Additional file 2: Overview of questionnaire domains and sources

Table A2.1: Child diet and activity questionnaire domains and sources

Domain	Source	Topics covered
Physical activity and sedentary behaviour	Bespoke	Active travel Sports participation Time outdoors Screen time Activity skills Physical activity enjoyment Knowledge of PA guidelines
	Physical Activity Questionnaire for Older Children (PAQ-C) [1]	Activity in last 7 days
	Parent and Peer Support Questionnaire [2]	Support from friends, parents and teachers to take part in physical activity/sport
Diet	Day in the Life Of (DILO) questionnaire [3]	Food/drink consumption on previous day
	Bespoke	Normal school lunch Takeaways
Acculturation	Based on Acculturation Rating Scale for Mexican Americans-II for Children and Adolescents (ARSMA) [4] Questions adapted for use with South Asian population.	Clothing Food Holidays celebrated by family/friends

Table A2.2: Parent questionnaire domains and sources

Domain	Source	Topics covered
Demographics	BiB baseline questionnaire	Ethnic background Household composition Pregnancy
Home	Bespoke	Home ownership Number of bedrooms Smartphone access
Neighbourhood	Bespoke	Availability, satisfaction and use of outdoor/green spaces
Socio-economic circumstances	Bespoke. Developed to map to ISCED levels [5]	Highest educational qualification
	National Statistics Socio-economic Classification (NS-SEC) [6]	Socio-economic Classification
	Bespoke	Household income Financial circumstances
Social circumstances	World Values Survey [7]	Trust of people
	Growing Up in Australia survey [8]	Family attachment and affection
	ONS social capital harmonised question set [9]	Voting in elections Belief that can influence decisions affecting local area
Health and health behaviour	Bespoke	Health conditions Medication Smoking E-cigarette use Alcohol consumption (based on chief medical officer guidelines, 2016)
	Millennium Cohort Study [10]	Longstanding illness/disability and impact Drug use
	Personal Health Questionnaire Depression Scale (PHQ-8) [11]	Depression
	Generalized Anxiety Disorder Screener (GAD-7) [12]	Anxiety
	Short form of the General Self-Efficacy Scale (GSE-6) [13]	Self-efficacy
Physical activity and sedentary behaviour	Bespoke	Television viewing Sitting time

	Active Australia Survey [14]	Vigorous, moderate and walking activity time
Child health, development and behaviours	Millennium Cohort Study [10]	Long-term health conditions and impact Diagnoses Wheezing Bed-wetting Hospital attendance
	Parental-Caregiver Perceptions Questionnaire (P-CPQ) in Child Oral Health Quality of Life Questionnaire (COHQOL) [15]	Health of teeth and mouth Impact
	Bespoke	Sleep patterns Puberty
Social and emotional wellbeing	Strengths and Difficulties Questionnaire [16]	Child's socio-emotional and behavioural difficulties
Acculturation	Bespoke questions based on Acculturation Rating Scale for Mexican Americans-II for Children and Adolescents (ARSMA) [4] and acculturation scale [17]	Speaking/watching TV/reading in English/South Asian language Clothing and food Holidays celebrated
Additional question mo	odules for sub-samples of the cohort	1
Diet	Children's Dietary Questionnaire [18]	Fruit/vegetable consumption Fat consumption Snack consumption
	Healthy Home Survey [19]	Where meals are eaten
Food insecurity	Short Form of the 18-item U.S. Household Food Security Survey Module [20]	Able to afford food/balanced meals
Physical activity	Parent supporting and controlling practices questionnaire [21]	Family physical activity Influences of parent behaviour Support to do physical activity
	Bespoke	Knowledge of physical activity guidelines
Parenting	Growing Up in Australia [8]	Confidence in parenting Views on child rearing Behaviour to child
Allergies	ISAAC phase III questionnaire 6-7 years [22]	Asthma Allergies Eczema

Table A2.3: Child 'me and my life' questionnaire domains and sources

Domain	Source	Topics covered
Family and home	Bespoke	Satisfaction with home and local parks
	Adapted from Millennium Cohort Study (MCS) Sweep 4 (age 7) [23]	Family relationships
	Bespoke	Languages spoken
Wellbeing and feelings	Child material wellbeing index developed for the Children's Society[24] and socially perceived necessities from the Poverty and Social Exclusion group[25].	Material wellbeing (including access to pocket money, a laptop, holidays, a car, garden)
	Children's Worlds. International survey of child wellbeing. Age 10 questionnaire. [26]	Concern about money
	MCS Sweep 4 (age 7) [23]	Feeling happy, sad, worried
	Bespoke	Feeling unwell, healthy; can work out what to do next when find something hard
Friends, school and	Adapted from MCS Sweep 4 (age 7) [23]	Friends, bullying
activities	MCS Sweep 4 (age 7) [23]	School
	Bespoke	Clubs and activities
Religion and	Bespoke	Religion
acculturation	Based on Acculturation Rating Scale for Mexican Americans-II for Children and Adolescents (ARSMA) [4] Questions adapted for use with South Asian population.	Clothing, Food, Holidays

REFERENCES

- 1. Kowalski KC, Crocker PRE, Donen RM: **The Physical Activity Questionnaire for Older Children (PAQ-C) and Adolescents (PAQ-A) Manual** In. Edited by College of Kinesiology UoS. Canada; 2004: 1-38.
- 2. Prochaska JJ, Rodgers MW, Sallis JF: **Association of parent and peer support with adolescent physical activity**. *Research quarterly for exercise and sport* 2002, **73**(2):206-210.
- 3. Kipping RR, Jago R, Lawlor DA: **Diet outcomes of a pilot school-based randomised controlled obesity prevention study with 9–10year olds in England**. *Preventive medicine* 2010, **51**(1):56-62.

- 4. Bauman S: The reliability and validity of the Brief Acculturation Rating Scale for Mexican Americans-II for children and adolescents. *Hispanic Journal of Behavioral Sciences* 2005, 27(4):426-441.
- 5. UNESCO: International Standard Classification of Education: ISCED 2011. In. http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf; 2012.
- 6. Office for National Statistics. **The National Statistics Socio-economic classification (NS-SEC).**https://www.ons.gov.uk/methodology/classificationsandstandards/otherclassifications/then-ationalstatisticssocioeconomicclassificationnssecrebasedonsoc2010 accessed 20/03/2019.
- 7. World Values Survey. http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp accessed 20/03/2019
- 8. Longitudinal Study of Austrialian Children. **Wave 7 Data Dictionary, Growing Up in Australia Wave** [http://www.growingupinaustralia.gov.au/data/datadict/index.html] accessed
 20/03/2019
- 9. Green H, Fletcher L: Social Capital Harmonised Question Set. A guide to questions for use in the measurement of social capital. In.: Office for National Statistics, Social and Vital Statistics Division; 2003.
- Millennium Cohort Study (2006) Second Survey: CAPI Questionnaire Documentation.
 Centre for Longitudinal Studies, University of London. https://cls.ucl.ac.uk/wp-content/uploads/2017/07/mcs3_capi_questionnaire_documentation_final.pdf accessed 20/03/2019
- 11. Kroenke K, Strine TW, Spitzer RL, Williams JBW, Berry JT, Mokdad AH: **The PHQ-8 as a measure of current depression in the general population**. *Journal of Affective Disorders* 2009, **114**(1–3):163-173.
- 12. Löwe B, Decker O, Müller S, Brähler E, Schellberg D, Herzog W, Herzberg PY: Validation and standardization of the Generalized Anxiety Disorder Screener (GAD-7) in the general population. *Medical Care* 2008, **46**(3):266-274.
- 13. Romppel M, Herrmann-Lingen C, Wachter R, Edelmann F, Dungen HD, Pieske B, Grande G: A short form of the General Self-Efficacy Scale (GSE-6): Development, psychometric properties and validity in an intercultural non-clinical sample and a sample of patients at risk for heart failure. *Psycho-social Medicine* 2013, **10**:doc1.
- 14. Australian Institute of Health and Welfare (AIHW): **The Active Australia Survey: a guide and manual for implementation, analysis and reporting.** Canberra: AIHW; 2003.
- 15. Jokovic A, Locker D, Stephens M, Kenny D, Tompson B, Guyatt G: **Measuring Parental Perceptions of Child Oral Health-related Quality of Life**. *Journal of Public Health Dentistry* 2003, **63**(2):67-72.
- 16. Goodman R: The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. . Journal of Child Psychology and Psychiatry 1999, 40:791-801.
- 17. Palmer B, Macfarlane G, Afzal C, Esmail A, Silman A, Lunt M: **Acculturation and the** prevalence of pain amongst South Asian minority ethnic groups in the UK. *Rheumatology* 2007, **46**(6):1009-1014.
- 18. Magarey A, Golley R, Spurrier N, Goodwin E, Ong F: **Reliability and validity of the Children's Dietary Questionnaire**; a new tool to measure children's dietary patterns. *International Journal of Pediatric Obesity* 2009, **4**(4):257-265
- 19. Bryant MJ, Ward DS, Hales D, Vaughn A, Tabak RG, Stevens J: **Reliability and validity of the Healthy Home Survey: a tool to measure factors within homes hypothesized to relate to overweight in children**. *International Journal of Behavioral Nutrition and Physical Activity*2008, **5**(1):1
- 20. Hamilton W, Cook J, Thompson W, Buron L, Frongillo C, Olson C: **Household food security in the United States in 1995: Technical report of the food security measurement project.** In.

- Alexandria (VA), US: United States Department of Agriculture, Food and Consumer Service; 1997.
- 21. Vaughn A, Hales D, Ward DS: **Measuring the physical activity practices used by parents of preschool children**. *Med Sci Sports Exerc* 2013, **45**(12):2369.
- 22. Ellwood P, Asher M, Beasley R, Clayton T, Stewart A, Committee IS: **The International Study of Asthma and Allergies in Childhood (ISAAC): Phase Three rationale and methods** [Research Methods]. *The International Journal of Tuberculosis and Lung Disease* 2005, **9**(1):10-16.
- 23. Child of the New Century. Age 7 Survey. https://cls.ucl.ac.uk/cls-studies/millennium-cohort-study/mcs-age-7-sweep/ accessed 20/03/2019
- 24. Main G, Pople L: Missing out: A child centred analysis of material deprivation and subjective well-being. London; 2011.
- 25. Main G, Bradshaw J: **Child poverty and social exclusion: Final report of 2012 PSE study**. York; 2014.
- 26. Children's Worlds. International survey of children's wellbeing. http://www.isciweb.org/?CategoryID=190 accessed 20/03/2019.