



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

[Work participation and risk factors for health-related job loss among older workers in the Health and Employment after Fifty \(HEAF\) study: Evidence from a 2-year follow-up period.](#) Syddall HE, D'Angelo S, Ntani G, Stevens M, Harris EC, Linaker CH, Walker-Bone K. PLoS One. 2020 Sep 17;15(9):e0239383. doi: 10.1371/journal.pone.0239383.

[The biological and social determinants of childhood obesity: comparison of two cohorts 50 years apart.](#) Robinson N, MCKay JA, Pearce MS, Albani V, Wright CM, Adamson AJ, Brown H. J Pediatr. 2020 Sep 16:S0022-3476(20)31164-1. doi: 10.1016/j.jpeds.2020.09.031.

[Ethnic Differences in Body Fat Deposition and Liver Fat Content in Two UK-Based Cohorts.](#) Alenaini W, Parkinson JRC, McCarthy JP, Goldstone AP, Wilman HR, Banerjee R, Yaghootkar H, Bell JD, Thomas EL. Obesity (Silver Spring). 2020 Sep 16. doi: 10.1002/oby.22948.

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International

[Obesity and cardiovascular disease.](#) Svačina Š. Vnitr Lek. 2020 Spring;66(2):89-91.

[Childhood overweight and obesity and back pain risk: a cohort study of 466 997 children.](#) Palmer AJ, Poveda JL, Martinez-Laguna D, Reyes C, de Bont J, Silman A, Carr AJ, Duarte-Salles T, Prieto-Alhambra D. BMJ Open. 2020 Sep 17;10(9):e036023. doi: 10.1136/bmjopen-2019-036023.

[Exercise Is Medicine.](#) Thompson WR, Sallis R, Joy E, Jaworski CA, Stuhr RM, Trilk JL. Am J Lifestyle Med. 2020 Apr 22;14(5):511-523. doi: 10.1177/1559827620912192.

[Obesity and binge alcohol intake are deadly combination to induce steatohepatitis: A model of high-fat diet and binge ethanol intake.](#) Hwang S, Ren T, Gao B. Clin Mol Hepatol. 2020 Sep 17. doi: 10.3350/cmh.2020.0100.

Underreporting of Obesity in Hospital Inpatients: A Comparison of Body Mass Index and Administrative Documentation in Australian Hospitals. Di Bella AL, Comans T, Gane EM, Young AM, Hickling DF, Lucas A, Hickman IJ, Banks M. *Healthcare (Basel)*. 2020 Sep 11;8(3):E334. doi: 10.3390/healthcare8030334.

Assessment of Active Video Games' Energy Expenditure in Children with Overweight and Obesity and Differences by Gender. Comeras-Chueca C, Villalba-Heredia L, Pérez-Llera M, Lozano-Berges G, Marín-Puyalto J, Vicente-Rodríguez G, Matute-Llorente Á, Casajús JA, González-Agüero A. *Int J Environ Res Public Health*. 2020 Sep 15;17(18):E6714. doi: 10.3390/ijerph17186714.

Evaluation of BMI Metrics to Assess Change in Adiposity in Children with Overweight and Moderate and Severe Obesity. Barlow SE, Salahuddin M, Durand C, Pont SJ, Hoelscher DM, Butte NF. *Obesity (Silver Spring)*. 2020 Aug;28(8):1512-1518. doi: 10.1002/oby.22858.

Results of the 3 Pillars Study (3PS), a relationship-based programme targeting parent-child interactions, healthy lifestyle behaviours, and the home environment in parents of preschool-aged children: A pilot randomised controlled trial. Marsh S, Taylor R, Galland B, Gerritsen S, Parag V, Maddison R. *PLoS One*. 2020 Sep 17;15(9):e0238977. doi: 10.1371/journal.pone.0238977.

Classroom Active Breaks to Increase Children's Physical Activity: A Cross-Sectional Study in the Province of Naples, Italy. Gallè F, Pecoraro P, Calella P, Cerullo G, Imoletti M, Mastantuono T, Muscariello E, Ricchiuti R, Sensi S, Sorrentino C, Liguori G, Valerio G. *Int J Environ Res Public Health*. 2020 Sep 10;17(18):E6599. doi: 10.3390/ijerph17186599.

Promoting healthy weight for all young children: a mixed methods study of child and family health nurses' perceptions of barriers and how to overcome them. Cheng H, Eames-Brown R, Tutt A, Laws R, Blight V, McKenzie A, Rossiter C, Campbell K, Sim K, Fowler C, Seabury R, Denney-Wilson E. *BMC Nurs*. 2020 Sep 14;19:84. doi: 10.1186/s12912-020-00477-z.

How Much Weight Loss is Required for Cardiovascular Benefits? Insights From a Metabolic Surgery Matched-cohort Study. Aminian A, Zajichek A, Tu C, Wolski KE, Brethauer SA, Schauer PR, Kattan MW, Nissen SE. *Ann Surg*. 2020 Oct;272(4):639-645. doi: 10.1097/SLA.0000000000004369.

Female adolescents with overweight and obesity share their perspectives on the clinical setting and weight management. Yerges AL, Snethen JA, Carrel AL. *Clin Obes*. 2020 Sep 17:e12415. doi: 10.1111/cob.12415.

Can School-Based Physical Activity Projects Such as Skipping Hearts Have a Long-Term Impact on Health and Health Behavior? Baumgartner L, Postler T, Graf C, Ferrari N, Haller B, Oberhoffer-Fritz R, Schulz T. *Front Public Health*. 2020 Aug 14;8:352. doi: 10.3389/fpubh.2020.00352.

Understanding School-Aged Childhood Obesity of Body Mass Index: Application of the Social-Ecological Framework. Noh K, Min JJ. *Children (Basel)*. 2020 Sep 13;7(9):E134. doi: 10.3390/children7090134.

The Predictors of Obesity among Urban Girls and Boys Aged 8-10 Years-A Cross-Sectional Study in North-Western Poland. Ratajczak J, Petriczko E. *Int J Environ Res Public Health*. 2020 Sep 11;17(18):E6611. doi: 10.3390/ijerph17186611.

The training and support needs of 22 programme directors of community-based childhood obesity interventions based on the EPODE approach: an online survey across programmes in 18 countries. Slot-Heijis JJ, Collard DCM, Pettigrew S, Vinck J, Edell D, Barriguete A, Visscher TLS. *BMC Health Serv Res*. 2020 Sep 15;20(1):870. doi: 10.1186/s12913-020-05709-1.

Change in Weight, BMI, and Body Composition in a Population-Based Intervention Versus Genetic-Based Intervention: The NOW Trial. Horne JR, Gilliland JA, O'Connor CP, Seabrook JA, Madill J. *Obesity (Silver Spring)*. 2020 Aug;28(8):1419-1427. doi: 10.1002/oby.22880.

Rounding as an indicator of bias in reported body weight in health surveys. García-González JM, Martín-Criado E. *J Biosoc Sci*. 2020 Sep 15:1-10. doi: 10.1017/S002193202000053X.

An online-based intervention to promote healthy eating through self-regulation among children: study protocol for a randomized controlled trial. Magalhães P, Silva C, Pereira B, Figueiredo G, Guimarães A, Pereira A, Rosário P. *Trials*. 2020 Sep 14;21(1):786. doi: 10.1186/s13063-020-04685-5.

Identification of Measurement Needs to Prevent Childhood Obesity in High-Risk Populations and Environments. Foti KE, Perez CL, Knapp EA, Kharmats AY, Sharfman AS, Arteaga SS, Moore LV, Bennett WL. *Am J Prev Med*. 2020 Sep 4:S0749-3797(20)30260-9. doi: 10.1016/j.amepre.2020.05.012.

Development of the impact of weight on daily activities questionnaire: A patient-reported outcome measure. Ervin CM, Whalley D, von Huth Smith L, Crawford R, Dine J, Fehnel SE. *Clin Obes*. 2020 Sep 15:e12387. doi: 10.1111/cob.12387.

Association between body mass index, missing data, and mortality risk among critically ill patients: the role of missing-data imputation. Jee HJ, Oh TK, Song IA, An H. *Ann Palliat Med*. 2020 Aug 31:apm-20-203. doi: 10.21037/apm-20-203.

Small increments in diet cost can improve compliance with the Dietary Guidelines for Americans. Rose CM, Gupta S, Buszkiewicz J, Ko LK, Mou J, Cook A, Moudon AV, Aggarwal A, Drewnowski A. *Soc Sci Med*. 2020 Sep 11;266:113359. doi: 10.1016/j.socscimed.2020.113359.

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 Jun;28(6):1062-1067. doi: 10.1002/oby.22797.

Promoting meal planning through mass media: awareness of a nutrition campaign among Canadian parents. Fernandez MA, Desroches S, Marquis M, Lebel A, Turcotte M, Provencher V. *Public Health Nutr*. 2019 Dec;22(18):3349-3359. doi: 10.1017/S1368980019002957.

Association of screen time and cardiometabolic risk in school-aged children. Vanderloo LM, Keown-Stoneman CDG, Sivanesan H, Parkin PC, Maguire JL, Anderson LN, Tremblay MS, Birken CS; TARGet Kids! Collaborative. *Prev Med Rep*. 2020 Aug 21;20:101183. doi: 10.1016/j.pmedr.2020.101183.

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Systematic reviews

Television food advertisements and childhood obesity: A systematic review. Pourmoradian S, Ostadrahimi A, Bonab AM, Roudsari AH, Jabbari M, Irandoost P. *Int J Vitam Nutr Res*. 2020 Sep 16:1-7. doi: 10.1024/0300-9831/a000681.

Childhood Obesity Evidence Base Project: A Systematic Review and Meta-Analysis of a New Taxonomy of Intervention Components to Improve Weight Status in Children 2-5 Years of Age, 2005-2019. Scott-Sheldon LAJ, Hedges LV, Cyr C, Young-Hyman D, Khan LK, Magnus M, King H, Arteaga S, Cawley J, Economos CD, Haire-Joshu D, Hunter CM, Lee BY, Kumanyika SK, Ritchie LD, Robinson TN, Schwartz MB. Child Obes. 2020 Sep;16(S2):S221-S248. doi: 10.1089/chi.2020.0139.

The Impact of Overweight and Obesity on Plantar Pressure in Children and Adolescents: A Systematic Review. Catan L, Amaricai E, Onofrei RR, Popoiu CM, Iacob ER, Stanciulescu CM, Cerbu S, Horhat DI, Suciuc O. Int J Environ Res Public Health. 2020 Sep 10;17(18):E6600. doi: 10.3390/ijerph17186600.

Family meal frequency and its association with food consumption and nutritional status in adolescents: A systematic review. do Amaral E Melo GR, Silva PO, Nakabayashi J, Bandeira MV, Toral N, Monteiro R. PLoS One. 2020 Sep 18;15(9):e0239274. doi: 10.1371/journal.pone.0239274.

Childhood Obesity Evidence Base Project: A Rationale for Taxonomic versus Conventional Meta-Analysis. Hedges LV, Saul JA, Cyr C, Magnus M, Scott-Sheldon LAJ, Young-Hyman D, Khan LK. Child Obes. 2020 Sep;16(S2):S21-S26. doi: 10.1089/chi.2020.0137.

Childhood Obesity Evidence Base Project: Building Translational Capacity through Meta-Analytic Methods. Young-Hyman D, Kettel Khan L. Child Obes. 2020 Sep;16(S2):S249-S254. doi: 10.1089/chi.2020.0140.

Childhood Obesity Evidence Base Project: Methods for Taxonomy Development for Application in Taxonomic Meta-Analysis. King H, Magnus M, Hedges LV, Cyr C, Young-Hyman D, Kettel Khan L, Scott-Sheldon LAJ, Saul JA, Arteaga S, Cawley J, Economos CD, Haire-Joshu D, Hunter CM, Lee BY, Kumanyika SK, Ritchie LD, Robinson TN, Schwartz MB. Child Obes. 2020 Sep;16(S2):S27-S220. doi: 10.1089/chi.2020.0138.

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Systematic reviews: Research related to COVID-19

Effect of obesity and body mass index on coronavirus disease 2019 severity: A systematic review and meta-analysis. Chang TH, Chou CC, Chang LY. Obes Rev. 2020 Sep 14. doi: 10.1111/obr.13089.

Body Mass Index and Prognosis of COVID-19 Infection. A Systematic Review. Peres KC, Riera R, Martimbianco ALC, Ward LS, Cunha LL. Front Endocrinol (Lausanne). 2020 Aug 14;11:562. doi: 10.3389/fendo.2020.00562.

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