## 2. Submission

Tallness comes with Higher Mortality in Two Cohorts of US Army Officers

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In all societies studied so far, taller people have a lower general morbidity and mortality, the only notable exception being cancer. The underlying causality is complex, because all relevant factors - genetics, nutritional status in childhood, a higher upward mobility for tall people in many social settings, fewer health hazards and better medical care for high social status people, together with cohort effects are highly intercorrelated. Here we study a special population, rigorously selected for health as young adults, thereafter subjected to a healthy lifestyle regime for many years, and medically very well taken care of ever since: graduates of the classes of 1925 and of 1950 of the US Military Academy at West Point, retired not disabled after at least 20 years in active service. In these samples, consequently, the variability of most of these intervening variables is very low. We show with nonparametric, semiparametric and parametric survival analyses that the taller half of both samples had an excess mortality between ages 60-75, leading to a gain of app. four more years lifespan for the shorter half. The prediction that this excess mortality is cancer related, with West Point sources can be supported only in the younger cohort, which raises the important question whether the higher cancer risk among tall people reported in general population samples exists only for cohorts born after 1920.

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