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- [UK and Ireland - 5](#)
- [International - 35](#)
- [Systematic reviews - 7](#)

UK and Ireland

[Does global warming contribute to the obesity epidemic?](#) Kanazawa S. Environ Res. 2019 Dec 6;182:108962. doi: 10.1016/j.envres.2019.108962.

[Assessing the acceptability of intervention components, delivery methods, and outcome measures of an adapted preschool obesity prevention programme: ToyBox-Scotland.](#) Malden S, Reilly JJ, Hughes A, Bardid F, Summerbell C, De Craemer M, Cardon G, Androutsos O, Manios Y, Gibson AM. Child Care Health Dev. 2019 Dec 19. doi: 10.1111/cch.12736.

[How youth cognitive and sociodemographic factors relate to the development of overweight and obesity in the UK and the USA: a prospective cross-cohort study of the National Child Development Study and National Longitudinal Study of Youth 1979.](#) Altschul DM, Wraw C, Gale CR, Deary IJ. BMJ Open. 2019 Dec 17;9(12):e033011. doi: 10.1136/bmjopen-2019-033011.

[Exploring how lifestyle weight management programmes for children are commissioned and evaluated in England: a mixed methodology study.](#) Mears R, Jago R, Sharp D, Patel A, Kipping R, Shield JPH. BMJ Open. 2019 Dec 16;9(12):e025423. doi: 10.1136/bmjopen-2018-025423.

[A simple cut-off for waist-to-height ratio \(0.5\) can act as an indicator for cardiometabolic risk: recent data from adults in the Health Survey for England.](#) Gibson S, Ashwell M. Br J Nutr. 2019 Dec 16:1-26. doi: 10.1017/S0007114519003301.

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

International

[Using nationally representative survey data for external adjustment of unmeasured confounders: An example using the NHANES data.](#) Hernández-Díaz S, Bateman BT, Palmsten K, Schneeweiss S, Huybrechts KF. Pharmacoepidemiol Drug Saf. 2019 Dec 20. doi: 10.1002/pds.4946.

Clustering of lifestyle risk factors for non-communicable diseases in 304,779 adolescents from 89 countries: A global perspective. Uddin R, Lee EY, Khan SR, Tremblay MS, Khan A. *Prev Med*. 2019 Dec 17;105955. doi: 10.1016/j.ypmed.2019.105955.

Weight Gain of Service Members After Basic Military Training. Webber BJ, Ruiz SA, Talcott GW, Little MA, Tate DF. *Am J Prev Med*. 2020 Jan;58(1):117-121. doi: 10.1016/j.amepre.2019.08.022.

Prepregnancy obesity is associated with cognitive outcomes in boys in a low-income, multiethnic birth cohort. Widen EM, Nichols AR, Kahn LG, Factor-Litvak P, Insel BJ, Hoepner L, Dube SM, Rauh V, Perera F, Rundle A. *BMC Pediatr*. 2019 Dec 20;19(1):507. doi: 10.1186/s12887-019-1853-4.

Stand-Biased Desk Intervention on Sleep Quality of High School Students: A Pilot Study Using Tri-Axial Accelerometry. Rhee J, Benden ME. *Int J Environ Res Public Health*. 2019 Dec 19;17(1). pii: E37. doi: 10.3390/ijerph17010037.

Associations between Family Weight-Based Teasing, Eating Pathology, and Psychosocial Functioning among Adolescent Military Dependents. Pearlman AT, Schvey NA, Neyland MKH, Solomon S, Hennigan K, Schindler R, Leu W, Gillmore D, Shank LM, Lavender JM, Burke NL, Wilfley DE, Sbrocco T, Stephens M, Jorgensen S, Klein D, Quinlan J, Tanofsky-Kraff M. *Int J Environ Res Public Health*. 2019 Dec 18;17(1). pii: E24. doi: 10.3390/ijerph17010024.

Assessing the Role of Health Behaviors, Socioeconomic Status, and Cumulative Stress for Racial/Ethnic Disparities in Obesity. Cuevas AG, Chen R, Slopen N, Thurber KA, Wilson N, Economos C, Williams DR. *Obesity (Silver Spring)*. 2020 Jan;28(1):161-170. doi: 10.1002/oby.22648.

Association of Food Access, Recreational Opportunities, and Natural Amenities with Engagement in the Veterans MOVE! Weight Management Program. Graham LA, Malone EB, Richman JS, Carson AP, Affuso O, Knight SJ, Levitan EB. *Obesity (Silver Spring)*. 2020 Jan;28(1):55-64. doi: 10.1002/oby.22640.

The Environmental Foodprint of Obesity. Magkos F, Tetens I, Bügel SG, Felby C, Schacht SR, Hill JO, Ravussin E, Astrup A. *Obesity (Silver Spring)*. 2020 Jan;28(1):73-79. doi: 10.1002/oby.22657.

Impact of Changes in the Food, Built, and Socioeconomic Environment on BMI in US Counties, BRFSS 2003-2012. Rummo PE, Feldman JM, Lopez P, Lee D, Thorpe LE, Elbel B. *Obesity (Silver Spring)*. 2020 Jan;28(1):31-39. doi: 10.1002/oby.22603.

Weight Gain Over 6 Years in Young Adults: The Study of Novel Approaches to Weight Gain Prevention Randomized Trial. Wing RR, Espeland MA, Tate DF, Perdue LH, Bahnon J, Polzien K, Robichaud EF, LaRose JG, Gorin AA, Lewis CE, Jelalian E; Study of Novel Approaches to Weight Gain Prevention (SNAP) Research Group. *Obesity (Silver Spring)*. 2020 Jan;28(1):80-88. doi: 10.1002/oby.22661.

Age of obesity onset, cumulative obesity exposure over early adulthood and risk of type 2 diabetes. Luo J, Hodge A, Hendryx M, Byles JE. *Diabetologia*. 2019 Dec 20. doi: 10.1007/s00125-019-05058-7.

Association between life-style behaviors and health outcomes in Adventist and non-Adventist adolescents in Mexico: a pilot study. Acosta Enríquez ME, Uribe Salas FJ, Baek J, Sierra Archbold JP, Carrillo G. *BMC Public Health*. 2019 Dec 19;19(1):1705. doi: 10.1186/s12889-019-8042-0.

Results of a referral-based weight management program targeted toward children aged 2 to 6 years with obesity or severe obesity. Wickel EE, Ali L, Hawkins H, Hemming E. *BMC Pediatr*. 2019 Dec 19;19(1):504. doi: 10.1186/s12887-019-1886-8.

Parental adiposity differentially associates with newborn body composition. Diaz EC, Cleves MA, DiCarlo M, Sobik SR, Ruebel ML, Thakali KM, Sims CR, Dajani NK, Krukowski RA, Børsheim E, Badger TM, Shankar K, Andres A. *Pediatr Obes*. 2019 Dec 19:e12596. doi: 10.1111/ijpo.12596.

Risks of Maternal Obesity in Pregnancy: A Case-control Study in a Portuguese Obstetrical Population. Alves P, Malheiro MF, Gomes JC, Ferraz T, Montenegro N. *Rev Bras Ginecol Obstet*. 2019 Dec;41(12):682-687. doi: 10.1055/s-0039-3400455.

Child behaviour and subsequent changes in body weight, composition and shape. Christensen KG, Nielsen SG, Olsen NJ, Dalgård C, Heitmann BL, Larsen SC. *PLoS One*. 2019 Dec 19;14(12):e0226003. doi: 10.1371/journal.pone.0226003.

Influence of Obesity and Impact of a Physical Activity Program on Postural Control and Functional and Physical Capacities in Institutionalized Older Adults: A Pilot Study. Maktouf W, Durand S, Beaune B, Boyas S. *J Phys Act Health*. 2019 Dec 19:1-8. doi: 10.1123/jpah.2018-0376.

JOIN for ME: Testing a Scalable Weight Control Intervention for Adolescents. Jelalian E, Evans EW, Rancourt D, Ranzenhofer L, Taylor N, Hart C, Seifer R, Klinepier K, Foster GD. *Child Obes*. 2019 Dec 18. doi: 10.1089/chi.2019.0053.

Child-Centred Health Dialogue for primary prevention of obesity in Child Health Services - a feasibility study. Derwig M, Tiberg I, Björk J, Hallström I. *Scand J Public Health*. 2019 Dec 19:1403494819891025. doi: 10.1177/1403494819891025.

Projected U.S. State-Level Prevalence of Adult Obesity and Severe Obesity. Ward ZJ, Bleich SN, Cradock AL, Barrett JL, Giles CM, Flax C, Long MW, Gortmaker SL. *N Engl J Med*. 2019 Dec 19;381(25):2440-2450. doi: 10.1056/NEJMsa1909301.

Stressor reactivity to insufficient sleep and its association with body mass index in middle-aged workers. Vigoureux TFD, Lee S, Buxton OM, Almeida DM. *J Sleep Res*. 2019 Dec 17:e12955. doi: 10.1111/jsr.12955.

Promoting healthy teenage behaviour across three European countries through the use of a novel smartphone technology platform, PEGASO fit for future: study protocol of a quasi-experimental, controlled, multi-Centre trial. Puigdomenech E, Martin A, Lang A, Adorni F, Gomez SF, McKinstry B, Prinelli F, Condon L, Rashid R, Caon M, Atkinson S, Lafortuna CL, Ciociola V, Hanley J, McCloughan L, Castell C, Espallargues M; PEGASO Fit For Future Consortium. *BMC Med Inform Decis Mak*. 2019 Dec 17;19(1):278. doi: 10.1186/s12911-019-0958-x.

The new TV dinner: effects of television programming content on eating and attitudes towards exercise. Szuhany KL, Otto MW. *Psychol Health Med*. 2019 Dec 17:1-6. doi: 10.1080/13548506.2019.1705990.

Co-Designing an Intervention to Prevent Overweight and Obesity among Young Children and Their Families in a Disadvantaged Municipality: Methodological Barriers and Potentials. Hoeg D, Christensen U, Grabowski D. *Int J Environ Res Public Health*. 2019 Dec 14;16(24). pii: E5110. doi: 10.3390/ijerph16245110.

Dietary and Lifestyle Patterns in the Spanish Pediatric Population (One to <10 Years Old): Design, Protocol, and Methodology of the EsNuPI Study. Madrigal C, Soto-Méndez MJ, Hernández-Ruiz Á, Ruiz E, Valero T, Ávila JM, Lara-Villoslada F, Leis R, Victoria EM, Moreno JM, Ortega RM, Ruiz-López MD, Varela-Moreiras G, Gil Á. *Nutrients*. 2019 Dec 13;11(12). pii: E3050. doi: 10.3390/nu11123050.

Obesity and Vitamin D Insufficiency among Adolescent Girls and Young Adult Women from Korea. Jang H, Lee Y, Park K. *Nutrients*. 2019 Dec 13;11(12). pii: E3049. doi: 10.3390/nu11123049.

Diet Quality and Micronutrient Intake among Long-Term Weight Loss Maintainers. Pascual RW, Phelan S, La Frano MR, Pilolla KD, Griffiths Z, Foster GD. *Nutrients*. 2019 Dec 13;11(12). pii: E3046. doi: 10.3390/nu11123046.

Annual Report on Children's Healthcare: Healthcare Access and Utilization by Obesity Status in the United States. Berdahl T, Biener A, McCormick MC, Guevara JP, Simpson L. *Acad Pediatr*. 2019 Dec 13. pii: S1876-2859(19)30514-5. doi: 10.1016/j.acap.2019.11.020.

Elucidating knowledge and beliefs about obesity and eating disorders among key stakeholders: paving the way for an integrated approach to health promotion. Bullivant B, Denham AR, Stephens C, Olson RE, Mitchison D, Gill T, Maguire S, Latner JD, Hay P, Rodgers B, Stevenson RJ, Touyz S, Mond JM. *BMC Public Health*. 2019 Dec 16;19(1):1681. doi: 10.1186/s12889-019-7971-y.

High and moderate adherence to Mediterranean lifestyle is inversely associated with overweight, general and abdominal obesity in children and adolescents: The MediLIFE-index. Katsagoni CN, Psarra G, Georgoulis M, Tambalis K, Panagiotakos DB, Sidossis LS; EYZHN Study Group. *Nutr Res*. 2019 Nov 11;73:38-47. doi: 10.1016/j.nutres.2019.09.009.

GWAS on longitudinal growth traits reveals different genetic factors influencing infant, child, and adult BMI. Couto Alves A, De Silva NMG, Karhunen V, Sovio U, Das S, Taal HR, Warrington NM, Lewin AM, Kaakinen M, Cousminer DL, Thiering E, Timpson NJ, Bond TA, Lowry E, Brown CD, Estivill X, Lindi V, Bradfield JP, Geller F, Speed D, Coin LJM, Loh M, Barton SJ, Beilin LJ, Bisgaard H, Bønnelykke K, Alili R, Hatoum IJ, Schramm K, Cartwright R, Charles MA, Salerno V, Clément K, Claringbould AAJ; BIOS Consortium, van Duijn CM, Moltchanova E, Eriksson JG, Elks C, Feenstra B, Flexeder C, Franks S, Frayling TM, Freathy RM, Elliott P, Widén E, Hakonarson H, Hattersley AT, Rodriguez A, Banterle M, Heinrich J, Heude B, Holloway JW, Hofman A, Hyppönen E, Inskip H, Kaplan LM, Hedman AK, Läärä E, Prokisch H, Grallert H, Lakka TA, Lawlor DA, Melbye M, Ahluwalia TS, Marinelli M, Millwood IY, Palmer LJ, Pennell CE, Perry JR, Ring SM, Savolainen MJ, Rivadeneira F, Standl M, Sunyer J, Tiesler CMT, Uitterlinden AG, Schierding W, O'Sullivan JM, Prokopenko I, Herzig KH, Smith GD, O'Reilly P, Felix JF, Buxton JL, Blakemore AIF, Ong KK, Jaddoe VWV, Grant SFA, Sebert S, McCarthy MI, Jarvelin MR; Early Growth Genetics (EGG) Consortium. *Sci Adv*. 2019 Sep 4;5(9):eaaw3095. doi: 10.1126/sciadv.aaw3095.

The Relationship Between Maternal and Obese Children's Daily Physical Activity. Foote SJ, Venezia A, Winkler DJ, Losche KR, Wadsworth DD. *Int J Exerc Sci*. 2019 Nov 1;12(5):1302-1314.

Assessing Physical Activity Levels and Motivation in an Urban Midwest Private Liberal Arts College. Kantor M, Freire Ribeiro AB. *Int J Exerc Sci*. 2019 Nov 1;12(4):1169-1178.

A multi-country survey of public support for food policies to promote healthy diets: Findings from the International Food Policy Study. Kwon J, Cameron AJ, Hammond D, White CM, Vanderlee L, Bhawra J, Sacks G. BMC Public Health. 2019 Sep 2;19(1):1205. doi: 10.1186/s12889-019-7483-9.

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

Systematic reviews

The relationship between weight indices and injuries and mortalities caused by the motor vehicle accidents: a systematic review and meta-analysis. Homaie Rad E, Khodadady-Hasankiadeh N, Kouchakinejad-Eramsadati L, Javadi F, Haghdoost Z, Hosseinpour M, Tavakoli M, Davoudi-Kiakalayeh A, Mohtasham-Amiri Z, Yousefzadeh-Chabok S. J Inj Violence Res. 2019 Dec 21;12(1). doi: 10.5249/ijvr.v12i1.1198.

Exercise prescription for weight management in obese adults at risk for osteoarthritis: synthesis from a systematic review. Barrow DR, Abbate LM, Paquette MR, Driban JB, Vincent HK, Newman C, Messier SP, Ambrose KR, Shultz SP. BMC Musculoskelet Disord. 2019 Dec 20;20(1):610. doi: 10.1186/s12891-019-3004-3.

Smartphone-Based Health Program for Improving Physical Activity and Tackling Obesity for Young Adults: A Systematic Review and Meta-Analysis. Kim HN, Seo K. Int J Environ Res Public Health. 2019 Dec 18;17(1). pii: E15. doi: 10.3390/ijerph17010015.

Whole milk compared with reduced-fat milk and childhood overweight: a systematic review and meta-analysis. Vanderhout SM, Aglipay M, Torabi N, Jüni P, da Costa BR, Birken CS, O'Connor DL, Thorpe KE, Maguire JL. Am J Clin Nutr. 2019 Dec 18. pii: nqz276. doi: 10.1093/ajcn/nqz276.

Obesity and pain: a systematic review. Chin SH, Huang WL, Akter S, Binks M. Int J Obes (Lond). 2019 Dec 17. doi: 10.1038/s41366-019-0505-y.

Effects of Accumulated Short Bouts of Exercise on Weight and Obesity Indices in Adults: A Meta-Analysis. Kim H, Reece J, Kang M. Am J Health Promot. 2020 Jan;34(1):96-104. doi: 10.1177/0890117119872863.

Lifestyle interventions to maternal weight loss after birth: a systematic review. Christiansen PK, Skjøth MM, Rothmann MJ, Vinter CA, Lamont RF, Draborg E. Syst Rev. 2019 Dec 16;8(1):327. doi: 10.1186/s13643-019-1186-2.

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