

Choral singing regulates heartbeat

Singing in a choir is as good for you as yoga, according to a study which found that the regular breathing patterns it requires can reduce the variability of your heartbeat.



The study could explain why choral singing is said to be good for your health Photo: ALAMY



By [Nick Collins](#), Science Correspondent

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When choir members sing together their heartbeats become synchronised, growing faster and slower at the same time as they breathe in and out in unison, researchers found.

The study could explain why choral singing is said to be good for your health, because reducing the variability of your heart rate is likely to be good for your well-being, they said.

It also suggests that singing can enhance the spirit of cooperation in a group because it helps regulate activity in the vagus nerve which is linked to emotions and communication with others, according to the [study published in the Frontiers in Neuroscience journal](#).

The researchers, from the University of Gothenburg, studied the heart rates of fifteen 18-year-old choral singers as they performed three different vocal exercises: humming, singing the Swedish hymn “Härlig är Jorden” (Lovely is the Earth), and chanting a slow mantra.

The combined results showed that the melody and structure of the music directly affected the singers' heart rates, and singing in unison caused their pulses to rise and fall at the same time.

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The mantra, which unlike the other two exercises forced the singers to breathe in and out at exactly the same time, had the greatest effect.

Björn Vickhoff, who led the study, explained: "Singing regulates activity in the so-called vagus nerve which is involved in our emotional life and our communication with others and which, for example, affects our vocal timbre.

"Songs with long phrases achieve the same effect as breathing exercises in yoga. In other words, through song we can exercise a certain control over mental states."

Singing could provide a health boost by forcing participants to adopt a calm and regular breathing pattern, which in turn regulates the heartbeat, he said.

“We already know that choral singing synchronises the singers’ muscular movements and neural activities in large parts of the body. Now we also know that this applies to the heart, to a large extent.”

