

# Stop jogging, get giggling: laughter is the best medicine

By Richard Alleyne  
Science Correspondent

LAUGHTER can do as much good for your body as a jog around the park, scientists have claimed.

Doctors describe "mirthful laughter" as "internal jogging" because it can lower blood pressure, reduce stress and boost the immune system – much like moderate exercise.

Volunteers asked to watch 20 minutes of comedies and stand-up routines registered a dramatic drop in stress hormones, blood pressure and cholesterol. They also had their appetite stimulated, as happens with exercise.

This means that "laughter-cise" could be a way to reduce heart disease and diabetes. It is especially important to the elderly, who may find it hard to perform more physical activities.

Dr Lee Berk, from Loma Linda University, California, who led the study, said that emotions and behaviour had a physical impact on the body.

He concluded "that the body's response to repetitive laughter is similar to the effect of repetitive exercise".

"As the old biblical wisdom states, it may indeed be true that laughter is a good medicine," he said.

Dr Berk, who has been studying the effects of laughter for more than two decades, said that the high people get from a giggling fit was similar to the endorphin rush from exercise.

He has shown how it can reduce the risk of a heart attack and diabetes and regulate the body's vital functions.

In the mid-1990s, Dr Berk found that laughter increased the number of cancer-killing cells in patients. These are the body's way of fighting tumours.

For the latest study he had 14 volunteers watch an extract from a comedy or stand-up routine. Blood samples taken afterwards showed a reduction in stress hormones and increase in immune T cells. Blood pressure was also down.

The findings were presented at the Experimental Biology conference in California.

In 1997, Dr Berk performed experiments with diabetic heart patients. One group watched a comedy each day for one year, another did not.

At the end of the year, the comedy-viewing group required less blood-pressure medication. Eight per cent of the comedy viewers had another heart attack, compared with 42 per cent of those who did not regularly view it.

An earlier study by Dr Berk also showed that the mere anticipation of a good laugh can benefit health.

The expectation of watching a comedy video was enough to raise levels of feel-good endorphins and boost amounts of a hormone that helps our immune system fight infection.

Editorial Comment: Page 21