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## UK and Ireland

[Temporal discounting does not influence Body Mass Index](#). Veillard ML, Vincent BT. *Physiol Behav*. 2020 Apr 8;112893. doi: 10.1016/j.physbeh.2020.112893.

[Associations of the objective built environment along the route to school with children's modes of commuting: A multilevel modelling analysis \(the SLIC study\)](#). Bosch LSMM, Wells JCK, Lum S, Reid AM. *PLoS One*. 2020 Apr 9;15(4):e0231478. doi: 10.1371/journal.pone.0231478.

[Making Connections: Social identification with New Treatment Groups for Lifestyle Management of Severe Obesity](#). Khan SS, Tarrant M, Kos K, Daly M, Gimbuta C, Farrow CV. *Clin Psychol Psychother*. 2020 Apr 8. doi: 10.1002/cpp.2454.

[Incidence of Depression and First-Line Antidepressant Therapy in People with Obesity and Depression in Primary Care](#). Tyrer F, Zaccardi F, Khunti K, Morriss R. *Obesity (Silver Spring)*. 2020 Apr 7. doi: 10.1002/oby.22772.

[Improving the assessment and management of obesity in UK children and adolescents: the PROMISE research programme including a RCT](#). Viner RM, Kinra S, Christie D, Cole TJ, Costa S, Croker H, Fry T, Hsia Y, Hudson L, Kessel AS, Morris S, Nazareth I, Nicholls D, Park MH, Saxena S, Taylor B, White B, Wong IC. Southampton (UK): NIHR Journals Library; 2020 Mar.

[Food waste concerns, eating behaviour and body weight](#). Sheen F, Hardman CA, Robinson E. *Appetite*. 2020 Apr 3;151:104692. doi: 10.1016/j.appet.2020.104692.

[Association of Video Game Use With Body Mass Index and Other Energy-Balance Behaviors in Children](#). Goodman W, Jackson SE, McFerran E, Purves R, Redpath I, Beeken RJ. *JAMA Pediatr*. 2020 Apr 6. doi: 10.1001/jamapediatrics.2020.0202.

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## International

The (bitter) sweet taste of nudge effectiveness: The Role of habits in a portion size nudge, a proof of concept study. Venema TAG, Kroese FM, Verplanken B, de Ridder DTD. *Appetite*. 2020 Apr 8;104699. doi: 10.1016/j.appet.2020.104699.

Optimal defaults as a strategy to improve selections from Children's Menus in full-service theme park dining. Dalrymple JC, Radnitz C, Loeb KL, Keller KL. *Appetite*. 2020 Apr 8;104697. doi: 10.1016/j.appet.2020.104697.

Differences in Brain Volume between Metabolically Healthy and Unhealthy Overweight and Obese Children: The Role of Fitness. Cadenas-Sanchez C, Esteban-Cornejo I, Migueles JH, Labayen I, Verdejo-Román J, Mora-Gonzalez J, Henriksson P, Maldonado J, Gómez-Vida J, Hillman CH, Erickson KI, Kramer AF, Catena A, Ortega FB. *J Clin Med*. 2020 Apr 8;9(4). pii: E1059. doi: 10.3390/jcm9041059.

Individual, Family, and Environmental Correlates of Motor Competence in Young Children: Regression Model Analysis of Data Obtained from Two Motor Tests. Niemistö D, Finni T, Cantell M, Korhonen E, Sääkslahti A. *Int J Environ Res Public Health*. 2020 Apr 8;17(7). pii: E2548. doi: 10.3390/ijerph17072548.

Concordance and Discordance in the Geographic Distribution of Childhood Obesity and Pediatric Type 2 Diabetes in New York City. Osorio M, Koziatsek CA, Gallagher MP, Recaii J, Weinstein M, Thorpe LE, Elbel B, Lee DC. *Acad Pediatr*. 2020 Apr 7. pii: S1876-2859(20)30162-5. doi: 10.1016/j.acap.2020.03.012.

Students Living in the Islands are Heavier and have Lower Fitness Levels Compared to their Mainland Counterparts; Results from the National Action for Children's Health (EYZHN) Program. Arnaoutis G, Tambalis KD, Georgoulis M, Psarra G, Panagiotakos DB, Sidossis LS. *Behav Med*. 2020 Apr 10;1-10. doi: 10.1080/08964289.2020.1740969.

An examination of potential mediators of the relationship between polygenic scores of BMI and waist circumference and phenotypic adiposity. Stephan Y, Sutin AR, Luchetti M, Caille P, Terracciano A. *Psychol Health*. 2020 Apr 10;1-11. doi: 10.1080/08870446.2020.1743839.

The effect of repeated episodic future thinking on the relative reinforcing value of snack food. Mansouri TH, Crandall AK, Temple JL. *J Health Psychol*. 2020 Apr 10;1359105320914060. doi: 10.1177/1359105320914060.

The Association Between Pre-Pregnancy Body Mass Index, Perinatal Depression and Maternal Vitamin D Status: Findings from an Australian Cohort Study. Jani R, Knight-Agarwal CR, Bloom M, Takito MY. *Int J Womens Health*. 2020 Mar 26;12:213-219. doi: 10.2147/IJWH.S239267.

Assessment of diet quality, nutrient intake, and dietary behaviours in obese children compared to healthy children. Koziół-Kozakowska A, Kozłowska M, Jagielski P. *Pediatr Endocrinol Diabetes Metab*. 2020 Apr 10. pii: 39973. doi: 10.5114/peddm.2020.93250.

Sales of Sugar-Sweetened Beverages in Australia: A Trend Analysis from 1997 to 2018. Shrapnel WS, Butcher BE. *Nutrients*. 2020 Apr 7;12(4). pii: E1016. doi: 10.3390/nu12041016.

**Leisure-Time Physical Activity, Sedentary Behaviour and Diet Quality are Associated with Metabolic Syndrome Severity: The PREDIMED-Plus Study.** Gallardo-Alfaro L, Bibiloni MDM, Mascaró CM, Montemayor S, Ruiz-Canela M, Salas-Salvadó J, Corella D, Fitó M, Romaguera D, Vioque J, Alonso-Gómez ÁM, Wärnberg J, Martínez JA, Serra-Majem L, Estruch R, Fernández-García JC, Lapetra J, Pintó X, García Ríos A, Bueno-Cavanillas A, Gaforio JJ, Matía-Martín P, Daimiel L, Micó-Pérez RM, Vidal J, Vázquez C, Ros E, Fernandez-Lázaro CI, Becerra-Tomás N, Gimenez-Alba IM, Zomeño MD, Konieczna J, Compañ-Gabucio L, Tojal-Sierra L, Pérez-López J, Zulet MÁ, Casañas-Quintana T, Castro-Barquero S, Gómez-Pérez AM, Santos-Lozano JM, Galera A, Basterra-Gortari FJ, Basora J, Saiz C, Pérez-Vega KA, Galmés-Panadés AM, Tercero-Maciá C, Sorto-Sánchez C, Sayón-Orea C, García-Gavilán J, Muñoz-Martínez J, Tur JA. *Nutrients*. 2020 Apr 7;12(4). pii: E1013. doi: 10.3390/nu12041013.

**Effectiveness of Weight Loss Interventions for Reducing Pain and Disability in People With Common Musculoskeletal Disorders: A Systematic Review With Meta-Analysis.** Robson EK, Hodder RK, Kamper SJ, O'Brien KM, Williams A, Lee H, Wolfenden L, Yoong S, Wiggers J, Barnett C, Williams CM. *J Orthop Sports Phys Ther*. 2020 Apr 9:1-55. doi: 10.2519/jospt.2020.9041.

**The Impact of Parental Diabetes on the Prevalence of Childhood Obesity.** Tojjar J, Norström F, Myléus A, Carlsson A. *Child Obes*. 2020 Apr 9. doi: 10.1089/chi.2019.0278.

**Associations of whole blood polyunsaturated fatty acids and insulin resistance among European children and adolescents.** Marth S, Börnhorst C, Mehlig K, Russo P, Moreno LA, De Henauw S, Veidebaum T, Molnár D, Tornaritis M, Risé P, Wolters M; IDEFICS and I.Family consortia. *Eur J Pediatr*. 2020 Apr 8. doi: 10.1007/s00431-020-03636-1.

**Effect of Lifestyle Interventions in Obese Pregnant Women on the Neurocognitive Development and Anthropometrics of Preschool Children.** Braeken MAK, Bogaerts A. *Obes Facts*. 2020 Apr 8:1-11. doi: 10.1159/000506690.

**The Association of Direct Observation of Medical Students With Patient-Centered Care for Obesity.** Miller N, Angstman KB, van Ryn M, Garrison GM, Fischer K, Phelan S. *Fam Med*. 2020 Apr;52(4):271-277. doi: 10.22454/FamMed.2020.314090.

**The information-motivation-behavioral skills model explains physical activity levels for adults with type 2 diabetes across all weight classes.** Ferrari M, Speight J, Beath A, Browne JL, Mosely K. *Psychol Health Med*. 2020 Apr 8:1-14. doi: 10.1080/13548506.2020.1749292.

**Preschool Obesity Is Associated With an Increased Risk of Childhood Fracture: A Longitudinal Cohort Study of 466,997 Children and Up to 11 Years of Follow-up in Catalonia, Spain.** Lane JC, Butler KL, Poveda-Marina JL, Martinez-Laguna D, Reyes C, de Bont J, Javaid MK, Logue J, Compston JE, Cooper C, Duarte-Salles T, Furniss D, Prieto-Alhambra D. *J Bone Miner Res*. 2020 Apr 7. doi: 10.1002/jbmr.3984.

**Late bedtime and body mass index gain in indigenous Australian children in the longitudinal study of indigenous children.** Fatima Y, Al Mamun A, Bucks RS, Charles Skinner T. *Acta Paediatr*. 2020 Apr 7. doi: 10.1111/apa.15219.

**The Application of an Evidence Framework for Obesity Prevention at the Population-Level.** Sacks G, Kwon J, Ananthapavan J. *Curr Obes Rep*. 2020 Apr 7. doi: 10.1007/s13679-020-00376-z.

**Predictors of Developmental Patterns of Obesity in Young Children.** O'Connor TG, Williams J, Blair C, Gatzke-Kopp LM, Francis L, Willoughby MT. *Front Pediatr.* 2020 Mar 24;8:109. doi: 10.3389/fped.2020.00109.

**A Randomized Controlled Trial of a Mindfulness-Based Weight Loss Intervention on Cardiovascular Reactivity to Social-Evaluative Threat Among Adults with Obesity.** Daubenmier J, Epel ES, Moran PJ, Thompson J, Mason AE, Acree M, Goldman V, Kristeller J, Hecht FM, Mendes WB. *Mindfulness (N Y).* 2019 Dec;10(12):2583-2595. doi: 10.1007/s12671-019-01232-5.

**Effects of Shift Work on the Eating Behavior of Police Officers on Patrol.** Kosmadopoulos A, Kervezee L, Boudreau P, Gonzales-Aste F, Vujovic N, Scheer FAJL, Boivin DB. *Nutrients.* 2020 Apr 4;12(4). pii: E999. doi: 10.3390/nu12040999.

**The Relation of CUN-BAE Index with Body Mass Index and Waist Circumference in Adults Aged 50 to 85 Years: The MCC-Spain Study.** Davila-Batista V, Molina AJ, Fernández-Villa T, Romaguera D, Pérez-Gómez B, Vilorio-Marqués L, Dierssen-Sotos T, Altzibar JM, Moreno V, Ardanaz E, Salcedo-Bellido I, Fernández-Tardon G, Capelo R, Salas D, Marcos-Gragera R, Huerta JM, de Sanjosé S, Sierra MÁ, Canga-Presa JM, Gómez-Acebo I, Amiano P, Pollan M, Aragonés N, Castaño-Vinyals G, Kogevinas M, Martín V, On Behalf Of McC-Spain Study Group. *Nutrients.* 2020 Apr 3;12(4). pii: E996. doi: 10.3390/nu12040996.

**Insights into smell and taste sensitivity in normal weight and overweight-obese adolescents.** Herz RS, Van Reen E, Gredvig-Ardito CA, Carskadon MA. *Physiol Behav.* 2020 Apr 4;221:112897. doi: 10.1016/j.physbeh.2020.112897.

**The Association Between Child Cooking Involvement in Food Preparation and Fruit and Vegetable Intake in a Hispanic Youth Population.** Asigbee FM, Davis JN, Markowitz AK, Landry MJ, Vandyousefi S, Ghaddar R, Ranjit N, Warren J, van den Berg A. *Curr Dev Nutr.* 2020 Mar 3;4(4):nzaa028. doi: 10.1093/cdn/nzaa028.

**Improving Willingness to Try Fruits and Vegetables Among Low-Income Children Through Use of Characters.** Cotwright CJ, Alvis C, de Jesus Jimenez F, Farmer P, Okoli C, Delane J, Cox GO. *Health Equity.* 2020 Mar 27;4(1):84-90. doi: 10.1089/heap.2019.0113.

**The effects of body mass index and body shape perceptions of South Korean adults on weight control behaviors; Correlation with quality of sleep and residence of place.** Kang NE, Kim SJ, Oh YS, Jang SE. *Nutr Res Pract.* 2020 Apr;14(2):160-166. doi: 10.4162/nrp.2020.14.2.160.

**Development of nutrition counselling resources for family medicine using the knowledge to action framework.** Fitzgerald JD, Andrade JM, Curl SL, Smith EB, Torna E, Nelson DS. *Fam Pract.* 2020 Apr 7. pii: cmaa020. doi: 10.1093/fampra/cmaa020.

**Associations between changes in fruit and vegetable consumption and weight change in Japanese adults.** Wilunda C, Sawada N, Goto A, Yamaji T, Takachi R, Ishihara J, Mori N, Kotemori A, Iwasaki M, Tsugane S. *Eur J Nutr.* 2020 Apr 6. doi: 10.1007/s00394-020-02236-x.

**Process evaluation of a whole-of-community systems approach to address childhood obesity in western Victoria, Australia.** Jenkins E, Lowe J, Allender S, Bolton KA. *BMC Public Health.* 2020 Apr 6;20(1):450. doi: 10.1186/s12889-020-08576-x.

**Air pollution and childhood obesity.** Seo MY, Kim SH, Park MJ. *Clin Exp Pediatr.* 2020 Mar 27. doi: 10.3345/cep.2020.00010.

**Temperament profiles are associated with dietary behavior from childhood to adulthood.** Lipsanen J, Elovainio M, Hakulinen C, Tremblay MS, Rovio S, Lagström H, Jaakkola JM, Jula A, Rönnemaa T, Viikari J, Niinikoski H, Simell O, Raitakari OT, Pahkala K, Pulkki-Råback L. *Appetite*. 2020 Apr 3:104681. doi: 10.1016/j.appet.2020.104681.

**Processed food consumption is associated with diet quality, but not weight status, in a sample of low-income and ethnically diverse elementary school children.** Bleiweiss-Sande R, Sacheck JM, Chui K, Goldberg JP, Bailey C, Evans EW. *Appetite*. 2020 Apr 3:104696. doi: 10.1016/j.appet.2020.104696.

**Fitness, physical activity, sedentary time, inhibitory control, and neuroelectric activity in children with overweight or obesity: The ActiveBrains project.** Mora-Gonzalez J, Esteban-Cornejo I, Solis-Urra P, Migueles JH, Cadenas-Sanchez C, Molina-Garcia P, Rodriguez-Ayllon M, Hillman CH, Catena A, Pontifex MB, Ortega FB. *Psychophysiology*. 2020 Apr 6:e13579. doi: 10.1111/psyp.13579.

**Are changes in depressive symptoms, general health and residential area socio-economic status associated with trajectories of waist circumference and body mass index?** Niyonsenga T, Carroll SJ, Coffee NT, Taylor AW, Daniel M. *PLoS One*. 2020 Jan 8;15(1):e0227029. doi: 10.1371/journal.pone.0227029.

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## **Systematic reviews**

**Parenting styles and the dietary intake of pre-school children: a systematic review.** Burnett AJ, Lamb KE, McCann J, Worsley A, Lacy KE. *Psychol Health*. 2020 Apr 7:1-20. doi: 10.1080/08870446.2020.1743842.

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