GROWTH AND MATURITY OF JAPANESE JOCKEY CANDIDATES

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PURPOSE: Jockeys (for flat racing) need to weigh about 50kg by the horse racing regulation. Since they are tied by the licensing system, admission to the school of JRA (Japan Racing Association) or NAR (The National Association of Racing). Less weight is required to admit the school, 44.0 to 46.5kg for ages of 15 to 19 years. They are trained at the school for 2 or 3 years. This study reported the short term (4 years) physical growth for students attended to the JRA Horse Racing School, and the skeletal maturity for the test-takers to the school.
METHODS: The longitudinal data for height and weight was analyzed for 195 students (all boys) of the Horse Racing School, JRA. They attended to the school during 1982 to 2006 and were 15 to 18 years old. TW3 skeletal maturity was assessed on the occasion of 2007 admission exam for 22 boys to estimate their final height.
RESULTS AND DISCUSSION: Height and weight were increased during resident school life from 156.0 cm (15.62 years) to 160.4 cm (18.45 years), and from 41.0 kg to 46.1 kg. These values were closer to 3rd percentile and were less to 3rd percentile for Japanese standard (Ogi Growth Study). Weight was correlated with height by 0.41 at 15.6 years, but the correlation coefficients decreased to 0.30 at 18.46 years. During 3 years in-residence of the school life, students were asked for not exceeded 47.5kg for their weight. This regulation by the school inevitably makes the students to control their weight by dieting or exercising. Daily total calories taken in the resident was regulated to 2100 kcal.
Test-takers showed retarded maturity status by TW3. Mean RUS score was 648 for 15.39 years. This was corresponded to 25th percentile for Japanese standard (Ogi Growth Study). Final height was estimated to about 162 cm by revised TW2 (Takai, 1995) and Growth Potential (Tanaka et al., 2002) methods. Original TW3 estimated the final height 5 cm taller, and BTT (in AUXAL3) with retrospective 9 years serial data resulted in the final height 4 cm taller.