



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 - 5](#)
- [International - 43](#)
- [Systematic reviews - 4](#)

## UK and Ireland

[Physical illnesses associated with childhood homelessness: a literature review](#). Strashun S, D'Sa S, Foley D, Hannon J, Murphy AM, O'Gorman CS. *Ir J Med Sci*. 2020 May 8. doi: 10.1007/s11845-020-02233-3

[How Does Obesity Influence the Risk of Vertebral Fracture? Findings From the UK Biobank Participants](#). Luo J, Lee RY. *JBMR Plus*. 2020 Mar 26;4(5):e10358. doi: 10.1002/jbm4.10358.

[Associations of childcare type, age at start, and intensity with body mass index trajectories from 10 to 42 years of age in the 1970 British Cohort Study](#). Costa S, Bann D, Benjamin-Neelon SE, Adams J, Johnson W. *Pediatr Obes*. 2020 May 5:e12644. doi: 10.1111/ijpo.12644.

[Active travelling to school is not associated with increased total daily physical activity levels, or reduced obesity and cardiovascular/pulmonary health parameters in 10-12-year olds: a cross-sectional cohort study](#). Zhang X, Smith NA, Sumowski MT, Anderson JM, Anderson K, Badenoch EA, Brady SJ, Coleman M, Coull RF, Green D, Innes RJ, Laing CM, Mckinley R, McLennan MS, Murray S, Phillips B, Rae S, Rankin S, Satar I, Shanks S, Sim FJ, Walker N, Howard D, Sniehotta FF, Jackson DM, VaanHolt LM, Hambly C, Speakman JR. *Int J Obes (Lond)*. 2020 May 4. doi: 10.1038/s41366-020-0571-1.

[Reducing consumption of unhealthy foods and beverages through banning price promotions: what is the evidence and will it work?](#) Watt TL, Beckert W, Smith RD, Cornelsen L. *Public Health Nutr*. 2020 May 5:1-6. doi: 10.1017/S1368980019004956.

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

## International

[Misperceptions and barriers to obesity management: Italian data from the ACTION-IO study](#). Sbraccia P, Busetto L, Santini F, Mancuso M, Nicoziani P, Nicolucci A. *Eat Weight Disord*. 2020 May 8. doi: 10.1007/s40519-020-00907-6.

Health indicators of the National Roma Integration Strategy in Spain in the years 2006 and 2014. La Parra-Casado D, Arza-Porras J, Estévez JF. Eur J Public Health. 2020 May 8. pii: ckaa070. doi: 10.1093/eurpub/ckaa070.

Avoiding hypersensitive reluctance to address parental responsibility in childhood obesity. Feiring E, Traina G, Fystro JR, Hofmann B. J Med Ethics. 2020 May 8. pii: medethics-2020-106120. doi: 10.1136/medethics-2020-106120.

Adolescent follow-up in the Health Outcomes and Measures of the Environment (HOME) Study: cohort profile. Braun JM, Buckley JP, Cecil KM, Chen A, Kalkwarf HJ, Lanphear BP, Xu Y, Woeste A, Yolton K. BMJ Open. 2020 May 7;10(5):e034838. doi: 10.1136/bmjopen-2019-034838.

A Weight-Loss Intervention Augmented by a Wearable Device in Rural Older Adults with Obesity: A Feasibility Study. Batsis JA, Petersen CL, Clark MM, Cook SB, Lopez-Jimenez F, Al-Nimr RI, Pidgeon D, Kotz D, Mackenzie TA, Bartels SJ. J Gerontol A Biol Sci Med Sci. 2020 May 8. pii: glaa115. doi: 10.1093/gerona/glaa115.

Physical activity and risk of cardiovascular disease by weight status among U.S adults. Zhang X, Cash RE, Bower JK, Focht BC, Paskett ED. PLoS One. 2020 May 8;15(5):e0232893. doi: 10.1371/journal.pone.0232893

Identifying underlying medical causes of pediatric obesity: Results of a systematic diagnostic approach in a pediatric obesity center. Kleinendorst L, Abawi O, van der Voorn B, Jongejan MHTM, Brandsma AE, Visser JA, van Rossum EFC, van der Zwaag B, Alders M, Boon EMJ, van Haelst MM, van den Akker ELT. PLoS One. 2020 May 8;15(5):e0232990. doi: 10.1371/journal.pone.0232990.

Obesity: Lifestyle Modification and Behavior Interventions. Wilson K. FP Essent. 2020 May;492:19-24.

Use of Small-Area Estimates to Describe County-Level Geographic Variation in Prevalence of Extreme Obesity Among US Adults. Mills CW, Johnson G, Huang TTK, Balk D, Wyka K. JAMA Netw Open. 2020 May 1;3(5):e204289. doi: 10.1001/jamanetworkopen.2020.4289.

Minority and low-income patients are less likely to have a scale for self-weighing in their home: A survey in primary care. Bramante CT, Lee G, Amsili SS, Linde JA, Phelan SM, Appel LJ, Bennett WL, Clark JM, Gudzone KA. Clin Obes. 2020 May 7:e12363. doi: 10.1111/cob.12363.

Greater social cohesion is associated with lower body mass index among African American adults. Cuevas AG, Kawachi I, Ortiz K, Pena M, Reitzel LR, McNeill LH. Prev Med Rep. 2020 Apr 23;18:101098. doi: 10.1016/j.pmedr.2020.101098.

Effect of maternal active smoking during pregnancy on the trajectory of childhood body mass index: A multilevel analysis using quartiles of birthweight. Kamiya M, Suzuki K, Yamagata Z. Tob Induc Dis. 2020 Apr 24;18:34. doi: 10.18332/tid/119117.

Study of active neighborhoods in Detroit (StAND): study protocol for a natural experiment evaluating the health benefits of ecological restoration of parks. Pearson AL, Pfeiffer KA, Gardiner J, Horton T, Buxton RT, Hunter RF, Breeze V, McDade T. BMC Public Health. 2020 May 7;20(1):638. doi: 10.1186/s12889-020-08716-3.

Translation of two healthy eating and active living support programs for parents of 2-6 year old children: a parallel partially randomised preference trial protocol (the 'time for healthy habits' trial). Hammersley ML, Wyse RJ, Jones RA, Wolfenden L, Yoong S, Stacey F, Eckermann S, Okely AD, Innes-Hughes C, Li V, Green A, May C, Xu J, Rissel C. BMC Public Health. 2020 May 7;20(1):636. doi: 10.1186/s12889-020-08526-7.

Analysis of the Relationship between Sleep Duration and Body Mass Index among Korean Adolescents Using Data from the 2013-2015 Korea National Health and Nutrition Examination Survey. Lee BR, Hong SK, Cho SI, Kim SC. Korean J Fam Med. 2020 May 8. doi: 10.4082/kjfm.18.0143.

Association of Multisetting Community Programs and Policies With Child Body Mass Index: The Healthy Communities Study. Collie-Akers VL, Fawcett SB, Schultz JA, Fleming KK, Swinburne Romine RE, Ritchie LD, Frongillo EA, Arteaga SS. Prev Chronic Dis. 2020 May 7;17:E34. doi: 10.5888/pcd17.190196.

Phenotypes of controlling feeding behaviours in mothers of toddlers: A mixed methods study. Pesch MH, Julian MM, Lo SL, Wu Y, Miller AL, Appugliese D, Lumeng JC. Pediatr Obes. 2020 May 7:e12639. doi: 10.1111/ijpo.12639.

Trajectories of BMI Before Diagnosis of Type 2 Diabetes: The Rotterdam Study. Nano J, Dhana K, Asllanaj E, Sijbrands E, Ikram MA, Dehghan A, Muka T, Franco OH. Obesity (Silver Spring). 2020 May 7. doi: 10.1002/oby.22802.

The impact of short sleep on food reward processes in adolescents. Duraccio KM, Krietsch KN, Zhang N, Whitacre C, Howarth T, Pfeiffer M, Beebe DW. J Sleep Res. 2020 May 7:e13054. doi: 10.1111/jsr.13054.

Contributions of Anthropometrics and Lifestyle to Blood Pressure in Japanese University Students : Investigation by Annual Health Screening. Yamamoto N, Maruyama T, Masaki Y, Nagano J, Irie M, Kajitani K, Tsuchimoto R, Sato T. J Med Invest. 2020;67(1.2):174-181. doi: 10.2152/jmi.67.174.

Using Simulation Modeling to Guide the Design of the Girl Scouts Fierce & Fit Program. Ferguson MC, Morgan MJ, O'Shea KJ, Winch L, Siegmund SS, Solano Gonzales M, Randall S, Hertenstein DL, Montague V, Woodberry A, Cassatt T, Lee BY. Obesity (Silver Spring). 2020 May 7. doi: 10.1002/oby.22827.

Stability and Change in Early Life Economic Hardship Trajectories and the Role of Sex in Predicting Adolescent Overweight/Obesity. Daundasekara SS, Schuler BR, Hernandez DC. J Youth Adolesc. 2020 May 6. doi: 10.1007/s10964-020-01249-3.

Overweight & obese Australian adults and micronutrient deficiency. McKay J, Ho S, Jane M, Pal S. BMC Nutr. 2020 May 1;6:12. doi: 10.1186/s40795-020-00336-9.

Prevalence of Metabolic Syndrome in Middle School Children and Evaluation of Components of Metabolic Syndrome. Elitok GK, Duru NS, Eveli M, Sağlam ZA, Karşıdağ K. Sisli Etfal Hastan Tip Bul. 2019 Nov 21;53(4):403-408. doi: 10.14744/SEMB.2018.50479.

Area-level socioeconomic disparity trends in nutritional status among 5-6-year-old children in Israel. Loewenberg Weisband Y, Kaufman-Shriqui V, Wolff Sagy Y, Krieger M, Abu Ahmad W, Manor O. Arch Dis Child. 2020 May 6. pii: archdischild-2019-318595. doi: 10.1136/archdischild-2019-318595.

Post-traumatic stress disorder and the association with overweight, obesity, and weight change among individuals exposed to the World Trade Center disaster, 2003-2016. Takemoto E, Van Oss KR, Chamany S, Brite J, Brackbill R. *Psychol Med*. 2020 May 7:1-10. doi: 10.1017/S0033291720001208.

Higher prevalence of obesity among children with functional abdominal pain disorders. Galai T, Moran-Lev H, Cohen S, Ben-Tov A, Levy D, Weintraub Y, Amir A, Segev O, Yerushalmy-Feler A. *BMC Pediatr*. 2020 May 6;20(1):193. doi: 10.1186/s12887-020-02106-9.

Effect of the Smart Moms intervention on targeted mediators of change in child sugar-sweetened beverage intake. Nezami BT, Lytle LA, Ward DS, Ennett ST, Tate DF. *Public Health*. 2020 May 3;182:193-198. doi: 10.1016/j.puhe.2020.03.015.

A Secondary Data Analysis Examining Young Adults' Performance in an Internet Weight Loss Program with Financial Incentives. LaRose JG, Leahey TM, Lanoye A, Reading J, Wing RR. *Obesity (Silver Spring)*. 2020 May 6. doi: 10.1002/oby.22797.

Childhood adversity is linked to adult health among African Americans via adolescent weight gain and effects are genetically moderated. Beach SRH, Ong ML, Lei MK, Klopock E, Carter SE, Simons RL, Gibbons FX, Lavner JA, Philibert RA, Ye K. *Dev Psychopathol*. 2020 May 6:1-18. doi: 10.1017/S0954579420000061.

Bedtime, body mass index and obesity risk in preschool-aged children. Roy M, Haszard JJ, Savage JS, Yolton K, Beebe DW, Xu Y, Galland B, Paul IM, Mindell JA, Mhrshahi S, Wen LM, Taylor B, Richards R, Te Morenga L, Taylor RW. *Pediatr Obes*. 2020 May 6. doi: 10.1111/ijpo.12650.

Effect of a responsive parenting intervention on child emotional overeating is mediated by reduced maternal use of food to soothe: The INSIGHT RCT. Harris HA, Anzman-Frasca S, Marini ME, Paul IM, Birch LL, Savage JS. *Pediatr Obes*. 2020 May 5:e12645. doi: 10.1111/ijpo.12645.

Delayed meal timing after exercise is associated with reduced appetite and energy intake in adolescents with obesity. Fillon A, Beaulieu K, Miguët M, Bailly M, Finlayson G, Julian V, Masurier J, Pereira B, Duclos M, Boirie Y, Thivel D. *Pediatr Obes*. 2020 May 6. doi: 10.1111/ijpo.12651.

Effective strategies for childhood obesity prevention via school based, family involved interventions: a critical review for the development of the Feel4Diabetes-study school based component. Lambrinou CP, Androutsos O, Karaglani E, Cardon G, Huys N, Wikström K, Kivelä J, Ko W, Karuranga E, Tsochev K, Iotova V, Dimova R, De Miguel-Etayo P, M González-Gil E, Tamás H, Jancsó Z, Liatis S, Makrilakis K, Manios Y; Feel4Diabetes-study group. *BMC Endocr Disord*. 2020 May 6;20(Suppl 2):52. doi: 10.1186/s12902-020-0526-5.

Cluster Analysis of Physical Activity Patterns, and Relationship with Sedentary Behavior and Healthy Lifestyles in Prepubertal Children: Genobox Cohort. Leis R, Jurado-Castro JM, Llorente-Cantarero FJ, Anguita-Ruiz A, Iris-Rupérez A, Bedoya-Carpente JJ, Vázquez-Cobela R, Aguilera CM, Bueno G, Gil-Campos M. *Nutrients*. 2020 May 1;12(5). pii: E1288. doi: 10.3390/nu12051288.

The association between distress tolerance and eating expectancies among trauma-exposed college students with obesity. Kauffman BY, Bakhshai J, Zvolensky MJ. *J Am Coll Health*. 2020 May 5:1-6. doi: 10.1080/07448481.2020.1754223.

Potential for unintended consequences: The association between smoking and body mass index among public housing residents in Baltimore, MD. Ellison-Barnes A, Pollack CE, Levine D, Latkin C, Clark JM, Gudzone KA. *Prev Med Rep.* 2020 Mar 24;18:101081. doi: 10.1016/j.pmedr.2020.101081.

Predictors of household food insecurity and relationship with obesity in First Nations communities in British Columbia, Manitoba, Alberta and Ontario. Domingo A, Spiegel J, Guhn M, Wittman H, Ing A, Sadik T, Fediuk K, Tikhonov C, Schwartz H, Chan HM, Batal M. *Public Health Nutr.* 2020 May 5:1-13. doi: 10.1017/S1368980019004889.

Food Advertising to Children in New Zealand: A Critical Review of the Performance of a Self-Regulatory Complaints System Using a Public Health Law Framework. Sing F, Mackay S, Culpin A, Hughes S, Swinburn B. *Nutrients.* 2020 Apr 30;12(5). pii: E1278. doi: 10.3390/nu12051278.

The Relationship between Weight Status, Health-Related Quality of Life, and Life Satisfaction in a Sample of Spanish Adolescents. Baile JI, Guevara RM, González-Calderón MJ, Urchaga JD. *Int J Environ Res Public Health.* 2020 Apr 29;17(9). pii: E3106. doi: 10.3390/ijerph17093106.

Nutritional Quality of Hidden Food and Beverage Advertising Directed to Children: Extent and Nature of Product Placement in Mexican Television Programs. Munguía A, Tolentino-Mayo L, Théodore FL, Vandevijvere S. *Int J Environ Res Public Health.* 2020 Apr 29;17(9). pii: E3086. doi: 10.3390/ijerph17093086.

Policies influencing the provision of healthy food and drinks in local government-owned sport and recreation facilities in Victoria, Australia. Riesenber D, Blake MR, Boelsen-Robinson T, Peeters A, Cameron AJ. *Aust N Z J Public Health.* 2020 May 4. doi: 10.1111/1753-6405.12988.

Analysis of physiological data from long-term physical exercise: A basis for improving the health of rural residents of Korea. Kim K, Kim TW, Kim SH. *Technol Health Care.* 2020 Apr 24. doi: 10.3233/THC-209026.

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

## Systematic reviews

A systematic review of interventions to improve the dietary intake, physical activity and weight status of children attending family day care services. Yoong SL, Lum M, Jones J, Kerr E, Falkiner M, Delaney T, McCrabb S, Chai LK, Seward K, Grady A. *Public Health Nutr.* 2020 May 8:1-10. doi: 10.1017/S1368980019005275.

A Systematic Review of Active Video Games on Youth's Body Composition and Physical Activity. Gao Z, Zeng N, McDonough DJ, Su X. *Int J Sports Med.* 2020 May 6. doi: 10.1055/a-1152-4959.

Accelerated weight gain, prematurity, and the risk of childhood obesity: A meta-analysis and systematic review. Ou-Yang MC, Sun Y, Liebowitz M, Chen CC, Fang ML, Dai W, Chuang TW, Chen JL. *PLoS One.* 2020 May 5;15(5):e0232238. doi: 10.1371/journal.pone.0232238.

Conventional weight loss interventions across the different BMI obesity classes: A systematic review and quantitative comparative analysis. Bauer K, Lau T, Schwille-Kiuntke J, Schild S, Hauner H, Stengel A, Zipfel S, Mack I. *Eur Eat Disord Rev.* 2020 May 3. doi: 10.1002/erv.2741.

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