



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

**Associations of air pollution with obesity and body fat percentage, and modification by polygenic risk score for BMI in the UK Biobank.** Furlong MA, Klimentidis YC. Environ Res. 2020 Mar 12;185:109364. doi: 10.1016/j.envres.2020.109364.

**Impact of a health marketing campaign on sugars intake by children aged 5-11 years and parental views on reducing children's consumption.** Bradley J, Gardner G, Rowland MK, Fay M, Mann K, Holmes R, Foster E, Exley C, Don Bosco A, Hugueniot O, Moynihan P. BMC Public Health. 2020 Mar 30;20(1):331. doi: 10.1186/s12889-020-8422-5.

**Text messaging to help women with overweight or obesity lose weight after childbirth: the intervention adaptation and SMS feasibility RCT.** McGirr C, Rooney C, Gallagher D, Dombrowski SU, Anderson AS, Cardwell CR, Free C, Hoddinott P, Holmes VA, McIntosh E, Somers C, Woodside JV, Young IS, Kee F, McKinley MC. Southampton (UK): NIHR Journals Library; 2020 Mar.

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## International

**Are Australian parents following feeding guidelines that will reduce their child's risk of dental caries?** Martin-Kerry J, Gussy M, Gold L, Calache H, Boak R, Smith M, de Silva A. Child Care Health Dev. 2020 Apr 4. doi: 10.1111/cch.12768.

**Effect of a lifestyle intervention program with energy-restricted Mediterranean diet and exercise on the serum polyamine metabolome in individuals at high cardiovascular disease risk: a randomized clinical trial.** Fernández-García JC, Martínez-Sánchez MA, Bernal-López MR, Muñoz-Garach A, Martínez-González MA, Fitó M, Salas-Salvadó J, Tinahones FJ, Ramos-Molina B. Am J Clin Nutr. 2020 Apr 4. pii: nqaa064. doi: 10.1093/ajcn/nqaa064.

**Physical discomfort intolerance as a predictor of weight loss and physical activity in a lifestyle modification program.** Martinelli MK, Godfrey KM, Martinez M, Forman EM, Butrym ML. J Behav Med. 2020 Apr 3. doi: 10.1007/s10865-020-00150-5.

**Incidence, aetiology and related comorbidities of cirrhosis: a Swedish population-based cohort study.** Vaz J, Eriksson B, Strömberg U, Buchebner D, Midlöv P. *BMC Gastroenterol.* 2020 Apr 3;20(1):84. doi: 10.1186/s12876-020-01239-6.

**Childhood Eating and Feeding Disturbances.** Hilbert A. *Nutrients.* 2020 Apr 1;12(4). pii: E972. doi: 10.3390/nu12040972.

**Implementation of a clinical practice guideline in a primary care setting for the prevention and management of obesity in adults.** Rust C, Prior RM, Stec M. *Nurs Forum.* 2020 Apr 3. doi: 10.1111/nuf.12453.

**Challenges Associated With Cervical Cancer Screening and Management in Obese Women: A Provider Perspective.** Clarke MA, Massad LS, Khan MJ, Smith KM, Guido RS, Mayeaux EJ Jr, Darragh TM, Huh WK, Johnson AL, Gold MA, Schiffman M, Wentzzenen N. *J Low Genit Tract Dis.* 2020 Apr;24(2):184-191. doi: 10.1097/LGT.0000000000000506.

**Society of Behavioral Medicine Call to Action: Include obesity/overweight management education in health professional curricula and provide coverage for behavior-based treatments of obesity/overweight most commonly provided by psychologists, dieticians, counselors, and other health care professionals and include such providers on all multidisciplinary teams treating patients who have overweight or obesity.** Ockene JK, Ashe K, Peterson KS, Fitzgibbon M, Buscemi J, Dulin A. *Transl Behav Med.* 2020 Apr 3. pii: ibaa030. doi: 10.1093/tbm/ibaa030.

**Implementation Outcomes Following Participation in a Large-Scale Healthy Workplace Program Conducted Across Multiple Worksites.** Talati Z, Grapes C, Davey E, Shilton T, Pettigrew S. *Am J Health Promot.* 2020 Apr 3:890117120911504. doi: 10.1177/0890117120911504.

**Sedentary behavior patterns and adiposity in children: a study based on compositional data analysis.** Gába A, Pedišić Ž, Štefelová N, Dygrýn J, Hron K, Dumuid D, Tremblay M. *BMC Pediatr.* 2020 Apr 2;20(1):147. doi: 10.1186/s12887-020-02036-6.

**Associations of types of green space across the life-course with blood pressure and body mass index.** Jimenez MP, Wellenius GA, James P, Subramanian SV, Buka S, Eaton C, Gilman SE, Loucks EB. *Environ Res.* 2020 Mar 26;185:109411. doi: 10.1016/j.envres.2020.109411.

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**Weight Management in Primary Care for Children With Autism: Expert Recommendations.** Curtin C, Hyman SL, Boas DD, Hassink S, Broder-Fingert S, Ptomey LT, Gillette MD, Fleming RK, Must A, Bandini LG. *Pediatrics.* 2020 Apr;145(Suppl 1):S126-S139. doi: 10.1542/peds.2019-1895P.

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**Attending After-School Physical Activity Club 2 Days a Week Attenuated an Increase in Percentage Body Fat and a Decrease in Fitness Among Adolescent Girls at Risk for Obesity.** Robbins LB, Ling J, Wen F. Am J Health Promot. 2020 Apr 2:890117120915679. doi: 10.1177/0890117120915679.

**Built Environment, Physical Activity, and Obesity: Findings from the International Physical Activity and Environment Network (IPEN) Adult Study.** Sallis JF, Cerin E, Kerr J, Adams MA, Sugiyama T, Christiansen LB, Schipperijn J, Davey R, Salvo D, Frank LD, De Bourdeaudhuij I, Owen N. Annu Rev Public Health. 2020 Apr 2;41:119-139. doi: 10.1146/annurev-publhealth-040218-043657.

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**Growth patterns from birth to overweight at age 5-6 years of children with various backgrounds in socioeconomic status and country of origin: the ABCD study.** Vrijkotte TGM, Oostvogels AJJM, Stronks K, Roseboom TJ, Hof MHP. Pediatr Obes. 2020 Apr 1:e12635. doi: 10.1111/ijpo.12635.

**Soft Drinks and Sugar-Sweetened Beverages Advertising in Spain: Correlation between Nutritional Values and Advertising Discursive Strategies.** Montaña Blasco M, Jiménez-Morales M. Int J Environ Res Public Health. 2020 Mar 30;17(7). pii: E2335. doi: 10.3390/ijerph17072335.

**Which strategies to manage problem foods were related to weight loss in a randomized clinical trial?** Roe LS, Rolls BJ. Appetite. 2020 Mar 29:104687. doi: 10.1016/j.appet.2020.104687.

**Characteristics of participants who benefit most from personalised nutrition: findings from the pan-European Food4Me randomised controlled trial.** Livingstone KM, Celis-Morales C, Navas-Carretero S, San-Cristobal R, Forster H, Woolhead C, O'Donovan CB, Moschonis G, Manios Y, Traczyk I, Gundersen TE, Drevon CA, Marsaux CFM, Fallaize R, Macready AL, Daniel H, Saris WHM, Lovegrove JA, Gibney M, Gibney ER, Walsh M, Brennan L, Martinez JA, Mathers JC. Br J Nutr. 2020 Feb 27:1-10. doi: 10.1017/S0007114520000653.

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**Exercise in the treatment of childhood obesity.** Bülbül S. Turk Pediatri Ars. 2020 Mar 9;55(1):2-10. doi: 10.14744/TurkPediatriArs.2019.60430.

**Promoting Healthy Eating Habits for College Students Through Creating Dietary Diaries via a Smartphone App and Social Media Interaction: Online Survey Study.** Watanabe-Ito M, Kishi E, Shimizu Y. JMIR Mhealth Uhealth. 2020 Mar 31;8(3):e17613. doi: 10.2196/17613.

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### **Systematic reviews**

**The Effects of Foods Embedded in Entertainment Media on Children's Food Choices and Food Intake: A Systematic Review and Meta-Analyses.** Villegas-Navas V, Montero-Simo MJ, Araque-Padilla RA. Nutrients. 2020 Mar 31;12(4). pii: E964. doi: 10.3390/nu12040964.

**Comparison of dietary macronutrient patterns of 14 popular named dietary programmes for weight and cardiovascular risk factor reduction in adults: systematic review and network meta-analysis of randomised trials.** Ge L, Sadeghirad B, Ball GDC, da Costa BR, Hitchcock CL, Svendrovski A, Kiflen R, Quadri K, Kwon HY, Karamouzian M, Adams-Webber T, Ahmed W, Damanhoury S, Zeraatkar D, Nikolakopoulou A, Tsuyuki RT, Tian J, Yang K, Guyatt GH, Johnston BC. BMJ. 2020 Apr 1;369:m696. doi: 10.1136/bmj.m696.

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