



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.

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 - 3](#)
- [International - 40](#)
- [Systematic reviews - 6](#)

UK and Ireland

[Mobile Health Apps in Pediatric Obesity Treatment: Process Outcomes From a Feasibility Study of a Multicomponent Intervention](#). Browne S, Kechadi MT, O'Donnell S, Dow M, Tully L, Doyle G, O'Malley G. JMIR Mhealth Uhealth. 2020 Jul 8;8(7):e16925. doi: 10.2196/16925.

[Recognition of 16-18-Year-Old Adolescents for Guiding Physical Activity Interventions: A Cross-Sectional Study](#). Bhatti SN, Watkin E, Butterfill J, Li JM. Int J Environ Res Public Health. 2020 Jul 11;17(14):E5002. doi: 10.3390/ijerph17145002.

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

UK and Ireland: Research related to COVID-19

[BMI and future risk for COVID-19 infection and death across sex, age and ethnicity: Preliminary findings from UK biobank](#). Sattar N, Ho FK, Gill JM, Ghouri N, Gray SR, Celis-Morales CA, Katikireddi SV, Berry C, Pell JP, McMurray JJ, Welsh P. Diabetes Metab Syndr. 2020 Jun 30;14(5):1149-1151. doi: 10.1016/j.dsx.2020.06.060.

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

International

[Do young children consistently meet 24-h sleep and activity guidelines? A longitudinal analysis using actigraphy](#). Meredith-Jones K, Galland B, Haszard J, Gray A, Sayers R, Hanna M, Taylor B, Taylor R. Int J Obes (Lond). 2019 Dec;43(12):2555-2564. doi: 10.1038/s41366-019-0432-y.

[Obesity and genetics](#). Golden A, Kessler C. J Am Assoc Nurse Pract. 2020 Jul;32(7):493-496. doi: 10.1097/JXX.0000000000000447.

Inter-individual differences in body mass index were not observed as a result of aerobic exercise in children and adolescents with overweight and obesity. Kelley GA, Kelley KS, Pate RR. *Pediatr Obes*. 2020 Jul 13:e12692. doi: 10.1111/ijpo.12692.

Ambulatory hemodynamic patterns, obesity, and pulse wave velocity in children and adolescents. Stabouli S, Kollios K, Nika T, Chrysaidou K, Tramma D, Kotsis V. *Pediatr Nephrol*. 2020 Jul 14. doi: 10.1007/s00467-020-04694-1.

Skipping breakfast and subsequent overweight/obesity in children: A nationwide prospective study of 2.5 to 13- year olds in Japan. Yaguchi-Tanaka Y, Tabuchi T. *J Epidemiol*. 2020 Jul 11. doi: 10.2188/jea.JE20200266.

Food and Beverage Advertising Aimed at Spanish Children Issued through Mobile Devices: A Study from a Social Marketing and Happiness Management Perspective. Jiménez-Marín G, Elías Zambrano R, Galiano-Coronil A, Ravina-Ripoll R. *Int J Environ Res Public Health*. 2020 Jul 14;17(14):E5056. doi: 10.3390/ijerph17145056.

Stakeholder perspectives and sustainability of an integrated care model for the prevention and management of obesity: the Childhood Obesity Research Demonstration (CORD) project. Lee RE, Parker NH, Hallett AM, Kao D, Modelska MJ, Rifai HS, Soltero EG, O'Connor DP. *Transl Behav Med*. 2020 Jul 15:ibaa058. doi: 10.1093/tbm/ibaa058.

Associations of movement behaviors and body mass index: comparison between a report-based and monitor-based method using Compositional Data Analysis. Kim Y, Burns RD, Lee DC, Welk GJ. *Int J Obes (Lond)*. 2020 Jul 13. doi: 10.1038/s41366-020-0638-z.

Effects of exercise modality on body composition and cardiovascular disease risk factors in adolescents with obesity: A randomized clinical trial. Lee S, Libman I, Hughan KS, Kuk JL, Barinas-Mitchell E, Chung H, Arslanian S. *Appl Physiol Nutr Metab*. 2020 Jul 16. doi: 10.1139/apnm-2019-0993.

Early Childhood Obesity Prevention: Challenges and Barriers of Implementing Child and Adult Care Food. White E, Potter R, Rasmussen C, Kleven J. *WMJ*. 2020 Jun;119(2):110-114.

Connections between Friendship Quality, Peer Competence, and Obesity in Early Childhood through Adolescence. Sutter C, Kim JH, Bost KK. *Child Obes*. 2020 Jul 15. doi: 10.1089/chi.2019.0287.

A Factorial Experiment to Optimize Remotely Delivered Behavioral Treatment for Obesity: Results of the Opt-IN Study. Spring B, Pfammatter AF, Marchese SH, Stump T, Pellegrini C, McFadden HG, Hedeker D, Siddique J, Jordan N, Collins LM. *Obesity (Silver Spring)*. 2020 Jul 12. doi: 10.1002/oby.22915.

Effects of 4- and 6-h Time-Restricted Feeding on Weight and Cardiometabolic Health: A Randomized Controlled Trial in Adults with Obesity. Cienfuegos S, Gabel K, Kalam F, Ezpeleta M, Wiseman E, Pavlou V, Lin S, Oliveira ML, Varady KA. *Cell Metab*. 2020 Jul 8:S1550-4131(20)30319-3. doi: 10.1016/j.cmet.2020.06.018.

Healthy Behaviors through Behavioral Design-Obesity Prevention. Funderburk L, Cardaci T, Fink A, Taylor K, Rohde J, Harris D. *Int J Environ Res Public Health*. 2020 Jul 14;17(14):E5049. doi: 10.3390/ijerph17145049.

The Unique Extended Selection Cohorts Design for the Evaluation of the School-Based Jump-In Intervention on Dietary Habits: A Study Protocol. Takens FE, Busch V, Ujčič-Voortman JK, van Eijnsden M, Chinapaw MJM. *Int J Environ Res Public Health*. 2020 Feb 11;17(4):1145. doi: 10.3390/ijerph17041145.

Health Behavior Change in the Classroom: A Means to a Healthy End? Wright RR, Nelson R, Garcia S, Butler A. *J Prim Prev*. 2020 Jul 18. doi: 10.1007/s10935-020-00605-0.

A patient-centredness improvement study for efficacy of behaviour change for healthy lifestyle and weight loss in a student-run free clinic. Lessans S, Vega X, Foley B, Bossan A, Baker A, McElroy M, Crouse E, Pasarica M. *Fam Pract*. 2020 Jul 15:cmaa057. doi: 10.1093/fampra/cmaa057.

Evidence-based clinical advice for nutrition and dietary weight loss strategies for the management of NAFLD and NASH. Hydes TJ, Ravi S, Loomba R, E Gray M. *Clin Mol Hepatol*. 2020 Jul 17. doi: 10.3350/cmh.2020.0067.

Mobile Apps for Weight Management: A Review of the Latest Evidence to Inform Practice. Ghelani DP, Moran LJ, Johnson C, Mousa A, Naderpoor N. *Front Endocrinol (Lausanne)*. 2020 Jun 24;11:412. doi: 10.3389/fendo.2020.00412.

Is adherence to the 24-hour movement guidelines associated with a reduced risk of adiposity among children and adolescents? Jakubec L, Gába A, Dygrýn J, Rubín L, Šimůnek A, Sigmund E. *BMC Public Health*. 2020 Jul 16;20(1):1119. doi: 10.1186/s12889-020-09213-3.

Predictors of uptake of general and tailored services to improve employee health and wellbeing. Talati Z, Grapes C, Davies E, Shilton T, Pettigrew S. *Health Promot J Austr*. 2020 Jul 18. doi: 10.1002/hpja.388.

Accuracy of self-reported weight, height and body mass index among older people in Japan. Yazawa A, Inoue Y, Kondo N, Miyaguni Y, Ojima T, Kondo K, Kawachi I. *Geriatr Gerontol Int*. 2020 Jul 16. doi: 10.1111/ggi.13971.

Policy Process And Non-State Actors' Influence On The 2014 Mexican Soda Tax. Carriedo A, Lock K, Hawkins B. *Health Policy Plan*. 2020 Jul 16:czaa060. doi: 10.1093/heapol/czaa060.

Living in Rural and Urban Areas of New Caledonia: Impact on Food Consumption, Sleep Duration and Anthropometric Parameters Among Melanesian Adolescents. Galy O, Paufigue E, Nedjar-Guerre A, Wacalie F, Wattlez G, Le Roux PY, Ponidja S, Zongo P, Serra-Mallol C, Allman-Farinelli M, Frayon S. *Nutrients*. 2020 Jul 10;12(7):E2047. doi: 10.3390/nu12072047.

Patterns of Food Parenting Practices Regarding Fruit and Vegetables among Parent-Adolescent Dyads. Thomson JL, Hennessy E, Landry AS, Goodman MH. *Child Obes*. 2020 Jul;16(5):340-349. doi: 10.1089/chi.2020.0087.

Problem-solving, Adherence to Lifestyle Goals, and Weight Loss Among Individuals Participating in a Weight Loss Study. Yu Y, Sereika SM, Finegold DN, Burke LE. *Int J Behav Med*. 2020 Jul 17. doi: 10.1007/s12529-020-09922-4.

Dietary Patterns of Adolescents from the Chilean Growth and Obesity Cohort Study Indicate Poor Dietary Quality. Martínez Arroyo A, Corvalán Aguilar C, Palma Molina X, Ceballos Sanchez X, Fisberg RM. *Nutrients*. 2020 Jul 14;12(7):E2083. doi: 10.3390/nu12072083.

Associations between lifestyle factors and body mass index in African-American community college students. Stephens J, Tan A, Miller H, Perkins A. J Am Coll Health. 2020 Jul 16:1-6. doi: 10.1080/07448481.2019.1706530.

'When I have time pressure, sport is the first thing that is cancelled': A mixed-methods study on barriers to physical activity among university students in Germany. Hilger-Kolb J, Loerbroks A, Diehl K. J Sports Sci. 2020 Jul 13:1-10. doi: 10.1080/02640414.2020.1792159

Consistent sleep onset and maintenance of body weight after weight loss: An analysis of data from the NoHoW trial. Larsen SC, Horgan G, Mikkelsen MK, Palmeira AL, Scott S, Duarte C, Santos I, Encantado J, O'Driscoll R, Turicchi J, Michalowska J, Stubbs RJ, Heitmann BL. PLoS Med. 2020 Jul 16;17(7):e1003168. doi: 10.1371/journal.pmed.1003168.

Consistent Morning Exercise May Be Beneficial For Individuals with Obesity. Schumacher LM, Thomas JG, Raynor HA, Rhodes RE, Bond DS. Exerc Sport Sci Rev. 2020 Jul 8. doi: 10.1249/JES.0000000000000226.

How Interactive Data Visualization and Users' BMI (Body Mass Index) Influence Obesity Prevention Intentions: The Mediating Effect of Cognitive Absorption. Oh J, Hwang AH, Lim HS. Health Commun. 2020 Jul 17:1-10. doi: 10.1080/10410236.2020.1791376.

Unmet Social Needs and Adherence to Pediatric Weight Management Interventions: Massachusetts, 2017-2019. Atkins M, Castro I, Sharifi M, Perkins M, O'Connor G, Sandel M, Taveras EM, Fiechtner L. Am J Public Health. 2020 Jul;110(S2):S251-S257. doi: 10.2105/AJPH.2020.305772.

Exercise and Obesity: The role of exercise in prevention, weight loss, and maintenance of weight loss. Secor M. J Am Assoc Nurse Pract. 2020 Jul;32(7):530-537. doi: 10.1097/JXX.0000000000000452.

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

International: Research related to COVID-19

Risk Factors for Intensive Care Unit Admission and In-hospital Mortality among Hospitalized Adults Identified through the U.S. Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET). Kim L, Garg S, O'Halloran A, Whitaker M, Pham H, Anderson EJ, Armistead I, Bennett NM, Billing L, Como-Sabetti K, Hill M, Kim S, Monroe ML, Muse A, Reingold AL, Schaffner W, Sutton M, Talbot HK, Torres SM, Yousey-Hindes K, Holstein R, Cummings C, Brammer L, Hall AJ, Fry AM, Langley GE. Clin Infect Dis. 2020 Jul 16:ciaa1012. doi: 10.1093/cid/ciaa1012.

How important is obesity as a risk factor for respiratory failure, intensive care admission and death in hospitalised COVID-19 patients? Results from a single Italian centre. Rottoli M, Bernante P, Belvedere A, Balsamo F, Garelli S, Giannella M, Cascavilla A, Tedeschi S, Ianniruberto S, Rosselli Del Turco E, Tonetti T, Ranieri VM, Poggioli G, Manzoli L, Pagotto U, Viale P, Bartoletti M. Eur J Endocrinol. 2020 Jul 1:EJE-20-0541.R2. doi: 10.1530/EJE-20-0541.

Aging, Male Sex, Obesity, and Metabolic Inflammation Create the Perfect Storm for COVID-19. Mauvais-Jarvis F. Diabetes. 2020 Jul 15:dbi190023. doi: 10.2337/dbi19-0023.

The role of visceral adiposity in the severity of COVID-19: highlights from a unicenter cross-sectional pilot study in Germany. Petersen A, Bressemer K, Albrecht J, Thieß HM, Vahldiek J, Hamm B, Makowski MR, Niehues A, Niehues S, Adams LC. Metabolism. 2020 Jul 13:154317. doi: 10.1016/j.metabol.2020.154317.

Obesity and COVID-19: The Two Sides of the Coin. Dicker D, Bettini S, Farpour-Lambert N, Frühbeck G, Golan R, Goossens G, Halford J, O'Malley G, Mullerova D, Ramos Salas X, Hassapiou MN, Sagen J, Woodward E, Yumuk V, Busetto L. *Obes Facts*. 2020 Jul 13:1-9. doi: 10.1159/000510005.

Characteristics, predictors and outcomes among 99 patients hospitalised with COVID-19 in a tertiary care centre in Switzerland: an observational analysis. Gregoriano C, Koch D, Haubitz S, Conen A, Fux CA, Mueller B, Bernasconi L, Hammerer-Lercher A, Oberle M, Burgermeister S, Reiter H, Kutz A, Schuetz P. *Swiss Med Wkly*. 2020 Jul 15;150:w20316. doi: 10.4414/smw.2020.20316.

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

Systematic reviews

Greenspace with overweight and obesity: A systematic review and meta-analysis of epidemiological studies up to 2020. Luo YN, Huang WZ, Liu XX, Markevych I, Bloom MS, Zhao T, Heinrich J, Yang BY, Dong GH. *Obes Rev*. 2020 Jul 16. doi: 10.1111/obr.13078.

Yoga as an Alternative Therapy for Weight Management in Child and Adolescent Obesity: A Systematic Review and Implications for Research. Dai CL, Sharma M, Chen CC, Yesilyurt E, Godbey S. *Altern Ther Health Med*. 2020 Jul 15:AT6220.

Primary prevention of overweight and obesity in adolescents: An overview of systematic reviews. Flodgren GM, Helleve A, Lobstein T, Rutter H, Klepp KI. *Obes Rev*. 2020 Jul 16. doi: 10.1111/obr.13102.

Layperson-Led vs Professional-Led Behavioral Interventions for Weight Loss in Pediatric Obesity: A Systematic Review and Meta-analysis. McGavock J, Chauhan BF, Rabbani R, Dias S, Klapat N, Boissoneault S, Lys J, Wierzbowski AK, Sakib MN, Zarychanski R, Abou-Setta AM. *JAMA Netw Open*. 2020 Jul 1;3(7):e2010364. doi: 10.1001/jamanetworkopen.2020.10364.

Comparing and assessing physical activity guidelines for children and adolescents: a systematic literature review and analysis. Parrish AM, Tremblay MS, Carson S, Veldman SLC, Cliff D, Vella S, Chong KH, Nacher M, Del Pozo Cruz B, Ellis Y, Aubert S, Spaven B, Sameeha MJ, Zhang Z, Okely AD. *Int J Behav Nutr Phys Act*. 2020 Feb 10;17(1):16. doi: 10.1186/s12966-020-0914-2.

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

Systematic reviews: Research related to COVID-19

Obesity and mortality of COVID-19. Meta-analysis. Hussain A, Mahawar K, Xia Z, Yang W, El-Hasani S. *Obes Res Clin Pract*. 2020 Jul 9:S1871-403X(20)30550-0. doi: 10.1016/j.orcp.2020.07.002.

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