

## Can frequent exercise epigenetically slow the aging process?

Research under way in Melbourne is showing that exercise can, literally, make your body younger.

...

[Researcher Sarah] Voisin tells me that calorie restriction can produce an epigenetic “signature” or biological age younger than a person’s chronological age. It is much less clear, she says, whether exercise could have a similar effect.

To find out, she and [geneticist Nir] Eynon had their participants ride exercise bikes to exhaustion to gauge their “VO2 max” ... . Each person was then assigned a fitness score and the researchers compared the fitter half to the less fit half.

Back in the boardroom Voisin is poised to swing her laptop around and show me the results, which are being prepared for publication.

...

On the left, a plot of the least fit people shows that their actual ages tally with their biological ages based on DNA methylation; the two are linked in a ladder of roughly horizontal lines. On the right, however, the ladder of the fitter people is wonky; their actual ages slope down in near uniform lines to their much lower biological ages – which are lower, on average, by four years.

“This is the first attempt to show that exercise can slow down ageing at the epigenetic level,” said Voisin. The result, adds Eynon, is that exercise is setting up skeletal muscle to succeed.

**Read full, original post:** [Mind and Muscles – How to age well](#)