

Supplementary Material

Country	Method	Representativeness: Survey/study (year); instrument details	Respondents	
			Age range	Sample size
Australia	Subjective (self-report)	Nationally representative: Australian Bureau of Statistics National Health Survey (2014-2015); survey specific questionnaire	15-17 years old	854
	Subjective (self-report)	Nationally Representative: National Secondary School Diet and Activity Survey (2012-2013); survey specific questionnaire	12-17 years old	8888
	Subjective (self-report)	State-based representative: Australian School Students Alcohol and Drug Survey South Australia (2014); survey specific questionnaire	12-17 years old	1518
	Subjective (self-report)	State-based representative: Australian School Students Alcohol and Drug Survey Queensland (2014); survey specific questionnaire	12-17 years old	3930
	Subjective (self-report)	State-based representative: Australian School Students Alcohol and Drug Survey Tasmania (2014); survey specific questionnaire	12-17 years old	1888
	Subjective (self-report)	State-based representative: Australian School Students Alcohol and Drug Survey Victoria (2014); survey specific questionnaire	12-17 years old	3806
	Subjective (self-report)	State-based representative: ACT Year 6 Physical Activity and Nutrition Survey (2015); survey specific questionnaire	11 -12 years old (grade 6)	1353
	Subjective (parent/guardian-report)	State-based representative: NSW Child Health Survey (2015-2016); survey specific questionnaire	5-15 years old	3217
	Subjective (self-report)	State-based representative: NSW Secondary Schools Health Behaviours Survey (2014); survey specific questionnaire	12-17 years old	5125
	Subjective (parent/guardian-report)	State-based representative: QLD Child Health Status Survey (2017-2018); survey specific questionnaire	5-17 years old	2663
	Subjective (parent/guardian-report for 5-14 years old, self-report for 15-17years old)	State-based representative: SA Monitoring and Surveillance Survey (2016-2017); survey specific questionnaire	5-17 years old	1034

	Subjective (parent/guardian-report for 5-10 years old, self-report for 11-15 years old))	State-based representative: NSW Schools Physical Activity and Nutrition Survey (2015); survey specific questionnaire	5-15 years old (grades K-10)	7138	
	Subjective (self-report)	State-based representative: VIC Student Health and Wellbeing Survey (2016); survey specific questionnaire	10, 13 & 16 years old (grades 5, 8 & 11)	11421	
	Subjective (parent/guardian-report)	State-based representative: VIC child Health and Wellbeing Survey (2013); survey specific questionnaire	5-12 years old	4635	
Belgium (Flanders)	Objective	Regionally representative: Belgian Food Consumption Survey (2014); accelerometer data (hip-worn ActiGraph GT3Xand accelerometers for 7 consecutive days) analyzed with Evenson 2008 cut-off points	6-9 years old	230	
			10-17 years old	353	
Canada	Objective	Nationally representative: Canadian Health Measures Survey (2014-2015) ; accelerometer data (hip worn Actical accelerometers for at least 4 consecutive days) analyzed with Puyau 2004 cut-off points	5-17 years old	1300	
Chile	Subjective (self-report)	Nationally representative: PISA (2015) using a questionnaire adapted from GSHS	15 years old	245947	
	Subjective (self-report)	Nationally representative: GSHS (2013), GSHS questionnaire	14-16 years old	1888	
	Subjective (self-report)	Nationally representative: National Survey on Activities of children and adolescents (2012); questionnaire adapted from GSHS.	9-11 years old	2042	
	Subjective (self-report)		12-17 years old	6929	
Chinese Taipei	Subjective (self-report)	Regionally representative: Nutrition and Health Survey; Chinese version of modified IPAQ questionnaire, 3 waves:			
			2010-2011	13-15 years old (grades 7-9)	1779
			2011	16-18 years old (grades 10 -12)	1169
			2012	7-12 years old (grades 1-6)	1260

Czech Republic	Objective	Regionally representative: (2013-2014); accelerometer data (ActiGraph, hip-worn for 7 consecutive days) analyzed with Evenson 2008 cut-off points	7–12 years old	365
	Objective	Regionally representative: IPEN study (2015–2016); accelerometer data (ActiGraph, hip-worn for 7 consecutive days) analyzed with Evenson 2008 cut-off points	11–17 years old	367
	Objective	Local study (2017–2018): accelerometer data (ActiGraph, wrist-worn for 7 consecutive days) analyzed with Chandler 2005 cut-off points	8–18 years old	300
	Subjective (self-report)	Nationally representative: HBSC (2014) ; HBSC questionnaire	11–15 years old	5750
	Subjective (self-report)	Nationally representative; (2013–2016); IPAQ-long questionnaire	15–17 years old	3334
Denmark	Subjective (self-report)	Nationally representative: National Health Survey (2017); survey specific questionnaire	16-17 years old	4634
	Subjective (self-report)	Nationally representative: The Youth Profile (2014); survey specific questionnaire	16-17 years old	40022
	Subjective (self-report)	Nationally representative: HBSC (2014); HBSC questionnaire	11-15 years old	3891
England	Subjective (self-report)	Nationally representative: HBSC (2016); HBSC questionnaire	11 years old	2116
			13 years old	1593
			15 years old	1608
	Subjective (parent/guardian-report for 5-12 years old, self-report for 13-15)	Nationally representative: Health Survey for England (2015); survey specific questionnaire	5-15 years old	3827
	Objective	Regionally representative: B-PROACT1V 2012-2016; accelerometer data (hip worn Actigraph wGT3X for 5 consecutive days) analyzed with Evenson 2008 cut-off points	5-6 years old (Phase 1)	1299
			8-9 years old (Phase 2)	1223
Objective	Regionally representative: ISCOLE 2015-2016; accelerometer data (hip worn Actigraph wGT3X+ for 7consecutive days) analyzed with Evenson 2008 cut-off points	9-11 years old	374	

Estonia	Objective	Nationally representative: Children's Physical Activity Study (2015); accelerometer data (hip-worn GT3X for 7 consecutive days) analyzed with Evenson 2008 cut-off points	6-13 years old	492
	Subjective (self-report)	Nationally representative: HBSC (2014); HBSC questionnaire	11, 13 & 15 years old	4057
	Subjective (self-report)	Nationally representative: Health Promotion Effectiveness in Estonian Schools (2012-2015); survey specific questionnaire	11-14 years old	1033
	Subjective (self-report)	Nationally representative: Schools in Motion survey (2018); online survey specific questionnaire	10-17 years old	3853
Finland	Subjective (self-report)	Nationally representative: National School Health Promotion Study (2017); survey specific questionnaire	10-11 years old	94531
			14-15 years old	71695
	Subjective (self-report)	Nationally representative: LIITU study (2016); HBSC questionnaire	9-15 years old	7321
	Objective	Nationally representative: LIITU study (2016) ; accelerometer data (hip-worn UKK AM30 and UKK RM42 monitors for 7 consecutive days) analyzed with Aittasalo 2015 cut-off points	9-15 years old	2931
France	Subjective (parent/guardian-report for 6-10 years old; self-report for 11-17 years old)	Nationally representative : INCA3 (2014-2015); survey specific questionnaire	6-10 years old	644
			Nationally representative : INCA3 (2014-2015); modified version of YRBSS questionnaire	11-17 years old
	Subjective (parent/guardian-report for 6-10 years old; self-report for 11-17 years old)	Nationally representative: ESTEBAN (2015); survey specific questionnaire	6-10 years old	1182
			Nationally representative: ESTEBAN (2015); modified version of YRBSS questionnaire	
Germany	Subjective (parent/guardian-report for 3-11 years old, self report for 12-17 years old)	Nationally representation: KiGGs Study (2009-2017); survey specific questionnaire	3 to 17 years old	12981

	Subjective (self-report)	Nationally representative: HBSC (2010); HBSC questionnaire	11-15-year	16918
	Objective	Regionally representative: Gini Study (2014); accelerometer data (hip worn ActiGraph GT3X for 7 consecutive days) analyzed with Freedson 1997 cut-off points	Mean age= 15.6 years old	1054
	Objective	Regionally representative: MAAS-Kids Study (2008); pedometers data (StepWatch 3™ System worn for 7 consecutive days)	6-17 year old	1020
	Objective	Regionally representative: IDEFICS Study (2011); accelerometer data (hip-worn ActiGraph GT1M for at least 3 consecutive days) analyzed with Evenson 2008 cut-off points	2-10.9 years old	516
Guernsey	Subjective (self-report)	Nationally representative: Guernsey Young People’s Survey (2016); survey specific questionnaire	10-11 years old	564
	Subjective (self-report)	Nationally representative: Guernsey Young People’s Survey (2016); survey specific questionnaire	12-13 & 14-15 years old	875
	Subjective (self-report)	Nationally representative: Guernsey Young People’s Survey (2016); survey specific questionnaire	16-18 years old	800
Hong Kong	Subjective (self-report)	Regionally representative: National Physical Fitness Survey (2011-2012); survey specific questionnaire	7-12 years old	2723
			13-19 years old	2517
	Subjective (self-report)	Regionally representative (2012-2013); Chinese version of GYTS questionnaire	Mean age = 14.8 year old	44478
	Objective	Regionally representative: IPEN Hong Kong study (2012-2013); accelerometer data (hip-worn ActiGraph GT3X and GT3X+ for 7 consecutive days) analyzed with Freedson 1997 cut-off points	11-18 years old	552
	Objective	Local study (2009-2010): accelerometer data (hip-worn actigraph GT3X for 8 consecutive days) analyzed with Freedson 1997 cut-off points	6-8 years old	263
Japan	NA	No representative data	NA	NA
Jersey	Subjective (self-report)	Nationally representative: Young People’s Health and Lifestyle Survey (2014); HBSC questionnaire	10-15 years old	2842
South Korea	Subjective (self-report)	Nationally representative: Korea National Health and Nutrition Examination Survey (2016); GPAQ	12-17 years old	524
	Subjective (self-report)	Nationally representative: Korea Youth Risk Behavior web-based Survey (2017), online Korean version of YRBSS questionnaire	12-17 years old	57884

Lithuania	Subjective (parent/guardian-report)	Nationally representative: Lithuanian COSI study (2013); WHO COSI questionnaire	Survey of parents/gardians of primary school children	3802
	Subjective (self-report)	Nationally representative: HBSC survey (2013-2014), HBSC questionnaire	11, 13 & 15 years-old	5730
	Subjective (self-report)	Nationally representative; Lifestyle study of schoolchildren made by Lithuanian Institute of Hygiene (2016); survey specific questionnaire	10-17 years old (grade 5, 7 & 9)	38633
Netherlands	Subjective (parent/guardian-report for 4-11 years old, self report for 12-17 years old)	Nationally representative: survey name?? 2017; survey specific questionnaire	4-11 years old	837
			12-17 years old	629
	Subjective (self-report)	Nationally representative (2016-2017): survey specific questionnaire	9-13 year old	1554
New Zealand	Subjective (parent/guardian-report for 5-11 years old; self-report for 12-17 years old)	Nationally representative: Active NZ Survey (2018); survey specific questionnaire	5-17 years old	5990
	Objective	Local study: 2016; accelerometer data (hip worn ActiGraph GT3X+ for minimum 3 valid days) analyzed with Evenson 2008 cut-off points	8-13 years old	1085
	Objective	Local study: 2016; accelerometer data (hip worn ActiGraph GT3X+ for minimum 5 valid days) analyzed with Evenson 2008 Cut-off points	13-18 years old	314
Poland	Subjective (self-report)	Nationally representative: HBSC year (2013-2014); HBSC questionnaire	11, 13 & 15 years old	4516
	Subjective (self-report)	Nationally representative: Physical Activity of School Children Aged 9 - 17 (2013); HBSC questionnaire	10-17 years old	3346
Portugal	Objective	Nationally representative: Observatório da Atividade Física e do Desporto (2012); accelerometer data (hip worn accelerometer for at least 3 valid days including a weekend day) analyzed with a cut-off point of 2,020 counts/min for MVPA	11-17 years old (grades 6-12)	2714

	Subjective (self report)	Nationally representative: HBSC (2014); HBSC questionnaire	11-18 years-old	5849
	Subjective (self report)	Nationally representative; IANAF Survey (2017) – IPAQ adolescents	13-17 years old (grades 8-12)	720
Qatar	Objective	Local study: School-time physical activity among Arab elementary school children in Qatar (2017); accelerometer data (ActiGraph wGT3X-BT worn on non-ominant wrist at school for 5 consecutive days) analyzed with Chandler 2015 cut-off point	6-12 years old	183
	Subjective (self-report)	Nationally representative: Qatar National School Survey (2015-2016); Questionnaire adapted from the GSHS	13-17 years old	5862
Scotland	Subjective (self-report)	Nationally representative: HBSC (2014), HBSC questionnaire	11, 13 & 15 years old	10839
Slovenia	Objective	Nationally representative; ACDSi research project (2013-2014); accelerometer data (hip-worn Sensewear Pro for 2 weeken days and minimum 3 week days) analyzed with a 4 MET cut-off point for MVPA	11 & 14 years old	245
	Subjective (parent/guardian-report)	Nationally representative: ACDSi research project (2013-2014); CLASS questionnaire	5-10 years old	2351
	Subjective (self-report)	Nationnally representative: ACDSi research project (2013-2014); SHAPES questionnaire	11-19 years old	2907
Spain	Subjective (self-report)	Local study: ANIVA study (2013-2014 & 2014-2015); survey specific questionnaire	6-9 years old	1371
	Subjective (parent/guardian-report)	Local study (2015); Spanish version of PACE 2 (validated for 13-18 years old adolescent)	3-18 years old	1055
	Subjective (parent/guardian-report)	Regionally representative: ESCA study (2016); survey specific questionnaire	3 -14 years old	1886
Sweden	Subjective (self-report)	Nationally representative: HBSC (2013-2014); HBSC questionnaire	11, 13 & 15 years	8000
	Objective	Regionally representative: IDEFICS (2014); accelreometer data (hip-worn ActiGraph for at least 3 consecutive days including a weekend day) analyzed with Evenson 2008 cut-off points	6-9 years	343
	Objective	Local study (2016): accelreometer data (right ankle worn ActiCal for 7	13-15 years	91

		consecutive days) analyzed with Heil 2006 cut-off points		
United Arab Emirates	Subjective (self-report)	Nationally representative: GSHS (2016); GSHS questionnaire	13-17 years-old (grades 8-12)	5849
United States	Subjective (self-report)	Nationally representative: YRBSS (2017); YRBSS questionnaire	14-18 years old (grades 9-12)	14765
	Subjective (parent/guardian-report)	Nationally representative: National Survey of Children’s Health (2016); survey specific questionnaire	6-17 years old	50212
Wales	Subjective (parent/guardian-report)	Nationally representative: National Survey for Wales (2016-2017): survey specific interview	3-17 years old	2109
	Subjective (self-report)	Nationally representative: HBSC (2017); HBSC questionnaire	11-17 years old	95591
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