

Patch promises weight loss without the heavy workouts

For those who have overindulged, help may be at hand from scientists in Singapore.

A tiny tummy patch has been shown to cut body fat by 30 per cent in just 28 days without the need to exercise. The patch is covered in hundreds of microneedles that gradually supply a dose of two weight-loss drugs.

The drug combination works to transform stubborn white fat into more manageable brown fat, which is burned away as energy used by the body to keep warm.

Although the patch has so far only been tested on animals, scientists at the Nanyang Technological University want to move to human trials, and have had interest from biotech companies.

Scientists believe the patch, which costs around US\$3.40 (\$4.80) to make, could help people who

struggle to lose weight, without needing to resort to costly surgery.

“Our solution aims to use a person’s own body fats to burn more energy, which is a natural process in babies,” said Professor Chen Peng from NTU.

The patch delivers the diet drug Beta-3 adrenergic receptor agonist and a thyroid hormone called T3 triiodothyronine, which is commonly used for medication for an underactive thyroid gland.

When the patch is pressed into the skin for about two minutes, the micro-needles become embedded in the skin and the patch can then be removed.

As the needles degrade, the drug molecules slowly diffuse the energy-storing white fat underneath the skin layer, turning it into energy-burning brown fat.

– *Telegraph Group Ltd*