

Children & adolescents

Study Reference	Mean Values									
	No. of subjects	Gender	Age (yrs)	Ethnicity	Weight (kg)	Height (cm)	BMI	RMR/BMR (Mj)	PAL	TEE (Mj)
Children										
Abbott et al 2004 (Australia)	24	Girls	8	Not given	30.1	131	17.4		1.72	7.9
Abbott et al 2004 (Australia)	23	Boys	9	Not given	30	133	16.7		1.71	8.3
Anderson et al 2004 (USA)	172	Girls	10y	71% white, 14% black & 15% other race/ethnicity subjects	33.1	141	16.6	REE 5.14		8.1
Ball et al 2001 (Australia)	52	Boys	8	Not given	27.6	128	16.7		1.69	7.9
Ball et al 2001 (Australia)	54	Girls	8	Not given	28.1	127	17.2		1.71	7.5
Bandini et al 2002 (USA)	123	Girls	10	Caucasian, black, hispanic, asian.	30.1	137	16	RMR-4.9		7.7
Bandini et al 2002 (USA)	73	Girls	11	Caucasian, black, hispanic, asian.	37.9	146	17.8	RMR-5.5		8.8
Champagne et al 1998 (USA)	27	Girls	10	African American	39.2	146	18			9.0
Champagne et al 1998 (USA)	31	Girls	10	Caucasian	39.3	144	19			9.7

Champagne et al 1998 (USA)	29	Boys	10	African American	46.4	147	21			10.6
Champagne et al 1998 (USA)	31	Boys	10	Caucasian	42.9	148	19.8			10.8
Craig et al 1996 (USA)	49	Girls	10	Not given	32.6	140	16.4	NREE 3.02mj		8.4
Davies et al 1995 (UK) same study as 35 & 36	12	Girls	2	Not given	13	89	16.4			4.4
Davies et al 1995 (UK) same study as 35 & 36	11	Boys	2	Not given	12.66	88	16.3			4.5
Davies et al 1995 (UK)	16	Girls	3	Not given	14.93	96	16.2			4.7
Davies et al 1995 (UK)	15	Boys	3	Not given	14.99	96	16.3			5.1
Davies et al 1995 (UK)	11	Girls	4	Not given	17.06					5.3
Davies et al 1995 (UK)	16	Boys	4	Not given	16.86	104	15.6			5.4
Delany et al 2002 (USA)	65	Girls	11	African American & Caucasian	37.7	144	18.4	5.63	1.59	8.8
Delany et al 2002 (USA)	66	Boys	11	African American & Caucasian	43.9	146	20.1	6.38	1.65	10.3

Delany et al 2006 (USA)	28	Girls	11	Black	37.9	145	1.45	5.38	1.74	9.1
Delany et al 2006 (USA)	25	Girls	11	Caucasian	39.4	147	18.9	5.55	1.77	9.7
Delany et al 2006 (USA)	31	Boys	11	Black	45	146	21	5.83	1.87	10.8
Delany et al 2006 (USA)	29	Boys	11	Caucasian	42.6	143	19.5	6.42	1.69	10.8
Delany et al 2004 (USA)	53	Girls	13	African American & Caucasian	49.1	156	23.7	RMR 6.24	1.48	9.2
Delany et al 2004 (USA)	61	Boys	13	African American & Caucasian	55.3	159	25.6	RMR 7.17mj	1.55	11.1
Ekelund et al 2001 (Denmark)	11	Girls	9	Not given	37	139	19.2	BMR 5.14	1.61	8.3
Ekelund et al 2001 (Denmark)	15	Boys	9	Not given	33	140	16.8	BMR 5.2	1.71	8.9
Ekelund et al 2004 (Sweden)	11	Girls	10	Not given	37	139	19.2	REE 5.1	1.61	8.2
Ekelund et al 2004 (Sweden)	15	Boys	10	Not given	33	140	16.8	REE 5.2	1.71	8.9
Fontvieille et al 1993 (France)	15	Boys	5	Caucasian	21.1	114	16.2	4.34		5.91

Fontvieille et al 1993 (France)	13	Girls	6	Caucasian	18.9	112	15.1	4		5.6
Franks et al 2005 (USA)	76	Male & female (dyzygotic twins)	6	European American	21.6	117	15.4	RMR-4.16		6.3
Franks et al 2005 (USA)	124	Male & female (monozygotic twins)	7	European American	24.7	122	17	RMR-4.4		7.0
Goran et al 1993 (USA)	14	Girls	5	Caucasian	21	113	16.4	REE 4.54		5.5
Goran et al 1993 (USA)	16	Boys	5	Caucasian	20.3	112	16.2	REE 4.74		6.0
Goran et al 1995 (USA)	73	Boys & girls	5	Caucasian	20.4	111	16.6	REE 4.44		6.1
Goran et al 1998 (USA)	11	Girls	6	Caucasian	21.5	114	16.5	4.57		5.7
Goran et al 1998 (USA)	11	Boys	5	Caucasian	21.3	113	16.7	4.9		6.6
Goran et al 1998 (USA)	11	Boys	6	Caucasian	25.2	120	17.5	5.3		7.5
Goran et al 1998 (USA)	11	Girls	7	Caucasian	24.8	121	16.9	4.8		7.6
Goran et al 1998 (USA)	11	Girls	10	Caucasian	38	139	19.7	5.4		6.7

Goran et al 1998 (USA)	11	Boys	9	Caucasian	37.8	138	19.8	5.9		8.7
Hernandez-Triana et al 2002 (Cuba)	6	Girls	6	Not given	19.5					6.1
Hernandez-Triana et al 2002 (Cuba)	5	Boys	5	Not given	18	110	15	RMR 3.72	1.71	6.3
Hoffman et al 2000 (Brazil)	14	Boys	10	Brazilian	32			REE-5.2		9.0
Hoffman et al 2000 (Brazil)	15	Girls	10	Brazilian	30.9	136	17.8	REE-4.66		8.1
Hoffman et al 2000 (Brazil)	13	Girls (stunted)	10	Brazilian	26.1	127	16.2	REE-4.3		7.3
Hoffman et al 2000 (Brazil)	15	Boys (stunted)	10	Brazilian	25.6	126	16.1	REE-4.4		8.4
Hoos et al 2003 (The Netherlands)	8	Girls	6	Not given	18.6	109	15.7	BMR 3.98		5.7
Hoos et al 2003 (The Netherlands)	3	Boys	9	Not given	21.8	121	14.9	BMR 4.34		7.3
Johnson et al 1998 (USA)	10	Girls, mean age 8.5y	9	Caucasian	33.1	130	19.6	RMR 5.19		6.5
Johnson et al 1998 (USA)	22	10 girls, 12 boys	9	Caucasian	32.9	130	19.5	RMR 5.53		8.0

Lindquist et al 2000 (USA)	13	Girls	10	African-American & Caucasian	42.9	141	20.8			7.9
Lindquist et al 2000 (USA)	17	Boys	9	African-American & Caucasian	41.2	139	20.9			7.9
Livingstone et al 1992a (Belfast, UK)	6	Boys	8	Not given	25.4	126	16			8.0
Livingstone et al 1992a (Belfast, UK)	5	Girls	8	Not given	23.5	120	16.3			7.1
Livingstone et al 1992a (Belfast, UK)	5	Boys	9	Not given	30.2	135	16.6			9.8
Livingstone et al 1992a (Belfast, UK)	4	Girls	9	Not given	33.4	134	18.6			8.1
Livingstone et al 1992a (Belfast, UK)	5	Boys	13	Not given	43.8	152	19			10.7
Livingstone et al 1992a (Belfast, UK)	5	Girls	13	Not given	45.1	158	18.1			11.7
Lopez-Alarcon et al 2004 (USA)	10	Boys	5	Caucasian	20	112	15.9			6.1
Lopez-Alarcon et al 2004 (USA)	7	Girls	5	Caucasian	20.7	113	16.2			5.7
Lopez-Alarcon et al 2004 (USA)	7	Boys	5	African-American	19.7	109	16.6			6.2

Lopez-Alarcon et al 2004 (USA)	5	Girls	4	African-American	21.3	111	17.3			6.0
Maffeis et al 1995 (Switzerland)	6	Boys & girls (not separated for gender)	9	Caucasian	47.3	137	25.1	SEE-2.25 PREE-1.86		9.0
Maffeis et al 1995 (Switzerland)	7	Boys & girls (not separated for gender)	9	Caucasian	31.8	139	16.5	SEE-1.89 PREE-1.04		8.4
McGloin et al 2002 (Northern Ireland, UK)	50	Boys & girls (not separated for gender)	7	Predominantly Caucasian	23.6	125	15.3			7.2
McGloin et al 2002 (Northern Ireland, UK)	50	Boys & girls (not separated for gender)	7	Predominantly Caucasian	25.7	125	16.5			7.7
McGloin et al 2002 (Northern Ireland, UK)	14	Boys & girls (not separated for gender)	7	Predominantly Caucasian	37.7	129	22.8			8.8
Montgomery et al 2004 (Scotland, UK)	52	Boys	6	Not given			16.2	3.9	1.66	6.7
Montgomery et al 2004 (Scotland, UK)	52	Girls	5	Not given			15.6	3.9	1.4	5.7
Montgomery et al 2005 (Glasgow, UK)	31	Girls	6	Not given	19.6	112	15.4			6.0
Montgomery et al 2005 (Glasgow, UK)	32	Boys	6.0	Not given	20.6	115	16.3			6.9
Nagy et al 1997 (USA)	22	Boys	7	African-American	31.6	129	18.4	REE-5.2		7.1

Nagy et al 1997 (USA)	25	Girls	8	African-American	32.8	129	19.1	REE-4.9		6.9
Nagy et al 1997 (USA)	20	Boys	8	Caucasian	29.7	130	17.4	REE-5.1		6.9
Nagy et al 1997 (USA)	9	Girls	8	Caucasian	28.8	125	18.2	REE-4.8		6.7
Nguyen et al 1996 (USA)	35	Girls	6	Caucasian & Mohawk	20.4	112	16.3	4.3		5.9
Nguyen et al 1996 (USA)	36	Boys	5	Caucasian & Mohawk	20	111	16.2	4.5		2.2
O'Connor et al 2001 (Australia)	25	Girls	8	Not given	26.5	124	17.1			7.2
O'Connor et al 2001 (Australia)	22	Boys	7	Not given	25	123	16.4			7.6
Perks et al 2000 (USA)	27	Girls	13	Not given	49.4	154	20.5	BMR 5.70	1.69	9.6
Perks et al 2000 (USA)	23	Boys	13	Not given	45.1	140	18.3	BMR 5.86	1.74	10.1
Reilly et al 2001 (Glasgow, UK)	41	Boys & girls	4	Not given	16.5	101	16.1			5.8
Rennie et al 2005 (Northern Ireland, UK)	29	Boys	7	Predominantly Caucasian	24.5	126	15.5		1.76	7.8

Rennie et al 2005 (Northern Ireland, UK)	31	Boys	7	Predominantly Caucasian	26.1	126	16.3		1.77	8.1
Rennie et al 2005 (Northern Ireland, UK)	21	Girls	7	Predominantly Caucasian	22.4	122	15.1		1.62	6.4
Rennie et al 2005 (Northern Ireland, UK)	19	Girls	7	Predominantly Caucasian	25	123	16.7		1.72	7.1
Roemmich et al 2000 (USA)	13	Girls	10	Not given	34.7	137	18.5	5.09		8.9
Roemmich et al 2000 (USA)	14	Boys	13	Not given	52	162	19.8	6.8		10.7
Roemmich et al 2000 (USA)	18	Girls	13	Not given	51.2	158	20.5	5.7		9.4
Roemmich et al 2000 (USA)	14	Boys	11	Not given	34.8	143	17	5.2		9.1
Rush et al 2003 (New Zealand)	13	Boys	10	European	35.4	140	17.5	RMR-5.9	1.51	9.8
Rush et al 2003 (New Zealand)	13	Girls	10	European	35.5	140	17.4	RMR-6.3	1.32	8.1
Spadano et al 2005 (USA)	28	Girls	10	Caucasian, black	33.7	141	16.9	RMR 5.2	1.56	8.2
Spadano et al 2005 (USA)	28	Girls	12	Caucasian, black	45.3	154	19	5.92 RMR	1.58	9.4

Sun et al 1998 (USA)	18	Girls	8	Caucasian	41.2	132	23.6	REE-5.35		8.1
Sun et al 1998 (USA)	29	Girls	8	African-American	34.5	129	20.7	REE-5.06		7.2
Sun et al 1998 (USA)	30	Boys	7	African-American	30.5	128	18.6	REE-5.29		7.2
Sun et al 1998 (USA)	21	Boys	8	Caucasian	29.3	130	17.3	REE-5.2		7.1
Sun et al 1999 (USA)	18	Girls	9	Caucasian	40.5	134	19.2	REE-5.6		7.7
Sun et al 1999 (USA)	30	Boys	9	Caucasian	34.4	132	19.3	REE-5.6		7.1
Sun et al 1999 (USA)	34	Boys	8	African American	34.9	133	21.8	REE-5.6		7.3
Sun et al 1999 (USA)	30	Girls	8	African American	31.6	128	18.7	REE-4.8		7
Trowbridge et al 1997 (USA)	13	Boys	8	Caucasian	28.5			REE-5.4		7.8
Trowbridge et al 1997 (USA)	18	Girls	8	Caucasian	40.3			REE-5.0		7.4
Trowbridge et al 1997 (USA)	17	Boys	8	African-American	30.8			REE-5.5		7.7

Trowbridge et al 1997 (USA)	27	Girls	8	African-American	33.8			REE-5.1		7.4
Treuth et al 1998 (USA)	12	Girls	9	Mixed ethnic backgrounds	46.5	134	25.9	BMR-5.4	1.6	8.4
Treuth et al 1998 (USA)	12	Girls	8	Mixed ethnic backgrounds	28.5	129	17.1	BMR-4.5	1.5	5.6
Treuth, Butte et al 2000 (USA)	30	Girls	9	Caucasian, African-American, Hispanic	27.2	130	15.9		1.59	7.1
Treuth, Butte et al 2000 (USA)	44	Girls	9	Caucasian, African-American, Hispanic	28	130	16.5		1.63	7.4
Treuth, Butte et al 2000 (USA)	27	Girls	9	Caucasian, African-American, Hispanic	29.6	131	17.2		1.61	7.5
Vasquez et al 2006 (Chile)	12	Girls	4	Not given	23.1	108	20.6	BMR 3.998	1.55	6.2
Vasquez et al 2006 (Chile)	12	Boys	4	Not given	22.3	108	19.1	BMR 4.225	1.61	6.8
Wong et al 1994 (USA)	9	Girls	13	Caucasian	43.3	155	17.8			9.7
Wong et al 1999 (USA)	40	Girls	14	Caucasian	53.2	159	20.9	5.9		11.8
Wong et al 1999 (USA)	41	Girls	13	African-American	57.5	160	22.5	5.57		10.1

Adolescents 15-18 years										
Arvidsson et al 2005 (Sweden)	16	Girls	16	Not given	56.4	164	21	RMR 5.7		9.1
Arvidsson et al 2005 (Sweden)	17	Boys	16	Not given	64.1	175	21	RMR 6.9		11.3
Bandini et al 1990 (USA)	14	Boys	15	Mixed ethnicities	56.4	167	20.2	7.28	1.79	13.0
Bandini et al 1990 (USA)	14	Girls	14	Mixed ethnicities	55.7	162	21.2	6.02	1.69	10.0
Bandini et al 1990 (USA)	18	Boys	14	Mixed ethnicities	94.2	166	34.2	9.41	1.68	15.1
Bandini et al 1990 (USA)	16	Girls	15	Mixed ethnicities	97.4	164	36.2	8.02	1.74	13.7
Bratteby et al 1997 (Sweden)	25	Girls	15	Not given	58.4	167	20.9	BMR 5.97	1.78	10.7
Bratteby et al 1997 (Sweden)	25	Boys	15	Not given	61.3	174	20.2	BMR 7.31	1.92	14.1

Bratteby et al 2005 (Sweden)	89	Girls	15	Not given	56	165	20.4		1.82	11.0
Bratteby et al 2005 (Sweden)	71	Boys	15	Not given	60.7	175	19.7		1.95	14.1
2002 (Sweden) (same study as	8	Boys	18	Not given	113.2	183	33.8	RMR-9.1	1.7	15.5
2002 (Sweden) (same study as	10	Girls	17	Not given	102.4	180	31.6	RMR-7.7	1.63	12.4
Ekelund et al 2002 (Sweden)	8	Boys	18	Not given	73.7	180	22.7	RMR-7.2	1.85	13.2
Ekelund et al 2002 (Sweden)	10	Girls	17	Not given	61.4	166	22.3	RMR-6.0	1.74	10.4
Ekelund et al 2004 (Sweden)	10	Females	17	Not given	62.3	166	22.6	REE-6.2	1.73	10.4
Ekelund et al 2004 (Sweden)	15	Males	18	Not given	71.4	179	22.3	REE-8.0	1.87	14.4
Livingstone et al 1992a (Belfast, UK)	3	Girls	16	Not given	55.4					9.6
Livingstone et al 1992a (Belfast, UK)	3	Boys	15	Not given	50.7					11.0
Sjoberg et al 2003 (Sweden)	18	boys	15-17y	Not given	64.1	176	20.8		1.69	12.7

Sjoberg et al 2003 (Sweden)	17	Girls	15-17y	Not given	56.4	164	20.8		1.67	10.1
Spadano et al 2005 (USA)	24	Girls	15	Caucasian, black	58.4	165	21.6	5.85	1.77	10.4