

WERE THE OFFSPRING OF THE EARLY SETTLERS OF THE COLONY OF NSW
TALLER THAN THEIR CONVICT PARENTS ?

D.C.K. ROBERTS and R. WALKER*

Early anecdotal reports in the literature suggest that the height of native born Australians was significantly greater than their parents, although actual data on their heights is scanty (Gandevia 1975). An analysis of 3000 records in the NSW Police Gazette of male prisoners released from NSW jails in the 1860's shows those born in the colony tend to be 3-5cm taller than those born in England or Ireland for any 5 year age group over 20. Data from about 1500 records in the late 1890's shows the gap to be narrowing, with the difference only being 1-2cm between native-born and English-born.

Interestingly, the figures for heights of those born in Australia show a decrease in the 1890's compared to the 1860's of about 1.5cm. By contrast, the English-born remain unchanged. Data from 1928/29 shows those born in Australia to be about .5cm taller than in the 1890's but still about 1 cm shorter than in the 1860's. Possible explanations for this anomaly follow.

Clearly, the population mix will have changed from 1820 to 1900, with those born in the 1820's coming from mainly English stock. Secondly, from the records it is clear that measurement in the 1860's was taken to the half-inch whereas it was to one eighth of an inch in the 1890's and 1928/29. A bias upward may account for 1 cm of the 1.5cm but does not account for the apparent lack of change seen in the English-born. Thirdly, there may have been a change in the prison population over this period. Certainly there was a difference in the age distribution of prisoners, the Australian-born being predominantly under 30 in the 1860's but more evenly distributed in the 1890's and 1928/29. By contrast, about one third of the English-born prisoners were over 45 in the 1860's. These factors may have affected the average heights calculated. A last possibility is that this difference is a real one and that there were some nutritional problems in the 1860's which affected the growth of Australians who were measured in the 1890's.

In support of this, analysis of data from Australian-born prisoners in Darlinghurst jail for whom weights were also recorded, show a reduction in mean BMI in the 1890's. In addition, the proportion of males over 25 who were underweight for height (BMI<19.5) doubled in 1891 to 5% of the prison population compared to 2.5% in 1871 and 3.5% in 1911. The proportion who were overweight for height (BMI>25) also fell slightly from 16% in 1871 to 13.5% in 1891 and rose again to 16% in 1911.

Looking at the early data (1860's), it is clear that the natives of the colony maintained a height advantage over those born overseas and maintained this, albeit at a reduced level in the 1890's. Exactly why spending one's growing years in the colony produced such a result is conjectural but must relate in some aspects to improved health and nutrition, either in the form of better foods or more sunlight. It is clear that nutrition was less of a bar to the expression of growth potential in the colonies than in contemporary Britain.

Gandevia, B., (1975). Australian Association for the History and Philosophy of Science, Sydney Meeting.