

seat just does not have enough breadth to even give them minimal sitting space. This publication from the U.S. Department of Health, Education & Welfare on page 21 makes an interesting observation and I quote it in the next paragraph as it appears there.

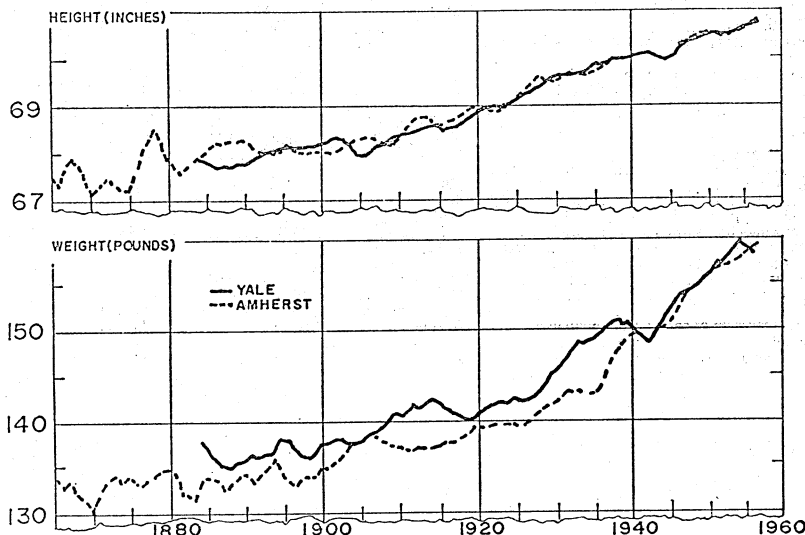
"Changes in body size have been taking place throughout the course of human evolution, but various studies, some of which are cited here, indicate that these changes may have been sufficiently accelerated in very recent times to cause significant differences in anthropometric surveys made only a few years apart. An indication of this trend is afforded by a comparison of Army inductees measured at three different times over the past 40 years. Inductees during World War II were 0.67 inches taller and 10.7 pounds heavier than the inductees of World War I. Inductees measured during the 1957-58 were 0.50 inches taller and over 7 pounds heavier than the World War II inductees, thus making a total increase from 1917-18 to 1957-58 of about 1.2 inches and 19 pounds.

"The same trend toward increased body size is also suggested in civilian studies. In two successive generations of Harvard students from the same families, the sons were 1.3 inches taller and 10 pounds heavier than their fathers were at the same age. A more recent study suggests that the average height of college students is continuing to increase."

Obviously from the statistics we can conclude that bus seats allow an inadequate width for many persons today and it is reasonable to believe that the changes that have been recorded in body dimensions and the increases shown will continue. If we think in terms of the future the tight conditions existing today will become even more serious as time goes on.

For comfort it is not adequate just to provide a minimal sitting breadth. A person cannot be comfortable when restricted from movement. For long periods of sitting such as is the case in inter-city bus travel there should be opportunity for freedom of movement without the necessity for standing which, of course, in itself would be hazardous.

We have been considering a seat breadth primarily but another factor is shoulder width. In a bus seat installation the seats are placed close to the wall in order to give sufficient aisle space. The person seated at the wall side of the bus quite often has interference at the shoulder level and lacks freedom of movement of the upper torso, when both seats are occupied, because the shoulder of the person seated next to him severely confines him.



SERIAL HEIGHTS AND WEIGHTS OF STUDENTS ENTERING AMHERST COLLEGE AND YALE UNIVERSITY FROM 1861 to 1957.

Source: "Heights and Weights of Adults in the United States"
Home Economics Research Report No. 10
Agricultural Research Service
United States Department of Agriculture