



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.

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- [UK and Ireland - 7](#)
- [International - 36](#)
- [Systematic reviews - 4](#)

UK and Ireland

[Overweight and obesity in shift workers: associated dietary and lifestyle factors.](#) O'Brien VM, Nea FM, Pourshahidi LK, Livingstone MBE, Bardon L, Kelly C, Kearney JM, Corish CA. Eur J Public Health. 2020 Jun 1;30(3):579-584. doi: 10.1093/eurpub/ckaa084.

["They Just Need to Come Down a Little Bit to your Level": A Qualitative Study of Parents' Views and Experiences of Early Life Interventions to Promote Healthy Growth and Associated Behaviours.](#) Hennessy M, Byrne M, Laws R, Heary C. Int J Environ Res Public Health. 2020 May 21;17(10). pii: E3605. doi: 10.3390/ijerph17103605.

[Are we overdiagnosing obesity in preschool children?](#) Wright CM. Arch Dis Child. 2020 May 22. pii: archdischild-2020-318857. doi: 10.1136/archdischild-2020-318857.

[BMI and Cause-Specific Hospital Admissions and Costs: The UK Biobank Cohort Study.](#) O'Halloran R, Mihaylova B, Cairns BJ, Kent S. Obesity (Silver Spring). 2020 Jul;28(7):1332-1341. doi: 10.1002/oby.22812.

[The obesity epidemic - Nature via nurture: A narrative review of high-income countries.](#) Jackson SE, Llewellyn CH, Smith L. SAGE Open Med. 2020 Apr 28;8:2050312120918265. doi: 10.1177/2050312120918265.

[The effect of brisk walking in the fasted versus fed state on metabolic responses, gastrointestinal function, and appetite in healthy men.](#) McIver VJ, Mattin L, Evans GH, Yau AMW. Int J Obes (Lond). 2019 Sep;43(9):1691-1700. doi: 10.1038/s41366-018-0215-x.

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

UK and Ireland: Research related to COVID-19

[Lifestyle risk factors, inflammatory mechanisms, and COVID-19 hospitalization: A community-based cohort study of 387,109 adults in UK.](#) Hamer M, Kivimäki M, Gale CR, Batty GD. Brain Behav Immun. 2020 Jul;87:184-187. doi: 10.1016/j.bbi.2020.05.059.

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

International

Gender differences in the longitudinal association between obesity, and disability with workplace absenteeism in the Australian working population. Keramat SA, Alam K, Gow J, Biddle SJH. PLoS One. 2020 May 27;15(5):e0233512. doi: 10.1371/journal.pone.0233512.

Effects of Exercise on Body Posture, Functional Movement, and Physical Fitness in Children With Overweight/Obesity. Molina-Garcia P, Mora-Gonzalez J, Migueles JH, Rodriguez-Ayllon M, Esteban-Cornejo I, Cadenas-Sanchez C, Plaza-Florido A, Gil-Cosano JJ, Pelaez-Perez MA, Garcia-Delgado G, Vanrenterghem J, Ortega FB. J Strength Cond Res. 2020 May 25. doi: 10.1519/JSC.0000000000003655.

Paediatric obesity and brain functioning: The role of physical activity-A novel and important expert opinion of the European Childhood Obesity Group. Esteban-Cornejo I, Reilly J, Ortega F, Matusik P, Mazur A, Erhardt E, Forslund A, Vlachopapadopoulou EA, Caroli M, Boyland E, Weghuber D, Thivel D. Pediatr Obes. 2020 May 27:e12649. doi: 10.1111/ijpo.12649.

Adherence to the Mediterranean diet and weight status in children: the role of parental feeding practices. Costarelli V, Michou M, Panagiotakos DB, Lionis C. Int J Food Sci Nutr. 2020 May 27:1-11. doi: 10.1080/09637486.2020.1765151.

Impact of Disadvantaged Neighborhoods and Lifestyle Factors on Adult Obesity: Evidence From a 5-Year Cohort Study in Australia. Keramat SA, Alam K, Gow J, Biddle SJH. Am J Health Promot. 2020 May 27:890117120928790. doi: 10.1177/0890117120928790.

Obesity or BMI Paradox? Beneath the Tip of the Iceberg. Donini LM, Pinto A, Giusti AM, Lenzi A, Poggiogalle E. Front Nutr. 2020 May 7;7:53. doi: 10.3389/fnut.2020.00053.

A Perspective on Management of Limb Fractures in Obese Children: Is It Time for Dedicated Guidelines? Donati F, Costici PF, De Salvatore S, Burrofato A, Micciulli E, Maiese A, Santoro P, La Russa R. Front Pediatr. 2020 May 8;8:207. doi: 10.3389/fped.2020.00207.

Trends in the prevalence of overweight, obesity and underweight in French children, aged 4-12 years, from 2013 to 2017. Vanhelst J, Baudalet JB, Thivel D, Ovigneur H, Deschamps T. Public Health Nutr. 2020 May 27:1-7. doi: 10.1017/S1368980020000476.

Trends in Selected Chronic Conditions and Related Risk Factors Among Women of Reproductive Age: Behavioral Risk Factor Surveillance System, 2011-2017. Hayes DK, Robbins CL, Ko JY. J Womens Health (Larchmt). 2020 May 22. doi: 10.1089/jwh.2019.8275.

Google Street View Derived Built Environment Indicators and Associations with State-Level Obesity, Physical Activity, and Chronic Disease Mortality in the United States. Phan L, Yu W, Keralis JM, Mukhija K, Dwivedi P, Brunisholz KD, Javanmardi M, Tasdizen T, Nguyen QC. Int J Environ Res Public Health. 2020 May 22;17(10). pii: E3659. doi: 10.3390/ijerph17103659.

Body Composition Impact on Sleep in Young Adults: The Mediating Role of Sedentariness, Physical Activity, and Diet. Carneiro-Barrera A, Amaro-Gahete FJ, Acosta FM, Ruiz JR. J Clin Med. 2020 May 21;9(5). pii: E1560. doi: 10.3390/jcm9051560.

Skeletal Muscle Composition and Glucose Levels in Children Who Are Overweight and Obese. Herda TJ, Gallagher PM, Miller JD, Bubak MP, Parra ME. Pediatr Exerc Sci. 2020 May 25:1-8. doi: 10.1123/pes.2020-0018.

Projecting the impact of the coronavirus disease-19 pandemic on childhood obesity in the United States: A microsimulation model. *An R. J Sport Health Sci.* 2020 May 23. pii: S2095-2546(20)30065-X. doi: 10.1016/j.jshs.2020.05.006.

Obesity treatment within the Italian national healthcare system tertiary care centers: what can we learn? Watanabe M, Risi R, De Giorgi F, Tuccinardi D, Mariani S, Basciani S, Lubrano C, Lenzi A, Gnessi L. *Eat Weight Disord.* 2020 May 25. doi: 10.1007/s40519-020-00936-1.

Clustering of health-related behaviours and its relationship with individual and contextual factors in Portuguese adolescents: results from a cross-sectional study. Dos Santos CS, Picoito J, Loureiro I, Nunes C. *BMC Pediatr.* 2020 May 25;20(1):247. doi: 10.1186/s12887-020-02057-1.

Misclassification of Self-Reported Body Mass Index Categories. Freigang R, Geier AK, Schmid GL, Frese T, Klement A, Unverzagt S. *Dtsch Arztebl Int.* 2020 Apr 10;117(15):253-260. doi: 10.3238/arztebl.2020.0253.

Racial/ethnic variations in weight management among patients with overweight and obesity status who are served by health centres. Pourat N, Chen X, Lu C, Zhou W, Daniel M, Hoang H, Sripathana A. *Clin Obes.* 2020 May 24:e12372. doi: 10.1111/cob.12372.

Changes in parental feeding practices and preschoolers' food habits following a randomized controlled childhood obesity trial. Somaraki M, Eli K, Sorjonen K, Ek A, Sandvik P, Nowicka P. *Appetite.* 2020 May 21:104746. doi: 10.1016/j.appet.2020.104746.

Prevalence and Management of Adult Obesity in a Large U.S. Academic Health System. Lumsden RH, Pagidipati NJ, Phelan MP, Chiswell K, Peterson ED. *Am J Prev Med.* 2020 Jun;58(6):817-824. doi: 10.1016/j.amepre.2020.01.018.

Behavioral Approaches to Weight Management for Health and Wellness. Normand MP, Gibson JL. *Pediatr Clin North Am.* 2020 Jun;67(3):537-546. doi: 10.1016/j.pcl.2020.02.008.

Associations of Sedentary Behaviour, Physical Activity, Cardiorespiratory Fitness and Body Composition with Risk of Sleep-Related Breathing Disorders in Children with Overweight/Obesity: A Cross-Sectional Study. Torres-Lopez LV, Cadenas-Sanchez C, Migueles JH, Adelantado-Renau M, Plaza-Florido A, Solis-Urra P, Molina-Garcia P, Ortega FB. *J Clin Med.* 2020 May 20;9(5). pii: E1544. doi: 10.3390/jcm9051544.

Are There Effective Interventions to Increase Physical Activity in Children and Young People? An Umbrella Review. Mannocci A, D'Egidio V, Backhaus I, Federici A, Sinopoli A, Ramirez Varela A, Villari P, La Torre G. *Int J Environ Res Public Health.* 2020 May 18;17(10). pii: E3528. doi: 10.3390/ijerph17103528.

Relative Accuracy of Bioelectrical Impedance Analysis for Assessing Body Composition in Children With Severe Obesity. Khan S, Xanthakos SA, Hornung L, Arce-Clachar C, Siegel R, Kalkwarf HJ. *J Pediatr Gastroenterol Nutr.* 2020 Jun;70(6):e129-e135. doi: 10.1097/MPG.0000000000002666.

Relationship between body mass index and physical fitness in Italian prepubertal schoolchildren. Fiori F, Bravo G, Parpinel M, Messina G, Malavolta R, Lazzer S. *PLoS One.* 2020 May 22;15(5):e0233362. doi: 10.1371/journal.pone.0233362

The association between negative affect and physical activity among adults in a behavioral weight loss treatment. Kerrigan SG, Schumacher L, Manasse SM, Loyka C, Butryn ML, Forman EM. *Psychol Sport Exerc.* 2020 Mar;47. pii: 101507. doi: 10.1016/j.psychsport.2019.03.010.

Reactions to graphic and text health warnings for cigarettes, sugar-sweetened beverages, and alcohol: An online randomized experiment of US adults. Hall MG, Grummon AH, Lazard AJ, Maynard OM, Taillie LS. *Prev Med*. 2020 Aug;137:106120. doi: 10.1016/j.ypmed.2020.106120. Epub 2020 May 8.

Enhancing employee wellness: Translating an effective community behavioral weight-loss treatment to the worksite. Murakami JM, Bennett BL, Rand-Giovannetti D, Stefano EC, Latner JD. *Nutr Health*. 2020 May 21:260106020926834. doi: 10.1177/0260106020926834.

Ethical Considerations for Food and Beverage Warnings. Grummon AH, Hall MG, Block JP, Bleich SN, Rimm EB, Taillie LS, Barnhill A. *Physiol Behav*. 2020 Aug 1;222:112930. doi: 10.1016/j.physbeh.2020.112930.

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

International: Research related to COVID-19

Obesity and COVID-19: ACE 2, the Missing Tile. Iannelli A, Favre G, Frey S, Esnault V, Gugenheim J, Bouam S, Schiavo L, Tran A, Alifano M. *Obes Surg*. 2020 May 25. doi: 10.1007/s11695-020-04734-7.

Hospitalization and Mortality among Black Patients and White Patients with Covid-19. Price-Haywood EG, Burton J, Fort D, Seoane L. *N Engl J Med*. 2020 Jun 25;382(26):2534-2543. doi: 10.1056/NEJMsa2011686.

Obesity and COVID-19: immune and metabolic derangement as a possible link to adverse clinical outcomes. Korakas E, Ikonomidis I, Kousathana F, Balampanis K, Kountouri A, Raptis A, Palaodimou L, Kokkinos A, Lambadiari V. *Am J Physiol Endocrinol Metab*. 2020 Jul 1;319(1):E105-E109. doi: 10.1152/ajpendo.00198.2020.

Implications of Obesity for the Management of Severe Coronavirus Disease 2019 Pneumonia. Lemyze M, Courageux N, Maladobry T, Arumadura C, Pauquet P, Orfi A, Komorowski M, Mallat J, Granier M. *Crit Care Med*. 2020 May 26. doi: 10.1097/CCM.0000000000004455.

Morbid Obesity as an Independent Risk Factor for COVID-19 Mortality in Hospitalized Patients Younger than 50. Klang E, Kassim G, Soffer S, Freeman R, Levin MA, Reich DL. *Obesity (Silver Spring)*. 2020 May 23. doi: 10.1002/oby.22913.

Body Mass Index, Weight Discrimination, and Psychological, Behavioral, and Interpersonal Responses to the Coronavirus Pandemic. Sutin AR, Robinson E, Daly M, Gerend MA, Stephan Y, Luchetti M, Aschwanden D, Strickhouser JE, Lee JH, Sesker AA, Terracciano A. *Obesity (Silver Spring)*. 2020 May 23. doi: 10.1002/oby.22914.

Good deeds and cheap marketing-The food industry in the times of COVID-19. White M, Nieto C, Barquera S. *Obesity (Silver Spring)*. 2020 May 22. doi: 10.1002/oby.22910.

Prevalence of obesity among adult inpatients with COVID-19 in France. Caussy C, Pattou F, Wallet F, Simon C, Chalopin S, Telliam C, Mathieu D, Subtil F, Frobert E, Alligier M, Delaunay D, Vanhems P, Laville M, Jourdain M, Disse E; COVID Outcomes HCL Consortium and Lille COVID–Obesity Study Group. *Lancet Diabetes Endocrinol*. 2020 Jul;8(7):562-564. doi: 10.1016/S2213-8587(20)30160-1.

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

Systematic reviews

Global, regional and time-trend prevalence of central obesity: a systematic review and meta-analysis of 13.2 million subjects. Wong MCS, Huang J, Wang J, Chan PSF, Lok V, Chen X, Leung C, Wang HHX, Lao XQ, Zheng ZJ. Eur J Epidemiol. 2020 May 24. doi: 10.1007/s10654-020-00650-3.

Interventions improving health professionals' practice for addressing patients' weight management behaviours: systematic review of reviews. Yazdizadeh B, Walker R, Skouteris H, Olander EK, Hill B. Health Promot Int. 2020 May 23. pii: daaa039. doi: 10.1093/heapro/daaa039.

A systematic review to assess the effectiveness of technology-based interventions to address obesity in children. McMullan M, Millar R, Woodside JV. BMC Pediatr. 2020 May 22;20(1):242. doi: 10.1186/s12887-020-02081-1.

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

Systematic reviews: Research related to COVID-19

Obesity as a predictor for a poor prognosis of COVID-19: A systematic review. Tamara A, Tahapary DL. Diabetes Metab Syndr. 2020 May 12;14(4):655-659. doi: 10.1016/j.dsx.2020.05.020.

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