

## Beetroot juice for boosting stamina.

**A regular beetroot juice drink allows you to exercise for longer without tiring.**

Forget punishing gym workouts and jogging miles uphill.

The key to boosting stamina could be as simple as a glass of beetroot juice.



A daily dose apparently allows us to exercise for longer before tiring.

Just under a pint of beetroot juice a day also lowers blood pressure, boosting heart health.

With some of the benefits even surpassing those gained from the strict training routines followed by professional sportsmen, the researchers admit to being stunned by the results.

And they say that while the earthy tang of the juice might not be to everyone's taste, it could have a big impact on everyone from athletes training for big events to pensioners who lack the energy to walk to the shops.

The researchers, from the University of Exeter and the Peninsula Medical School, in the same city, recruited eight healthy young men to complete a series of cycling tests.

They took them twice - after drinking beetroot juice once a day for six days and after drinking blackcurrant cordial.

When tasked with cycling at an easy pace, the men used less oxygen after drinking beetroot juice, the Journal of Applied Physiology reports.

This indicates that their muscles were able to do the same amount of work while spending less energy. When they were asked to cycle for as long as they could before stopping, the beetroot juice allowed them to pedal an extra minute-and-a-half before running out of energy.

This 16 per cent increase in endurance means that someone who normally runs out of steam after jogging for hour would be able to keep going for an extra ten minutes.

Alternatively, they could cover the same distance but more quickly.

Researcher Andy Jones said: 'We were amazed by the effects of beetroot juice on oxygen uptake because these effects cannot be achieved by any other known means, including training.

'Obviously you get fitter with training but your oxygen uptake stays fixed.

'You could take a Tour de France cyclist and a man in the street and their oxygen uptake at the same work rate would be exactly the same.'

The benefits are likely to be due to the high levels of nitrate in beetroot juice, which costs around £2 a pint in health food shops.

The chemical is also found in green leafy vegetables such as lettuce and spinach but is especially concentrated in juices.

It is thought that it undergoes a series of changes in the body which lead to the blood vessels widening, improving oxygen supply to the muscles.

Although the study used shop-bought beetroot juice, the researchers said that homemade versions should also be beneficial.

But drinking beetroot juice is likely to have another unexpected consequence - purple urine, or 'beeturia' as it is known to scientists.

## **Beetroot juice reduces blood pressure**

**Drinking a glass of beetroot juice daily could help beat high blood pressure**, reports the *Daily Mail*. "Drinking half a litre – just under a pint – led to dramatically lower readings", the newspaper says. The effect was linked to the nitrate in the beetroot that, the researchers suggest, "reacted with bacteria in the mouth... which resulted in blood vessels dilating to increase blood flow", the *Mail* adds.

The newspaper story is based on a study conducted in healthy volunteers that looked at the short-term effect of beetroot juice on blood pressure. The volunteers who drank the beetroot juice had a drop in blood pressure between two-and-a-half and three hours after drinking. If this research can be replicated with other vegetables and in people with high blood pressure, this would further confirm the benefits of a healthy, vegetable-rich diet.

Where did the story come from?

Dr Andrew Webb from the William Harvey Research Institute at Barts and the London School of Medicine, London and colleagues from other institutions around the UK, conducted this research. The study was supported by fellowships from the Wellcome Trust and the British Heart Foundation. It was published in the (peer-reviewed) medical journal of the American Heart Association: *Hypertension*.