



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 - 1](#)
- [International - 33](#)
- [Systematic reviews - 3](#)

UK and Ireland

[Testing the feasibility of a sustainable preschool obesity prevention approach: a mixed-methods service evaluation of a volunteer-led HENRY programme.](#) Howlett N, Roberts KPJ, Swanston D, Edmunds LD, Willis TA. BMC Public Health. 2021 Jan 6;21(1):46. doi: 10.1186/s12889-020-10031-w.

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

International

[Breakfast and dinner insulin index and insulin load in relation to overweight in children and adolescents.](#) Caferoglu Z, Erdal B, Akin L, Kurtoglu S. Eur J Nutr. 2021 Jan 9. doi: 10.1007/s00394-020-02478-9.

[Clinical Assessment and Treatment of Early-Onset Severe Obesity.](#) Raatz S, Gross AC. Curr Obes Rep. 2021 Jan 7. doi: 10.1007/s13679-020-00418-6.

[Prevalence of Overweight and Obesity Among African American Children and Adolescents: Risk Factors, Health Outcomes, and Prevention/Intervention Strategies.](#) Sutherland ME. J Racial Ethn Health Disparities. 2021 Jan 8. doi: 10.1007/s40615-020-00890-9.

[An Exploration of the Role of Sugar-Sweetened Beverage in Promoting Obesity and Health Disparities.](#) Sigala DM, Stanhope KL. Curr Obes Rep. 2021 Jan 7:1-14. doi: 10.1007/s13679-020-00421-x.

[Obesity and overall mortality: findings from the Jackson Heart Study.](#) Min YI, Gao Y, Anugu P, Anugu A, Correa A. BMC Public Health. 2021 Jan 6;21(1):50. doi: 10.1186/s12889-020-10040-9.

A measure development study of sugar-sweetened beverage-related knowledge, self-efficacy, and intention among urban, low-income adults. Heaton B, Wright JA, Bond JC, Quintiliani LM. BMC Public Health. 2021 Jan 7;21(1):69. doi: 10.1186/s12889-020-10073-0.

The association between sleep health and weight change during a 12-month behavioral weight loss intervention. Kline CE, Chasens ER, Bizhanova Z, Sereika SM, Buysse DJ, Imes CC, Kariuki JK, Mendez DD, Cajita MI, Rathbun SL, Burke LE. Int J Obes (Lond). 2021 Jan 7. doi: 10.1038/s41366-020-00728-8.

Annual rhythms in adults' lifestyle and health (ARIA): protocol for a 12-month longitudinal study examining temporal patterns in weight, activity, diet, and wellbeing in Australian adults. Curtis RG, Olds T, Fraysse F, Dumuid D, Hendrie GA, Esterman A, Brown WJ, Ferguson T, Lagiseti R, Maher CA. BMC Public Health. 2021 Jan 7;21(1):70. doi: 10.1186/s12889-020-10054-3.

Economic evaluation of a web-based menu planning intervention to improve childcare service adherence with dietary guidelines. Reeves P, Edmunds K, Szewczyk Z, Grady A, Yoong SL, Wolfenden L, Wyse R, Finch M, Stacey F, Wiggers J, Searles A. Implement Sci. 2021 Jan 7;16(1):1. doi: 10.1186/s13012-020-01068-x.

An exploration of perceptions and preferences for healthy eating in Dutch consumers: a qualitative pilot study. Coumans JMJ, Bolman CAW, Lechner L, Oenema A. Pilot Feasibility Stud. 2021 Jan 8;7(1):20. doi: 10.1186/s40814-020-00735-6.

Identifying meaningful dietary intake and physical activity questions for individual and population health. Shinall JB, Schlundt DG, Sullivan MH, Frank HJ, Po'e EK, Sommer EC, Bonnet KR, Burgess LE, Barkin SL, Haws KL. Clin Obes. 2021 Jan 7:e12435. doi: 10.1111/cob.12435.

Digital Tools to Support Family-Based Weight Management for Children: Mixed Methods Pilot and Feasibility Study. Staiano AE, Shanley JR, Kihm H, Hawkins KR, Self-Brown S, Höchsmann C, Osborne MC, LeBlanc MM, Apolzan JW, Martin CK. JMIR Pediatr Parent. 2021 Jan 7;4(1):e24714. doi: 10.2196/24714.

Association between Food Insecurity and Health-Related Quality of Life: a Nationally Representative Survey. Hanmer J, DeWalt DA, Berkowitz SA. J Gen Intern Med. 2021 Jan 6. doi: 10.1007/s11606-020-06492-9.

Children's Active School Travel: Examining the Combined Perceived and Objective Built-Environment Factors from Space Syntax. Ozbil A, Yesiltepe D, Argin G, Rybarczyk G. Int J Environ Res Public Health. 2021 Jan 2;18(1):286. doi: 10.3390/ijerph18010286.

Work-related physical and psychosocial risk factors cluster with obesity, smoking and physical inactivity. van den Berge M, van der Beek AJ, Türkeli R, van Kalken M, Hulsegrave G. Int Arch Occup Environ Health. 2021 Jan 6. doi: 10.1007/s00420-020-01627-1.

What a weight loss programme should contain if people with obesity were asked - a qualitative analysis within the DO:IT study. Jessen-Winge C, Ilvig PM, Fritz H, Brandt CJ, Lee K, Christensen JR. BMC Public Health. 2021 Jan 6;21(1):28. doi: 10.1186/s12889-020-09850-8.

Asthma and Obesity: Two Diseases on the Rise and Bridged by Inflammation. Bantulà M, Roca-Ferrer J, Arismendi E, Picado C. J Clin Med. 2021 Jan 6;10(2):E169. doi: 10.3390/jcm10020169.

Living With Obesity: Expressions of Longing. Ueland V, Dysvik E, Furnes B. SAGE Open Nurs. 2020 Jan 22;6:2377960819901193. doi: 10.1177/2377960819901193.

Impact of obesity on pulmonary function: current understanding and knowledge gaps. Hegewald MJ. Curr Opin Pulm Med. 2020 Dec 24; Publish Ahead of Print. doi: 10.1097/MCP.0000000000000754.

The healthy food marketing strategies study: design, baseline characteristics, and supermarket compliance. Glanz K, Chung A, Morales KH, Kwong PL, Wiebe D, Giordano DP, Brensinger CM, Karpyn A. Transl Behav Med. 2020 Dec 31;10(6):1266-1276. doi: 10.1093/tbm/iba078.

The Frequency and Context of Snacking among Children: An Objective Analysis Using Wearable Cameras. Gage R, Girling-Butcher M, Joe E, Smith M, Ni Mhurchu C, McKerchar C, Puloka V, McLean R, Signal L. Nutrients. 2020 Dec 30;13(1):E103. doi: 10.3390/nu13010103.

Understanding the association between mother's education level and effectiveness of a child obesity prevention intervention: a secondary analysis of an RCT. Broccoli S, Bonvicini L, Djuric O, Candela S, Davoli AM, Ferrari E, Panza C, Storani S, Tamelli M, Fabbri A, Giorgi Rossi P. Epidemiol Prev. 2020 Sep-Dec;44(5-6 Suppl 1):153-162. doi: 10.19191/EP20.5-6.S1.P153.085.

Cost-Effectiveness of a National Sugar-Sweetened Beverage Tax to Reduce Cancer Burdens and Disparities in the United States. Du M, Griecci CF, Kim DD, Cudhea F, Ruan M, Eom H, Wong JB, Wilde PE, Michaud DS, Lee Y, Micha R, Mozaffarian D, Zhang FF. JNCI Cancer Spectr. 2020 Aug 25;4(6):pkaa073. doi: 10.1093/jncics/pkaa073.

Formative work to design a digital learning self-assessment and feedback tool to prevent weight gain among college students. Napolitano MA, Lynch SB, Mavredes MN, Shambon BD, Posey L. Digit Health. 2020 Dec 17;6:2055207620979458. doi: 10.1177/2055207620979458.

Understanding stigma and food inequity: a conceptual framework to inform research, intervention, and policy. Earnshaw VA, Karpyn A. Transl Behav Med. 2020 Dec 31;10(6):1350-1357. doi: 10.1093/tbm/iba087.

Examining commonly used perceived and objective measures of fruit and vegetable access in low-income populations and their association with consumption. Haynes-Maslow L, McGuirt J, Trippichio G, Armstrong-Brown J, Ammerman AS, Leone LA. Transl Behav Med. 2020 Dec 31;10(6):1342-1349. doi: 10.1093/tbm/iba077.

Thigh-worn accelerometry for measuring movement and posture across the 24-hour cycle: a scoping review and expert statement. Stevens ML, Gupta N, Inan Eroglu E, Crowley PJ, Eroglu B, Bauman A, Granat M, Straker L, Palm P, Stenholm S, Aadahl M, Mork P, Chastin S, Rangul V, Hamer M, Koster A, Holtermann A, Stamatakis E. BMJ Open Sport Exerc Med. 2020 Dec 24;6(1):e000874. doi: 10.1136/bmjsem-2020-000874.

The Four Domain Food Insecurity Scale (4D-FIS): development and evaluation of a complementary food insecurity measure. Johnson CM, Ammerman AS, Adair LS, Aiello AE, Flax VL, Elliott S, Hardison-Moody A, Bowen SK. Transl Behav Med. 2020 Dec 31;10(6):1255-1265. doi: 10.1093/tbm/iba125.

Internalising dietary norms and transforming food practices: social inequalities in the management of childhood obesity. Lutz A. *Health Socio Rev.* 2020 Mar;29(1):16-30. doi: 10.1080/14461242.2019.1691933.

No Changes in Appetite-Related Hormones Following Swimming and Cycling Exercise Interventions in Adults with Obesity. Fico BG, Alkatan M, Tanaka H. *Int J Exerc Sci.* 2020 Dec 1;13(2):1819-1825.

Collecting Early Childhood Obesity Measurements Through a Home Visiting Program: A Proof-of-Concept Study. Kapp JM, Hall B, Kemner A. *Prev Chronic Dis.* 2020 Dec 31;17:E169. doi: 10.5888/pcd17.200214.

Perceived Importance of Physical Activity and Walkable Neighborhoods Among US Adults, 2017. Carlson SA, Ussery EN, Watson KB, Cornett KA, Fulton JE. *Prev Chronic Dis.* 2020 Dec 31;17:E168. doi: 10.5888/pcd17.200262.

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

International: Research related to COVID-19

Excess body weight is an independent risk factor for severe forms of COVID-19. Pietri L, Giorgi R, Bégu A, Lojou M, Koubi M, Cauchois R, Grangeot R, Dubois N, Kaplanski G, Valéro R, Béliard S. *Metabolism.* 2021 Jan 6:154703. doi: 10.1016/j.metabol.2021.154703.

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

Systematic reviews

A systematic review and meta-analysis of school-based interventions with health education to reduce body mass index in adolescents aged 10 to 19 years. Jacob CM, Hardy-Johnson PL, Inskip HM, Morris T, Parsons CM, Barrett M, Hanson M, Woods-Townsend K, Baird J. *Int J Behav Nutr Phys Act.* 2021 Jan 4;18(1):1. doi: 10.1186/s12966-020-01065-9.

The relationship between the home environment and child adiposity: a systematic review. Kininmonth AR, Smith AD, Llewellyn CH, Dye L, Lawton CL, Fildes A. *Int J Behav Nutr Phys Act.* 2021 Jan 6;18(1):4. doi: 10.1186/s12966-020-01073-9.

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

Systematic reviews: Research related to COVID-19

Obesity Increases the Severity and Mortality of Influenza and COVID-19: A Systematic Review and Meta-Analysis. Zhao X, Gang X, He G, Li Z, Lv Y, Han Q, Wang G. *Front Endocrinol (Lausanne).* 2020 Dec 21;11:595109. doi: 10.3389/fendo.2020.595109.

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