MedicalXpress

The tall and short of diseases

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(PhysOrg.com) -- Research shows that being taller means a fatter pay check and an increased risk of some cancers.

Dr Brian McEvoy from the Genetic Epidemiology Laboratory at QIMR has reviewed over 70 studies on human height. “The results were very interesting”, explained Dr McEvoy. “Research has shown that taller people are more likely to suffer from certain cancers; such as thyroid, breast, pancreatic and colorectal. For example, the risk for prostate cancer increases by 6% for each 10 cm you are over the average height.”

However, do not think those of us who are vertically challenged are off the hook. Shorter stature is associated with a higher risk of type 2 diabetes, heart disease and osteoarthritis.

Being taller has its benefits: the taller you are, the more you are likely to earn.

“One Australian study found that for each 10 cm increase in height, hourly wages increased by 3%. That’s equivalent to a half a year of extra education or two years of work experience,” said Dr McEvoy.

It has long been recognised that height runs in families and it is estimated that 80% of the difference in height between people is controlled by our genes. “With recent developments in DNA sequencing technology we are now in a position to find those genes” says Dr McEvoy. “Over the past two years, around 50 height genes have been discovered, but we have a long way to go.”

“We believe many of the genes affecting height may also have roles in the biology of diseases, reinforcing the link between height and some conditions,” said Dr McEvoy.

It has been clear from some time than people are getting taller. For example, men from the Netherlands are, on average, more than 19cm taller today than they were 150 years ago and similar trends can be seen in other countries.

“This is mainly due to improved diet and access to better health care,” explained Dr McEvoy. “These environmental influences have lead to worldwide increased height over a relatively short time.”

However, genetics may play an important role in the differences in average height between countries. The number of “short” and “tall” genes can vary between different regions.

“This may be a matter of chance. It is also possible that natural selection has played a role in adapting different populations to different environments,” said Dr McEvoy.

The paper will be published in the December edition of *Economics and Human Biology*.

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