



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.

PHE is not responsible for the content of articles published by external organisations.

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 - 23
- Systematic reviews - 3

UK and Ireland

Genetic risk of obesity as a modifier of associations between neighbourhood environment and body mass index: an observational study of 335 046 UK Biobank participants. Mason KE, Palla L, Pearce N, Phelan J, Cummins S. BMJ Nutr Prev Health. 2020 Oct 5;3(2):247-255. doi: 10.1136/bmjnph-2020-000107.

Planning and Public Health professionals' experiences of using the planning system to regulate hot food takeaway outlets in England: A qualitative study. Keeble M, Burgoine T, White M, Summerbell C, Cummins S, Adams J. Health Place. 2021 Jan;67:102305. doi: 10.1016/j.healthplace.2020.102305.

The Development of a Multilevel Intervention to Optimise Participant Engagement with an Obesity Prevention Programme Delivered in UK children's Centres. Burton W, Sahota P, Twiddy M, Brown J, Bryant M. Prev Sci. 2021 Feb 1. doi: 10.1007/s11121-021-01205-y.

Developing healthy weight maintenance through co-creation: a partnership with Black African migrant community in East Midlands. Ochieng L, Amaugo L, Ochieng BMN. Eur J Public Health. 2021 Feb 3:ckaa222. doi: 10.1093/eurpub/ckaa222.

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

UK and Ireland: Research related to COVID-19

Measures of Adiposity and Risk of Testing Positive for SARS-CoV-2 in the UK Biobank Study. Christensen RAG, Sturrock SL, Arneja J, Brooks JD. J Obes. 2021 Jan 22;2021:8837319. doi: 10.1155/2021/8837319.

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

International

Sex and gender differences in childhood obesity: contributing to the research agenda. Shah B, Tombeau Cost K, Fuller A, Birken CS, Anderson LN. *BMJ Nutr Prev Health.* 2020 Sep 9;3(2):387-390. doi: 10.1136/bmjnph-2020-000074.

Associations between the built environment and obesity: an umbrella review. Lam TM, Vaartjes I, Grobbee DE, Karssenberg D, Lakerveld J. *Int J Health Geogr.* 2021 Feb 1;20(1):7. doi: 10.1186/s12942-021-00260-6.

The obesity paradigm and the role of health services in obesity prevention: a grounded theory approach. Pearce C, Rychetnik L, Wilson A. *BMC Health Serv Res.* 2021 Feb 2;21(1):111. doi: 10.1186/s12913-021-06089-w.

A practical approach to obesity prevention: Healthy home habits. Fruh S, Williams S, Hayes K, Hauff C, Hudson GM, Sittig S, Graves RJ, Hall H, Barinas J. *J Am Assoc Nurse Pract.* 2021 Jan 27. doi: 10.1097/JXX.0000000000000556.

Development of a Genetic Risk Score to predict the risk of overweight and obesity in European adolescents from the HELENA study. Seral-Cortes M, Sabroso-Lasa S, De Miguel-Etayo P, Gonzalez-Gross M, Gesteiro E, Molina-Hidalgo C, De Henauw S, Gottrand F, Mavrogianni C, Manios Y, Plada M, Widhalm K, Kafatos A, Erhardt É, Meirhaeghe A, Salazar-Tortosa D, Ruiz J, Moreno LA, Esteban LM, Labayen I. *Sci Rep.* 2021 Feb 4;11(1):3067. doi: 10.1038/s41598-021-82712-4.

How Many US Children and Adolescents with Overweight and Obesity Could Improve Their Percent Body Fat by Exercising?: Meta-Analytic Based Estimates. Kelley GA, Kelley KS, Pate RR. *Child Obes.* 2021 Feb 5. doi: 10.1089/chi.2020.0245.

Effects of a Protein-Rich, Low-Glycaemic Meal Replacement on Changes in Dietary Intake and Body Weight Following a Weight-Management Intervention-The ACOORH Trial. Röhling M, Stensitzky A, Oliveira CLP, Beck A, Braumann KM, Halle M, Führer-Sakel D, Kempf K, McCarthy D, Predel HG, Schenkenberger I, Toplak H, Berg A. *Nutrients.* 2021 Jan 26;13(2):376. doi: 10.3390/nu13020376.

Physical Activity Drops During Summer Holidays for 6- to 9-Year-Old Children. Volmut T, Pišot R, Planinšec J, Šimunič B. *Front Public Health.* 2021 Jan 18;8:631141. doi: 10.3389/fpubh.2020.631141.

The early effects of cumulative and individual adverse childhood experiences on child diet: Examining the role of socioeconomic status. Schuler BR, Vazquez C, Kobulsky JM, Schroeder K, Tripicchio GL, Wildfeuer R. *Prev Med.* 2021 Feb 2:106447. doi: 10.1016/j.ypmed.2021.106447.

Exploring the relationship between appetitive behaviours, executive function, and weight status among preschool children. Rhee KE, Manzano M, Goffin S, Strong D, Boutelle KN. *Pediatr Obes.* 2021 Feb 2:e12774. doi: 10.1111/ijpo.12774.

Feasibility of Integration of Yoga in a Behavioral Weight-Loss Intervention: A Randomized Trial. Jakicic JM, Davis KK, Rogers RJ, Sherman SA, Barr S, Marcin ML, Collins KA, Collins AM, Yuan N, Lang W. *Obesity (Silver Spring).* 2021 Feb 2. doi: 10.1002/oby.23089.

Poor Mental Health Is Related to Excess Weight via Lifestyle: A Cross-Sectional Gender-and Age-Dependent Mediation Analysis. Michels N. Nutrients. 2021 Jan 28;13(2):406. doi: 10.3390/nu13020406.

Effects of very low volume high intensity versus moderate intensity interval training in obese metabolic syndrome patients: a randomized controlled study. Reljic D, Frenk F, Herrmann HJ, Neurath MF, Zopf Y. Sci Rep. 2021 Feb 2;11(1):2836. doi: 10.1038/s41598-021-82372-4.

Examining Nutrition and Food Waste Trade-offs Using an Obesity Prevention Context. Ellison B, Prescott MP. J Nutr Educ Behav. 2021 Jan 30:S1499-4046(20)30711-9. doi: 10.1016/j.jneb.2020.11.005.

Fostering Innovation in Prevention and Treatment of Obesity in Youth: Digitally Mediated Physical Play as an Exemplar. Kalarchian MA, Hammer J, Kapuścińska A. *Obesity* (Silver Spring). 2021 Feb 4. doi: 10.1002/oby.23113.

General and specific graphic health warning labels reduce willingness to consume sugar-sweetened beverages. Schubert E, Smith E, Brydevall M, Lynch C, Ringin E, Dixon H, Kashima Y, Wakefield M, Bode S. *Appetite*. 2021 Jan 29:105141. doi: 10.1016/j.appet.2021.105141.

Weight Loss and Improvement of Metabolic Alterations in Overweight and Obese Children Through the I2AO2 Family Program: A Randomized Controlled Clinical Trial. Fernández-Ruiz VE, Solé-Agustí M, Armero-Barranco D, Cauli O. *Biol Res Nurs.* 2021 Feb 1:1099800420987303. doi: 10.1177/1099800420987303.

Childhood Overweight/Obesity and the Physical Activity Environment in Rhode Island. Flanagan S, Rogers ML, Carlson L, Jelalian E, Vivier PM. *R I Med J* (2013). 2021 Feb 1;104(1):42-46.

Self-estimated BMI, but not self-perceived body size, accurately identifies unhealthy weight in US adults. Smith MP. *BMC Public Health.* 2021 Jan 30;21(1):253. doi: 10.1186/s12889-021-10316-8.

Examining associative conditioning with a positive peer context as a strategy to increase children's vegetable acceptance. Tauriello S, Bowker J, Wilding G, Epstein L, Anzman-Frasca S. *Pediatr Obes.* 2020 Oct;15(10):e12660. doi: 10.1111/ijpo.12660.

The Impact of Dietary Patterns and Nutrition in Nonalcoholic Fatty Liver Disease. Kim A, Krishnan A, Hamilton JP, Woreta TA. *Gastroenterol Clin North Am.* 2021 Mar;50(1):217-241. doi: 10.1016/j.gtc.2020.10.013.

[back to top]

International: Research related to COVID-19

Updated overview on the interplay between obesity and COVID-19. Onorato D, Carpenè G, Lippi G, Pucci M. *Diagnosis (Berl).* 2020 Nov 19;8(1):5-16. doi: 10.1515/dx-2020-0111.

Childhood Obesity and COVID-19 Lockdown: Remarks on Eating Habits of Patients Enrolled in a Food-Education Program. Nicodemo M, Spreghini MR, Manco M, Wietrzykowska Sforza R, Morino G. *Nutrients.* 2021 Jan 26;13(2):383. doi: 10.3390/nu13020383.

[back to top]

Systematic reviews

Alcohol, calories, and obesity: A rapid systematic review and meta-analysis of consumer knowledge, support, and behavioral effects of energy labeling on alcoholic drinks. Robinson E, Humphreys G, Jones A. *Obes Rev.* 2021 Feb 2. doi: 10.1111/obr.13198.

A Systematic Review of Economic Evaluations of Health-Promoting Food Retail-Based Interventions. Tran HNQ, McMahon E, Moodie M, Ananthapavan J. *Int J Environ Res Public Health.* 2021 Feb 2;18(3):1356. doi: 10.3390/ijerph18031356.

Implementation at-scale of school-based physical activity interventions: A systematic review utilizing the RE-AIM framework. Kennedy SG, Sanders T, Estabrooks PA, Smith JJ, Lonsdale C, Foster C, Lubans DR. *Obes Rev.* 2021 Feb 1. doi: 10.1111/obr.13184.

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