



Public Health England

Welcome to the latest issue of the weekly Obesity Knowledge Update from Public Health England. This bulletin highlights new research relating to obesity and its determinants.

If you do not wish to receive further Obesity Knowledge Updates, please [click here to unsubscribe](#). You will continue to receive other Obesity Intelligence emails (notification of new resources etc.).

- [UK and Ireland - 4](#)
- [International - 32](#)
- [Systematic reviews - 7](#)

UK and Ireland

[Ultra-processed food consumption and indicators of obesity in the United Kingdom population \(2008-2016\)](#). Rauber F, Steele EM, Louzada MLDC, Millett C, Monteiro CA, Levy RB. PLoS One. 2020 May 1;15(5):e0232676. doi: 10.1371/journal.pone.0232676.

[The descriptive epidemiology of standing activity during free-living in 5412 middle-aged adults: the 1970 British Cohort Study](#). Hamer M, Stamatakis E. J Epidemiol Community Health. 2020 Apr 29. pii: jech-2020-213783. doi: 10.1136/jech-2020-213783.

[Clinical and cost-effectiveness of a diabetes education and behavioural weight management programme versus a diabetes education programme in adults with a recent diagnosis of type 2 diabetes: study protocol for the Glucose Lowering through Weight management \(GLOW\) randomised controlled trial](#). Ahern AL, Woolston J, Wells E, Sharp SJ, Islam N, Lawlor ER, Duschinsky R, Hill AJ, Doble B, Wilson E, Morris S, Hughes CA, Brennan A, Bostock J, Boothby C, Griffin SJ. BMJ Open. 2020 Apr 28;10(4):e035020. doi: 10.1136/bmjopen-2019-035020.

[Developing and testing intervention theory by incorporating a views synthesis into a qualitative comparative analysis of intervention effectiveness](#). Melendez-Torres GJ, Sutcliffe K, Burchett HED, Rees R, Thomas J. Res Synth Methods. 2019 Sep;10(3):389-397. doi: 10.1002/jrsm.1341.

[\[back to top\]](#)

International

[Implementation intentions for weight loss in college students with overweight and obesity: a proof-of-concept randomized controlled trial](#). Hayes JF, Balantekin KN, Graham AK, Strube MJ, Bickel WK, Wilfley DE. Transl Behav Med. 2020 May 2. pii: ibaa038. doi: 10.1093/tbm/ibaa038.

[Effect of a 12-week endurance training program on force transfer and membrane integrity proteins in lean, obese, and type 2 diabetic subjects](#). Jannas-Vela S, Langer HT, Marambio H, Baar K, Zbinden-Foncea H. Physiol Rep. 2020 May;8(9):e14429. doi: 10.14814/phy2.14429.

Changes in Free-Living Glycemic Profiles after 12 Months of Lifestyle Intervention in Children with Overweight and with Obesity. Karnebeek K, Rijks JM, Dorenbos E, Gerver WM, Plat J, Vreugdenhil ACE. *Nutrients*. 2020 Apr 26;12(5). pii: E1228. doi: 10.3390/nu12051228.

HEADS UP: Design and Methods of a Louisiana State-Funded Surgical and Non-Surgical Weight Loss Program. Brantley PJ, Guan W, Brock R, Zhang D, Hu G. *Int J Environ Res Public Health*. 2020 Apr 26;17(9). pii: E2999. doi: 10.3390/ijerph17092999.

Using Cocreation to Define Contents and Functions of a Smartphone App for Obesity Prevention in Childhood: Mixed Method Study Describing the Process. Giorgi Rossi P, Ferrari F, Amarri S, Bassi A, Bonvicini L, Dall'Aglio L, Della Giustina C, Fabbri A, Ferrari AM, Ferrari E, Fontana M, Foracchia M, Gallelli T, Ganugi G, Ilari B, Lo Scocco S, Maestri G, Moretti V, Panza C, Pinotti M, Prandini R, Storani S, Street ME, Tamelli M, Trowbridge H, Venturelli F, Volta A, Davoli AM. *JMIR Mhealth Uhealth*. 2020 Feb 21. doi: 10.2196/16165.

Pilot test of an interactive obesity treatment approach among employed adults in a university medical billing office. Tabak RG, Strickland JR, Kirk B, Colvin R, Stein RI, Dart H, Colditz GA, Dale AM, Evanoff BA. *Pilot Feasibility Stud*. 2020 Apr 28;6:57. doi: 10.1186/s40814-020-00599-w. eCollection 2020.

Association between work schedules and motivation for lifestyle change in workers with overweight or obesity: a cross-sectional study in Japan. Tanikawa Y, Kimachi M, Ishikawa M, Hisada T, Fukuhara S, Yamamoto Y. *BMJ Open*. 2020 Apr 30;10(4):e033000. doi: 10.1136/bmjopen-2019-033000.

Adherence to the Mediterranean Diet and Chronic Disease in Australia: National Nutrition and Physical Activity Survey Analysis. Aridi YS, Walker JL, Roura E, Wright ORL. *Nutrients*. 2020 Apr 28;12(5). pii: E1251. doi: 10.3390/nu12051251.

Weekly, seasonal and holiday body weight fluctuation patterns among individuals engaged in a European multi-centre behavioural weight loss maintenance intervention. Turicchi J, O'Driscoll R, Horgan G, Duarte C, Palmeira AL, Larsen SC, Heitmann BL, Stubbs J. *PLoS One*. 2020 Apr 30;15(4):e0232152. doi: 10.1371/journal.pone.0232152.

Outcomes in a digital weight management intervention with one-on-one health coaching. Silberman JM, Kaur M, Sletteland J, Venkatesan A. *PLoS One*. 2020 Apr 30;15(4):e0232221. doi: 10.1371/journal.pone.0232221.

Multidimensional Cognitive Behavioral Therapy for Obesity Applied by Psychologists Using a Digital Platform: Open-Label Randomized Controlled Trial. Kim M, Kim Y, Go Y, Lee S, Na M, Lee Y, Choi S, Choi HJ. *JMIR Mhealth Uhealth*. 2020 Apr 30;8(4):e14817. doi: 10.2196/14817.

"Bad Enough to Cook for Two, Worse for One" - Mixed Method Evaluation of Eating Behavior among Community Dwelling Older Adults. Knippen KL, Lee H, Ford T, Welch P. *J Nutr Gerontol Geriatr*. 2020 Apr 30;1-22. doi: 10.1080/21551197.2020.1759478.

The role of weight perceptions and their impact on health and well-being: A multiple mediation model. Dias Neto D, Mourinho Baptista T, Marques C, Sousa Ferreira A. *Clin Obes*. 2020 Apr 30:e12362. doi: 10.1111/cob.12362.

Nonalcoholic Fatty Liver Disease Is Associated With Low Skeletal Muscle Mass in Overweight/Obese Youths. Pacifico L, Perla FM, Andreoli G, Grieco R, Pierimarchi P, Chiesa C. *Front Pediatr*. 2020 Apr 15;8:158. doi: 10.3389/fped.2020.00158.

Longitudinal relationship of favorable weight change to academic performance in children. Ishihara T, Nakajima T, Yamatsu K, Okita K, Sagawa M, Morita N. NPJ Sci Learn. 2020 Apr 24;5:4. doi: 10.1038/s41539-020-0063-z.

Obesity in African-Americans: Is physiology to blame? Gower BA, Fowler LA. J Intern Med. 2020 Apr 29. doi: 10.1111/joim.13090.

Prevalence and time trends of overweight, obesity and severe obesity in 447,925 Swedish adults, 1995-2017. Hemmingsson E, Ekblom Ö, Kallings LV, Andersson G, Wallin P, Söderling J, Blom V, Ekblom B, Ekblom-Bak E. Scand J Public Health. 2020 Apr 30;1403494820914802. doi: 10.1177/1403494820914802.

The Extent and Nature of Food and Beverage Company Sponsorship of Children's Sports Clubs in Canada: A Pilot Study. Pauzé E, Ekeh O, Kent MP. Int J Environ Res Public Health. 2020 Apr 27;17(9). pii: E3023. doi: 10.3390/ijerph17093023.

How will the main risk factors contribute to the burden of non-communicable diseases under different scenarios by 2050? A modelling study. Devaux M, Lerouge A, Giuffre G, Giesecke S, Baiocco S, Ricci A, Reyes F, Cantarero D, Ventelou B, Cecchini M. PLoS One. 2020 Apr 29;15(4):e0231725. doi: 10.1371/journal.pone.0231725.

The Design of A Clinical Trial to Increase Self-Monitoring of Physical Activity and Eating Behaviors Among Adolescents: Protocol for the ImPACT Feasibility Study. Moore JB, Singletary CR, Skelton JA, Miller DP Jr, Miller DP Jr, Heboyan V, De Leo G, Turner-McGrievy G, Ip EH, Ip EH. JMIR Res Protoc. 2020 Feb 29. doi: 10.2196/18098.

Associations Between Parent Self-Reported and Accelerometer-Measured Physical Activity and Sedentary Time in Children: Ecological Momentary Assessment Study. de Brito JN, Loth KA, Tate A, Berge JM. JMIR Mhealth Uhealth. 2020 Feb 26. doi: 10.2196/15458.

Effect of an mHealth Intervention Using a Pedometer App With Full In-Person Counseling on Body Composition of Overweight Adults: Randomized Weight Loss Trial. Hernández-Reyes A, Cámara-Martos F, Molina-Luque R, Moreno-Rojas R. JMIR Mhealth Uhealth. 2020 Feb 10. doi: 10.2196/16999.

Food and beverage marketing in schools: school superintendents' perspectives and practices after the healthy, Hunger-Free Kids Act. Asada Y, Harris JL, Mancini S, Schwartz MB, Chriqui JF. Public Health Nutr. 2020 Apr 29;1-8. doi: 10.1017/S1368980019004804.

Bus Stops Near Schools Advertising Junk Food and Sugary Drinks. Huang D, Brien A, Omari L, Culpin A, Smith M, Egli V. Nutrients. 2020 Apr 24;12(4). pii: E1192. doi: 10.3390/nu12041192.

Step-Based Metrics and Overall Physical Activity in Children With Overweight or Obesity: Cross-Sectional Study. Migueles JH, Cadenas-Sanchez C, Aguiar EJ, Molina-Garcia P, Solis-Urra P, Mora-Gonzalez J, García-Mármol E, Shiroma EJ, Labayen I, Chillón P, Löff M, Tudor-Locke C, Ortega FB. JMIR Mhealth Uhealth. 2020 Apr 28;8(4):e14841. doi: 10.2196/14841.

Impact of a nutrition education programme on preschool children's willingness to consume fruits and vegetables. Melnick EM, Thomas K, Farewell C, Quinlan J, LaFlamme D, Brogden D, Scarbro S, Puma JE. Public Health Nutr. 2020 Apr 28;1-8. doi: 10.1017/S1368980019005032.

Healthy nutrition in Germany: a survey analysis of social causes, obesity and socioeconomic status. Mader S, Rubach M, Schaecke W, Röger C, Feldhoffer I, Thalmeier EM. Public Health Nutr. 2020 Apr 27;1-15. doi: 10.1017/S1368980019004877.

Taxes on unhealthy food and externalities in the parental choice of children's diet. Kalamov Z, Runkel M. Health Econ. 2020 Apr 26. doi: 10.1002/hec.4024.

The role of comorbidity in the association of obesity with unemployment and disability. Le Strat Y, Melchior M, Gorwood P, Tebeka S, Dubertret C. Ann Epidemiol. 2020 Apr 2. pii: S1047-2797(20)30135-6. doi: 10.1016/j.annepidem.2020.03.004.

Dietary quality among children from 6 months to 4 years, NHANES 2011-2016. Hamner HC, Moore LV. Am J Clin Nutr. 2020 Jan 1;111(1):61-69. doi: 10.1093/ajcn/nqz261.

Baseline Psychosocial and Demographic Factors Associated with Study Attrition and 12-Month Weight Gain in the DIETFITS Trial. Fielding-Singh P, Patel ML, King AC, Gardner CD. Obesity (Silver Spring). 2019 Dec;27(12):1997-2004. doi: 10.1002/oby.22650.

Antiobesity Medication Use in 2.2 Million Adults Across Eight Large Health Care Organizations: 2009-2015. Saxon DR, Iwamoto SJ, Mettenbrink CJ, McCormick E, Arterburn D, Daley MF, Oshiro CE, Koebnick C, Horberg M, Young DR, Bessesen DH. Obesity (Silver Spring). 2019 Dec;27(12):1975-1981. doi: 10.1002/oby.22581.

[\[back to top\]](#)

Systematic reviews

A systematic review on the association of month and season of birth with future anthropometric measures. Hemati Z, Keikha M, Riahi R, Daniali SS, Goudarzi M, Kelishadi R. Pediatr Res. 2020 Apr 30. doi: 10.1038/s41390-020-0908-4.

The effect of Berberine on weight loss in order to prevent obesity: A systematic review. Ilyas Z, Perna S, Al-Thawadi S, Alalwan TA, Riva A, Petrangolini G, Gasparri C, Infantino V, Peroni G, Rondanelli M. Biomed Pharmacother. 2020 Apr 27;127:110137. doi: 10.1016/j.biopha.2020.110137.

Metabolic risk factors and incident advanced liver disease in non-alcoholic fatty liver disease (NAFLD): A systematic review and meta-analysis of population-based observational studies. Jarvis H, Craig D, Barker R, Spiers G, Stow D, Anstee QM, Hanratty B. PLoS Med. 2020 Apr 30;17(4):e1003100. doi: 10.1371/journal.pmed.1003100.

Effectiveness of Text Message Interventions for Weight Management in Adolescents: Systematic Review. Partridge SR, Raeside R, Singleton A, Hyun K, Redfern J. JMIR Mhealth Uhealth. 2020 Feb 10. doi: 10.2196/15849.

Communication of children's weight status: what is effective and what are the children's and parents' experiences and preferences? A mixed methods systematic review. Ames H, Mosdøl A, Blaasvær N, Nøkleby H, Berg RC, Langøien LJ. BMC Public Health. 2020 Apr 28;20(1):574. doi: 10.1186/s12889-020-08682-w.

Effectiveness of Mobile Health Interventions on Diabetes and Obesity Treatment and Management: Systematic Review of Systematic Reviews. Wang Y, Min J, Khuri J, Xue H, Xie B, A Kaminsky L, J Cheskin L. JMIR Mhealth Uhealth. 2020 Apr 28;8(4):e15400. doi: 10.2196/15400.

Effects of fasting intervention regulating anthropometric and metabolic parameters in subjects with overweight or obesity: a systematic review and meta-analysis. Yan S, Wang C, Zhao H, Pan Y, Wang H, Guo Y, Yao N, Li B, Cui W. Food Funct. 2020 Apr 28. doi: 10.1039/d0fo00287a.

[\[back to top\]](#)