

# Love handles patch could melt fat away from hips, say scientists

◆ A patch that promises to burn off pockets of stubborn fat such as “love handles” is being developed by scientists.

Successful initial trials in the US indicated that it could reduce localised fat by 20 per cent.

The patch delivers metabolism-altering drugs in nanoparticles which enter the body via dozens of microscopic needles.

Humans have two types of fat: white fat which stores excess energy in large triglyceride droplets, and brown fat, which has smaller droplets and a high number of mitochondria that burn fat to produce heat.

For years, researchers have been searching for ways to transform an adult’s white fat into brown. There are several drugs that promote browning, but all must be given as pills or injections, exposing the whole body to the drugs, which can lead to side-effects such as stomach upset, weight gain, and bone fractures.

The skin patch circumvents these complications by delivering the drugs directly to the region needed, such as the areas of flesh above the hips.

Researchers at Columbia University Medical Center in New York tested the device on mice and found that they lost 20 per cent of fat on the treated side compared with the untreated side. The research is published in the journal *ACS Nano*.

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