



DHEAS and total testosterone by RIA. Nine months later, the children were measured again by the same measurers. Results indicate that sports training did not affect both height and weight at various chronological age group but the athletes had significantly lower % body fat in both sexes. When individual data at 9 month interval were compared, the athletes were increased in height and weight at all pubertal stages but such effects were not observed in the controls. The sports training did not affect sexual maturation in cross sectional study, whereas pubic hair in the athletic girls were at more advanced stages than the controls even though their serum DHEAS levels in the athletes did not differ from the controls. As previously reported, menarche in the athletic girls was delayed compared to the sedentary controls. The sport training caused a delay in sexual development during prepuberty but an enhancement during peripuberty in boys. It was also found that serum DHEAS and total testosterone levels did not differ between the athletes and the controls. Interestingly, the age at the first ejaculation was not influenced by sports training in boys. The results suggest that exercise and sports training in children enhances growth especially at the later stage of pubertal progression. On the other hand, it caused delayed menarche but enhanced pubic hair development in girls, and delayed onset of puberty in boys but no effect on the first ejaculation.