

Table 8.—*Heights by Age and Parentage (Inches).*

Age.	(1) Both Parents born in New Zealand.	(2) One Parent born in New Zealand and one Abroad.	(3) Both Parents born Abroad.
10 years 6 months to 11 years 5 months ..	54·6	54·5	54·2
11 years 6 months to 12 years 5 months ..	56·4	56·5	56·4
12 years 6 months to 13 years 5 months ..	58·4	58·3	58·3
13 years 6 months to 14 years 5 months ..	60·2	60·15	60·2

Table 8A.—*Weights according to Age and Parentage (Pounds).*

Age.	(1) Both Parents born in New Zealand.	(2) One Parent born in New Zealand and one Abroad.	(3) Both Parents born Abroad.
10 years 6 months to 11 years 5 months ..	72·0	71·8	70·2
11 years 6 months to 12 years 5 months ..	78·45	78·6	78·1
12 years 6 months to 13 years 5 months ..	86·5	86·8	85·8
13 years 6 months to 14 years 5 months ..	95·25	95·5	94·2

PHYSICAL GROWTH AND MENTAL ATTAINMENT.

In considering the interrelation between the physical growth and good mental attainment the total results of this survey show that the average height and weight of children of good mental attainment is greater than those of inferior ability.

Children were divided into three groups—superior, average, and inferior intelligence.* The average height and weight of the superior group at ages 11 to 14 was found to be uniformly greater than those of average children, and still more markedly so for those of inferior intelligence (see Tables 9 and 9A). This observation is in accordance with many others made in Europe and America: see Terman, "Hygiene of School Life," and Stanley Hall, "Adolescence."

Records of height and weight for the boys residing at Otekaike, a school for the feeble-minded, show that they are below the average for New Zealand school-children both in height and in weight.

When mental attainment is considered in relation to the occupation of the father it is found that children of the professional classes show superiority, the superiority being most marked for the children of doctors and of journalists.

We have apparently inconsistent results, in that we find country children on the average taller and heavier than town children, and yet, as far as the "academic" test determines, intellectually inferior. This apparently contradicts our finding that increased height and weight, on the average, go with increased mental development. Nevertheless, in considering either the town or country group by itself, our conclusion holds good. The real interpretation may possibly be that individuals above the average in academic attainment but of smaller physique, who are therefore not equally endowed as manual labourers, tend to migrate towards the city. Town life, no doubt, is a contributing factor towards the result.

The relationship of physical growth to mental attainment is important in view of the popular idea that tall children should be given lighter tasks at school in order that the greater output of energy required in growth should be compensated for by a less expense of mental energy. If, however, good physical and mental development go together this is an unsound practice, as the mind equally with the body requires food appropriate to its stage of growth, and, instead of being benefited by restriction, is dulled and thwarted. This does not mean that intelligent children should be crammed to the fatigue point, but that education conducted on sound lines must consider not only the chronological age of pupils but must take note of the stage of their mental development.

There is evidence from scholarship results and also from the Education Department intelligence survey of 1924 that where adolescent acceleration occurs earlier, as in the northern parts of New Zealand, the mental development is correspondingly quickened temporarily. This has a practical bearing upon the junior-high-school system, which takes into consideration individual aptitudes and mental attainment, and with its variable curriculum should be adaptable to differing individuals.

* The intelligence score was derived from general tests, including and largely dependent on tests in "reading and comprehension" and arithmetic reasoning. The test result correlated well with results of Otis and Terman group tests.