

Exercise can reduce inherited obesity

■ **PHYSICAL** exercise can reduce a genetic predisposition to obesity by an average of 40 per cent, a new study showed. The research challenges the notion that an inherited propensity to obesity is impossible to overcome and boosts the case for the benefit of more exercise for someone looking to shed some weight.

The study, published in this week's *Public Library of American Science Medicine* journal, is based on the examination of 20,430 people living in Norwich, Britain.

It found that most of the participants inherited between 10 and 13 genetic variants known to increase the risk of obesity, with some inheriting as many as 17 variants, and others as few as six.

Using modelling techniques, the researchers found that each genetic variant was linked to an increase in body mass index (BMI) — a measure of body size based on both height and weight.

They said each additional genetic variant in the score was associated with an increase in BMI equivalent to 445g in body weight for a person 170cm tall. For physically active individuals, the increase was just 379g.

odds per variant for obesity risk were 40 per cent lower. — AFP

■ **WOMEN** with mutations in the well-known BRCA1 or BRCA2 genes who have had their breasts and ovaries removed, are much more likely to survive than women who do not get preventive surgery.

A new study shows the benefits of genetic tests that give women with a family history of cancer the chance to take steps to increase their chances of survival.

It was a first study to prove that women survive longer with these preventive surgeries and showed the importance of genetic testing when there was a family history of early breast or ovarian cancer.

Women with mutations in the BRCA1 or BRCA2 genes have a 56 to 84 per cent higher risk of developing breast cancer during their lifetimes.

Those with the BRCA1 mutation also have a 36 to 63 per cent higher risk of ovarian cancer and those with the BRCA2 mutation who have a 10 to 27 per cent higher risk of ovarian cancer. Because of this, many women make the difficult choice to have their breasts or ovaries and fallopian tubes removed to

who decided against it in favour of frequent cancer screenings.

No woman who had a mastectomy, developed breast cancer during the three years of follow-up testing. Seven per cent of women who decided against a mastectomy were diagnosed with breast cancer in the same period.

About 10 to 20 per cent of breast and ovarian cancers are due to BRCA1 or BRCA2 genes. While admitting that surgery could save lives, experts acknowledged that it was not an easy decision.

Women need to come to terms with the psychological issues involved in having their breasts removed, and younger women who have their ovaries removed must contend with early menopause symptoms. — Reuters

■ **WHEN** it comes to changing health behaviours, it takes more than a far-flung network of friends on Facebook egging you on.

In order to change your behaviour, you need to be surrounded by the message — with neighbours, family and members in the community all reinforcing the same idea.

Previously, social scientists have assumed that changing behaviour would spread like

signed up, they would be assigned to "health buddies" in the space of this online social networking site. To form friendship groups, Centola introduced people to six other people who had similar interests.

The team then seeded the groups with people to encourage them to sign up, and they watched to see how quickly people would register. People in the small friend groups registered four times as fast as those with less connected networks. — Reuters

■ **DRINKING** a cup of coffee a day may be the secret to long life. According to a recent study, it helps improve elasticity of the arteries, which can ward off heart disease.

Researchers looked at people aged between 65 and 100 and long-term inhabitants of the Greek island of Ikaria. It is known as the "land of longevity" and a third of residents reach the age of 90.

The population suffers 20 per cent less cancer and half the rate of heart disease compared with the Western average, and there is virtually no dementia.

They looked at 485 people with high blood pressure, medically known as hypertension. By increasing



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Their arteries were more elastic than those measured in people who drank little or no coffee. Around one in 10 who drank three or more cups a day had the least elasticity.

But drinking too much coffee would probably cancel out the effect. One of the critical findings was that moderate coffee drinkers took their time to relax and enjoy it. — Daily Mail

taking part in an ongoing sleep study. Their sleep was monitored at home by a wrist band device and food intake was measured with interviews done by trained staff.

They found that teenagers who slept less than eight hours on weeknights consumed 2.2 per cent more calories from fats and 3.0 per cent fewer calories from carbohydrates than teenagers who slept eight hours or more.

That was 36 per cent lower than in physically inactive individuals in whom the increase was 592g per variant, the research found. Each additional variant also raised the individual's chances of obesity 1.1-fold, but in physically active individuals, the increased

reduce their risk. Researchers from the University of Pennsylvania School of Medicine in Philadelphia studied the effectiveness of these procedures, comparing rates of cancer and death in 2,482 women who had the surgery with those

the flu, which transmits best via individuals with lots of long-distance contacts. Researchers from Massachusetts Institute of Technology found that when it comes to health habits, people are quicker to change when they hear the message from more than one source.

They said the findings are useful when policy-makers need to develop strategies to promote vaccinations or health screenings, but it could be equally effective in combating obesity.

In the study, they set up two different types of social networks within an online community of about 1,500 people. One group consisted of individuals with far-flung ties, and the other involved clusters of people who interacted with each other.

According to the researchers, when people

the load on the heart, hypertension results in stiffness of the arteries and reduced elasticity which in turn increases the likelihood of heart attacks and strokes.

The researchers said there was conflicting evidence about the effect of coffee drinking on heart health, with some research showing it aggravated high blood pressure.

But drinking coffee is a deeply embedded social tradition in Greek culture which made it imperative to investigate on this island of high life-expectancy.

Subjects' arteries were assessed for distensibility or elasticity. The 56 per cent who were moderate coffee drinkers, consuming between one and two cups a day, had the best arterial health, with their blood vessels behaving like those found in younger people

■ TEENAGERS who sleep less than eight hours a night on weeknights eat more fatty foods and snacks than those who get more than eight hours.

Researchers at the Brigham and Women's Hospital and Beth Israel Deaconess Medical Center in Boston said getting too little sleep can result in chronic changes in the diet that can increase the risk of obesity, especially in girls. Prior studies have shown that too little sleep can lead to weight gain, but the new findings show where the extra calories come from.

Increasing intake of fatty foods, which are typically high in calories, can increase the overall daily caloric intake, and if it happens routinely, it can lead to excess fat.

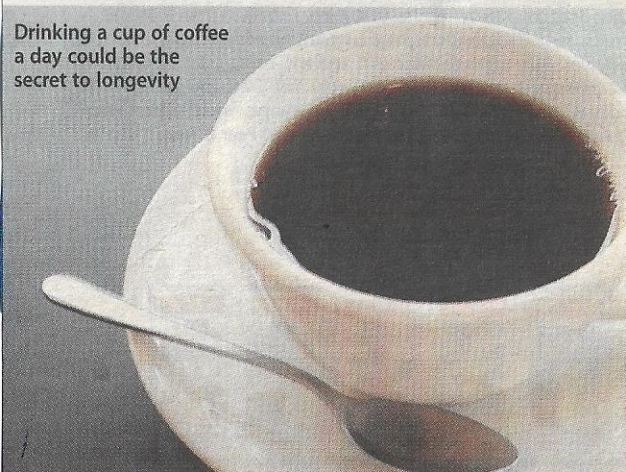
The researchers studied 240 teenagers aged 16 to 19

They said the relative increase in fat consumption among shorter sleepers by 2.2 percent per day chronically may contribute to cumulative increases in energy consumption that would be expected to increase risk for obesity and cardiovascular disease.

But the risk may be easily reversed. The team found that each added hour of sleep lowered the odds of eating a high amount of calories from snacks by an average of 21 per cent. Curiously, when they looked at gender, they found the results were statistically significant in girls, but not boys.

While it is not clear why, the team said it may be that teenage girls are more likely to turn to food for emotional reasons than boys, but that needs to be studied.

Reuters



Drinking a cup of coffee a day could be the secret to longevity