

Table G9.A5. Body Composition, Experimental Studies In Children and Adolescents of Normal Weight or Mixed Weight Status. Part 1. Randomized Controlled Trials

Reference	Subjects/Duration	Results
Eliakim et al., 1996 (1)	N=44, 100% F, 15-17 years, 68% white, 20% Asian, 11% Hispanic, Duration: 5 weeks	No significant effect on BMI, but increase in thigh muscle volume
Eliakim et al., 1997 (2)	N=44, 100% F, 15-17 years, 61% white, 20% Asian, 18% Hispanic, Duration: 5 weeks	No significant effect on BMI, but increase in thigh muscle volume
Eliakim et al., 1998 (3)	N=44, 100% M, 15-17 years, 71% Asian, 20% white, 9% Hispanic, Duration: 5 weeks	Small significant increase in weight and thigh muscle volume
Ewart et al., 1998 (4)	N=88, 100% F, 70% AA, Duration: 18 weeks	No change in BMI in either group
Eliakim et al., 2000 (5)	N=44, 100% M, 15-17 years, 71% Asian, 20% white, 9% Hispanic, Duration: 5 weeks	Small decrease in thigh fat and subcutaneous abdominal adipose tissue
MacKelvie et al., 2001 (6) <i>Group Randomized Trial</i>	N=177, 100% F, Duration: 1 school year (< 10 months)	No effect of high-impact brief activity on weight and fat mass
Mandigout et al., 2002 (7) <i>Group Randomized Trial</i>	N=19, 47% F, 10-11 years, Duration: 13 weeks	No effect on percent fat mass and percent muscle mass
MacKelvie et al., 2003 (8) <i>Group Randomized Trial</i>	N=139, 54% F, 9-10 years, Duration: 2 school years	Females: No effect on weight and fat mass. Males: No effect on weight and fat mass, significant increase in total body lean mass
Obert et al., 2003 (9) <i>Group Randomized Trial</i>	N=35, 49% F, 10-11 years, Duration: 13 weeks	No effect on percent fat
Tolfrey et al., 2004 (10)	N=32, 44% F, 10.6±0.6 years, Duration: 12 weeks	Negligible effects of training on weight and skinfolds
Baquet et al., 2004 (11) <i>Group Randomized Trial</i>	N=110, 58% F, 8-11 years, Duration: 7 weeks	No difference in body weight and percent fat
Fitzgibbon et al., 2005 (12) <i>Group Randomized Trial</i>	N=409, about 4 years at baseline, 80%+ AA, Duration: 14 weeks	Smaller gain in BMI in intervention preschoolers
Haerens et al., 2006(13) <i>Group Randomized Trial</i>	N=2,840, mean age 13.1±0.8, Duration: 2 school years	Smaller gain in BMI in intervention and parent support group

AA, African American; BMI, body mass index; F, female; M, male; N, number

Table G9.A5. Body Composition, Experimental Studies In Children and Adolescents of Normal Weight or Mixed Weight Status. Part 2. Non-Randomized Controlled Trials

Reference	Subjects/Duration	Results
Williford et al., 1996 (14)	N=17, 0% F, 11-13 years, 100% AA, Duration: 15 weeks	No effect on weight and sum of skinfold thicknesses
Stoedefalke et al., 2000 (15)	N=34, 100% F, 13-14 years, Duration: 20 weeks	No effect on skinfold thicknesses
Baquet et al., 2001 (16)	N=551, 47% F, 11-16 years, Duration: 10 weeks	Small increase BMI and percent fat
Sundberg et al., 2001 (17)	N=228, 46% F, 12-16 years, Duration: 3-4 years	No effect of added physical education on fat mass and lean body mass
Baquet et al., 2002 (18)	N=53, 57% F, 9.7±0.8 years, Duration: 7 weeks	No difference in body weight and percent fat
Annesi et al., 2005 (19)	N=570, 40% F, 5-12 years, >95% AA, Duration: 12 weeks	Significant decrease in percent fat
Schneider et al., 2007 (20)	N=122, 100% F, 10th-11th, Duration: 1 school year	No effect on percent fat
Viskic-Stalec et al., 2007 (21)	N=220, 100% F, 16-18 years, Duration: 1 school year	Larger declines in weight and percent fat in Experimental group than in Control group

AA, African American; BMI, body mass index; F, female; N, number

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