-0135.

Socioeconomic inequalities in the food environment and body composition among school-aged children: a fixed-effects analysis. Mölenberg FJM, Mackenbach JD, Poelman MP, Santos S, Burdorf A, van Lenthe FJ. *Int J Obes (Lond).* 2021 Aug 13. doi: 10.1038/s41366-021-00934-y.

Implementing family-based behavioral treatment in the pediatric primary care setting: Design of the PLAN study. Epstein LH, Schechtman KB, Kilanowski C, Ramel M, Moursi NA, Quattrin T, Cook SR, Eneli IU, Pratt C, Geller N, Campo R, Lew D, Wilfley DE. *Contemp Clin Trials.* 2021 Aug 10:106497. doi: 10.1016/j.cct.2021.106497.

Occasions, purposes, and contexts for offering snacks to preschool-aged children: Schemas of caregivers with low-income backgrounds. Ce B, Kk D, Re B, Jo F. *Appetite.* 2021 Aug 10:105627. doi: 10.1016/j.appet.2021.105627.

Kids N Fitness Junior: Outcomes of an Evidence-Based Adapted Weight Management Program for Children Ages Three-Seven Years. Lipton-Inga M, Manzanarez B, Vidmar AP, Garcia S, Fink C, Iverson E, Geffner ME. *Child Obes.* 2021 Aug 12. doi: 10.1089/chi.2021.0090.

Neighbourhood walkability and obesity among adults in rural Japan: results from a Japanese health database. Koh G, Sekine M, Yamada M, Fujimura Y, Tatsuse T. *J Public Health (Oxf).* 2021 Aug 13:fdab319. doi: 10.1093/pubmed/fdab319.

Association Between Physical Activity, Screen Time and Sleep, and School Readiness in Canadian Children Aged 4 to 6 Years. Vanderloo LM, Omand J, Keown-Stoneman CDG, Janus M, Tremblay MS, Maguire JL, Borkhoff CM, Lebovic G, Parkin P, Mamdani M, Simpson JR, Duku E, Birken CS. *J Dev Behav Pediatr.* 2021 Aug 11. doi: 10.1097/DBP.0000000000000986.

Goldilocks Days: optimising children's time use for health and well-being. Dumuid D, Olds T, Lange K, Edwards B, Lycett K, Burgner DP, Simm P, Dwyer T, Le H, Wake M. *J Epidemiol Community Health.* 2021 Aug 12:jech-2021-216686. doi: 10.1136/jech-2021-216686.

Factors associated with feeding practices of black immigrant mothers of African and Caribbean origin living in Ottawa, Canada. Kengneson CC, Blanchet R, Sanou D, Batal M, Giroux I. *Appetite.* 2021 Aug 10;167:105641. doi: 10.1016/j.appet.2021.105641.

The prevalence and incidence rate of overweight and obesity among 2.5 million children and adolescents in Spain. de Bont J, Bennett M, León-Muñoz LM, Duarte-Salles T. *Rev Esp Cardiol (Engl Ed).* 2021 Aug 9:S1885-5857(21)00216-4. doi: 10.1016/j.rec.2021.07.002.

Maternal Diet During Pregnancy and Lactation and Child Food Preferences, Dietary Patterns, and Weight Outcomes: a Review of Recent Research. Ventura AK, Phelan S, Silva Garcia K. *Curr Nutr Rep.* 2021 Aug 12. doi: 10.1007/s13668-021-00366-0.

Associations of Percent Body Fat and Motor Skill Development in Preschool-Aged Children: National Youth Fitness Survey. Wood AP, McMillan AG, Imai S, Swift D, DuBose KD. *Child Obes.* 2021 Aug 11. doi: 10.1089/chi.2021.0026.

Prospective relations between maternal emotional eating, feeding to soothe, and infant appetitive behaviors. Temmen CD, Lipsky LM, Faith MS, Nansel TR. *Int J Behav Nutr Phys Act.* 2021 Aug 11;18(1):105. doi: 10.1186/s12966-021-01176-x.

Facility-level conditions leading to higher reach: a configurational analysis of national VA weight management programming. Miech EJ, Freitag MB, Evans RR, Burns JA, Wiitala WL, Annis A, Raffa SD, Spohr SA, Damschroder LJ. *BMC Health Serv Res.* 2021 Aug 11;21(1):797. doi: 10.1186/s12913-021-06774-w.

A Critical Analysis of Representations of Inequalities in Childhood Obesity in Australian Health Policy Documents. Chung A, Zorbas C, Peeters A, Backholer K, Browne J. *Int J Health Policy Manag.* 2021 Aug 7. doi: 10.34172/ijhpm.2021.82.

Understanding Teach-Back and Teach-To-Goal Strategies Embedded in Support Calls for a Health Literacy-Sensitive Childhood Obesity Treatment Trial. Yuhas M, Zoellner J, Hou X, Alexander R, Hill J, You W, Estabrooks P. *Health Lit Res Pract.* 2021 Jul;5(3):e208-e217. doi: 10.3928/24748307-20210713-01.

Parental and Child Factors Associated With 2- to 6-Year-Old Children's Diet Quality in Finland. Koivuniemi E, Gustafsson J, Mäkelä I, Koivisto VJ, Vahlberg T, Schwab U, Niinikoski H, Laitinen K. *J Acad Nutr Diet.* 2021 Aug 6:S2212-2672(21)00414-7. doi: 10.1016/j.jand.2021.06.014.

Childhood overweight and obesity in Europe: Changes from 2007 to 2017. Buoncristiano M, Spinelli A, Williams J, Nardone P, Rito AI, García-Solano M, Grøholt EK, Gutiérrez-González E, Klepp KI, Starc G, Petruskienė A, Kunešová M, Hassapidou M, Pérez-Farinós N, Pudule I, Kelleher CC, Duleva V, Rakovac I, Chatterjee S, Breda J. *Obes Rev.* 2021 Aug 10:e13226. doi: 10.1111/obr.13226.

Estimated Financial Impacts of Inaccurate Obese Patient Data Recorded by the Western Australian Country Health Service. McClean K, Cross M, Reed S. *J Multidiscip Healthc.* 2021 Aug 3;14:2035-2042. doi: 10.2147/JMDH.S321395.

Randomized trial of a novel lifestyle intervention compared with the Diabetes Prevention Program for weight loss in adult dependents of military service members. Das SK, Bukhari AS, Taetzsch AG, Ernst AK, Rogers GT, Gilhooly CH, Hatch-McChesney A, Blanchard CM, Livingston KA, Silver RE, Martin E, McGraw SM, Chin MK, Vail TA, Lutz LJ, Montain SJ, Pittas AG, Lichtenstein AH, Allison DB, Dickinson S, Chen X, Saltzman E, Young AJ, Roberts SB. *Am J Clin Nutr.* 2021 Aug 10:nqab259. doi: 10.1093/ajcn/nqab259.

Trajectories of objectively measured physical activity and childhood overweight: longitudinal analysis of the IDEFICS/I.Family cohort. Sprengeler O, Pohllabeln H, Bammann K, Buck C, Lauria F, Verbestel V, Eiben G, Konstabel K, Molnár D, Moreno LA, Pitsiladis Y, Page A, Reisch L, Tornaritis M, Ahrens W. *Int J Behav Nutr Phys Act.* 2021 Aug 9;18(1):103. doi: 10.1186/s12966-021-01171-2.

Predictors of successful weight loss in children treated at a community hospital-based tertiary care pediatric weight management program. C Mc Sweeney Z, McSweeney MD, Huang SH, G Hill S. *J Child Health Care*. 2021 Aug 9:13674935211037535. doi: 10.1177/13674935211037535.

Efficacy of a Multi-Component m-Health Diet, Physical Activity, and Sleep Intervention on Dietary Intake in Adults with Overweight and Obesity: A Randomised Controlled Trial. Fenton S, Burrows TL, Collins CE, Rayward AT, Murawski B, Duncan MJ. *Nutrients*. 2021 Jul 19;13(7):2468. doi: 10.3390/nu13072468.

Perceived Facilitators and Barriers to Engaging with a Digital Intervention among Those with Food Insecurity, Binge Eating, and Obesity. Venkatesh A, Chang A, Green EA, Randall T, Gallagher R, Wildes JE, Graham AK. *Nutrients*. 2021 Jul 19;13(7):2458. doi: 10.3390/nu13072458.

Menu Engineering and Dietary Behavior Impact on Young Adults' Kilocalorie Choice. Bergman C, Tian Y, Moreo A, Raab C. *Nutrients*. 2021 Jul 7;13(7):2329. doi: 10.3390/nu13072329.

Preliminary assessment of the Healthy Beverage Index for U.S. Children and Adolescents: a tool to quantify the overall beverage intake quality of 2- to 19-year-olds. Parker MK, Davy BM, Hedrick VE. *J Acad Nutr Diet*. 2021 Aug 6:S2212-2672(21)00833-9. doi: 10.1016/j.jand.2021.07.007.

Five-year follow-up of a family-based multidisciplinary program for children with obesity. Wild CEK, Wynter LE, Triggs CM, Derraik JGB, Hofman PL, Anderson YC. *Obesity (Silver Spring)*. 2021 Aug 9. doi: 10.1002/oby.23225.

Effectiveness of high-intensity interval training for weight loss in adults with obesity: a randomised controlled non-inferiority trial. D'Amuri A, Sanz JM, Capatti E, Di Vece F, Vaccari F, Lazzer S, Zuliani G, Dalla Nora E, Passaro A. *BMJ Open Sport Exerc Med*. 2021 Jul 20;7(3):e001021. doi: 10.1136/bmjsem-2020-001021.

Diet quality in middle-aged and older women with and without body weight dissatisfaction: results from a population-based national nutrition survey in Switzerland. Chatelan A, Carrard I. *J Nutr Sci*. 2021 May 25;10:e38. doi: 10.1017/jns.2021.32.

Relationship between modifiable risk factors and overweight in adolescents aged 12-14 years. Jiménez Candel MI, Carpena Lucas PJ, Ceballos-Santamaría G, Mondéjar Jiménez J, Monreal Tomás AB, Lozano Pastor VE. *An Pediatr (Engl Ed)*. 2021 Aug 4:S2341-2879(21)00127-7. doi: 10.1016/j.anpede.2020.08.008.

Compliance with the 24-Hour Movement Behavior Guidelines and Associations with Adiposity in European Preschoolers: Results from the ToyBox-Study. Decraene M, Verbestel V, Cardon G, Iotova V, Koletzko B, Moreno LA, Miguel-Berges ML, Gurzkowska B, Androutsos O, Manios Y, De Craemer M. *Int J Environ Res Public Health*. 2021 Jul 14;18(14):7499. doi: 10.3390/ijerph18147499.

Dietary Patterns in Early Childhood and the Risk of Childhood Overweight: The GECKO Drenthe Birth Cohort. Sirkka O, Fleischmann M, Abrahamse-Berkveld M, Halberstadt J, Olthof MR, Seidell JC, Corpeleijn E. *Nutrients*. 2021 Jun 15;13(6):2046. doi: 10.3390/nu13062046.

Availability and placement of healthy and discretionary food in Australian supermarkets by chain and level of socio-economic disadvantage. Schultz S, Cameron AJ, Grigsby-Duffy L, Robinson E, Marshall J, Orellana L, Sacks G. *Public Health Nutr*. 2021 Feb;24(2):203-214. doi: 10.1017/S1368980020002505.

Energy-dense, nutrient-poor food and beverage sales in Australia: where and when products are sold, and how sales are changing over time. Gearon E, Riesenber D, Backholer K, Cameron AJ, Sacks G, Ni Mhurchu C, Peeters A. *Public Health Nutr.* 2021 Feb;24(2):193-202. doi: 10.1017/S1368980020002347.

Adolescent Motivation Toward Physical Exercise: The Role of Sex, Age, Enjoyment, and Anxiety. Navarro J, Escobar P, Miragall M, Cebolla A, Baños RM. *Psychol Rep.* 2021 Jun;124(3):1049-1069. doi: 10.1177/0033294120922490.

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International: Research related to COVID-19

Body mass index and Mini Nutritional Assessment-Short Form as predictors of in-hospital mortality in older adults with COVID-19. Kananen L, Eriksdotter M, Boström AM, Kivipelto M, Annetorp M, Metzner C, Bäck Jerlardtz V, Engström M, Johnson P, Lundberg LG, Åkesson E, Sühl Öberg C, Hägg S, Religa D, Jylhävä J, Cederholm T. *Clin Nutr.* 2021 Jul 29:S0261-5614(21)00360-5. doi: 10.1016/j.clnu.2021.07.025.

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Systematic reviews

Peer-supported lifestyle interventions on body weight, energy intake, and physical activity in adults: A systematic review and meta-analysis. Lim S, Lee WK, Tan A, Chen M, Tay CT, Sood S, Pirotta S, Moran LJ, Daividanam M, Busija L, Skouteris H, Awoke MA, Hill B. *Obes Rev.* 2021 Aug 13:e13328. doi: 10.1111/obr.13328.

Undergraduate medical education interventions aimed at managing patients with obesity: A systematic review of educational effectiveness. Katz NJ, Neary E, Tang N, Braund H, Cofie N, Zevin B. *Obes Rev.* 2021 Aug 11:e13329. doi: 10.1111/obr.13329.

Nonsurgical weight loss interventions: A systematic review of systematic reviews and meta-analyses. Twells LK, Harris Walsh K, Blackmore A, Adey T, Donnan J, Peddle J, Ryan D, Farrell A, Nguyen H, Gao Z, Pace D. *Obes Rev.* 2021 Aug 11:e13320. doi: 10.1111/obr.13320.

Gamification for the Improvement of Diet, Nutritional Habits, and Body Composition in Children and Adolescents: A Systematic Review and Meta-Analysis. Suleiman-Martos N, García-Lara RA, Martos-Cabrera MB, Albendín-García L, Romero-Béjar JL, Cañadas-De la Fuente GA, Gómez-Urquiza JL. *Nutrients.* 2021 Jul 20;13(7):2478. doi: 10.3390/nu13072478.

Weight management interventions that include dietary components for young people with chronic health care needs: A systematic review. Billich N, Maugeri I, Calligaro L, Truby H, Davidson ZE. *Nutr Diet.* 2021 Aug 8. doi: 10.1111/1747-0080.12698.

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