Author acknowledgements and declarations of interest

C.M.M. is supported by funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Sklodowska-Curie grant agreement no. 721567. J.F.F. has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 633595 (DynaHEALTH) and 733206 (LifeCycle). R.M.F. and R.N.B. are supported by Sir Henry Dale Fellowship (Wellcome Trust and Royal Society grant: WT104150). D.L.C. is funded by the American Diabetes Association Grant 1-17-PDF-077. D.O.M-K. was supported by Dutch Science Organization (ZonMW-VENI Grant 916.14.023). N.M.W. is supported by an Australian National Health and Medical Research Council Early Career Fellowship (APP1104818). T.S.A. was partially funded by the Gene-Diet Interactions in Obesity (GENDINOB) project on behalf of GOYA male cohort data management and analyses and acknowledges the same. S.D. was supported by National Institute of Health Research. T.M.F. is supported by the European Research Council grant: 323195 SZ-245 50371-GLUCOSEGENES-FP7-IDEAS-ERC. The Novo Nordisk Foundation Center for Basic Metabolic Research is an independent Research Center at the University of Copenhagen partially funded by an unrestricted donation from the Novo Nordisk Foundation (www.metabol.ku.dk). H.H. is funded by The Children’s Hospital of Philadelphia Endowed Chair in Genomic Research. A.T.H. is supported by the Wellcome Trust Senior Investigator Awards (WT098395), National Institute for Health Research (NIHR) Senior Investigator Award (NF-SI-0611-10219). J.Hebebrand received grants from German Research Society, German Ministry of Education and Research. M-F.H. is currently supported by an American Diabetes Association (ADA) Pathway Program Accelerator Early Investigator Award (1-15-ACE-26). S.J. is supported by Helse Vest no. 23929, Bergen Forskningsstiftelse and KG Jebsen Foundation and University of Bergen. J.K. has been supported by the Academy of Finland Research Professor program (grants 265240 & 263278). J.P.K. is funded by a University of Queensland Development Fellowship (UQFEL1718945). H.L. has served as a speaker for Eli-Lilly and Shire and has received research grants from Shire; all outside the submitted work. C.M.L is supported by the Li Ka Shing Foundation, WT-SSI/John Fell funds and by the NIHR Biomedical Research Centre, Oxford, by Widenlife and NIH (5P50HD028138-27). S.E.M. was funded by an NHMRC Senior Research Fellowship (APP1103623). K.Panoutsoopolou is funded by a career development fellowship (grant 20308) and by the Wellcome Trust (WT098051). C.P. at UCL Institute of Child Health, with support from the National Institute for Health Research Biomedical Research Centre at Great Ormond Street Hospital for Children NHS Foundation Trust and University College London. I.P. was funded in part by the Wellcome Trust (WT205915), and the European Union’s Horizon 2020 research, the European Union FP7-IDEAS-ERC Advanced Grant (GEPIDIAB, ERC-AG – ERC- 294785), and innovation programme (DYNahealth, H2020-PHC-2014-633595). R.C.R. is supported by CRUK (grant number C18281/A19169). J.G.S. is supported by an NHMRC Practitioner Fellowship Grant (APP1105807). J.T. is funded by the European Regional Development Fund (ERDF), the European Social Fund (ESF), Convergence Programme for Cornwall and the Isles of Scilly and the Diabetes Research and Wellness Foundation Non-Clinical Fellowship. N.V-T. is funded by a pre-doctoral grant from the
Agència de Gestió d’Ajuts Universitaris i de Recerca (AGAUR) (2015 FI_B 00636), Generalitat de Catalunya. T.G.M.V was supported by ZonMW (TOP 40–00812–98–11010). J.F.W. is supported by the MRC Human Genetics Unit quinquennial programme "QTL in Health and Disease". H.Y. is funded by Diabetes UK RD Lawrence fellowship (grant: 17/0005594). M.H.Z was supported by BBMRI-NL (CP2013-50). E.Z. is supported by the Wellcome Trust (098051). B.F. is supported by Novo Nordisk Foundation (12955) and an Oak Foundation Fellowship. S.S. and M-R.J. have received funding from the European Union’s Horizon 2020 research and innovation programme [under grant agreement No 633595] for the DynaHEALTH action. P.R.N. was supported by the European Research Council (ERC), University of Bergen, KG Jebsen and Helse Vest. G.D.S. works within the MRC Integrative Epidemiology Unit at the University of Bristol (MC_UU_12013/1). D.A.L was supported by the European Research Council under the European Union’s Seventh Framework Programme (FP/2007-2013) / ERC Grant Agreement (Grant number 669545; DevelopObese), US National Institute of Health (grant: R01 DK10324), the UK Medical Research Council (grant: MC_UU_00011/6), Wellcome Trust GWAS grant (WT088806), an NIHR Senior Investigator Award (NF-SI-0611-10196) and the NIHR Biomedical Research Centre at University Hospitals Bristol NHS Foundation Trust and the University of Bristol. L.Paternoster was supported by the UK Medical Research Council Unit grants MC_UU_12013_5. N.J.T. is a Wellcome Trust Investigator (202802/Z/16/Z), is the PI of the Avon Longitudinal Study of Parents and Children (MRC & WT 102215/2/13/2), is supported by the University of Bristol NIHR Biomedical Research Centre (BRC) and works within the CRUK Integrative Cancer Epidemiology Programme (C18281/A19169). V.W.V.J. received additional grant from the Netherlands Organization for Health Research and Development (NWO, ZonMw-VIDI 016.136.361), a European Research Council Consolidator Grant (ERC-2014-CoG-648916) and funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 633595 (DynaHEALTH) and 733206 (LifeCycle). D.M.E. is funded by the UK Medical Research Council Unit grant MC_UU_12013_4, Australian Research Council Future Fellowship (FT130101709) and a NHMRC Senior Research Fellowship (GNT1137714). S.F.A.G. is funded by the Daniel B. Burke Endowed Chair for Diabetes Research and R01 HD056465. D.I.B. is supported by Spinozapremie (NWO-56-464-14192) and the Royal Netherlands Academy of Science Professor Award (PAH/6635) to DIB. M.I.M. is a Wellcome Senior Investigator and NIHR Senior Investigator supported by the Wellcome (090532, 098381, 203141), NIHR (NF-SI-0617-10090) and the NIHR Biomedical Research Centre, Oxford. The views expressed in this article are those of the author(s) and not necessarily those of the NHS, the NIHR, or the Department of Health.