

Smell receptors found all over the body; those in skin may help healing

There are more than 350 types of olfactory receptors in the nose, tuned to different scents. About 150 are also found in internal tissues such as those of the heart, liver and gut, but they are hard to study.

Hanns Hatt's lab at Ruhr University Bochum in Germany focused on skin, which is easier to study, and tested the response to scents of receptors in keratinocytes, the main skin cell type.

They found that Sandalore – a synthetic sandalwood oil used in aromatherapy, perfumes and skin care products – bound to an olfactory receptor in skin called OR2AT4. Rather than sending a message to the brain, as nose receptors do, the receptor triggered cells to divide and migrate, important processes in repairing damaged skin.

“There is a big trend towards odour receptors being found elsewhere in the body doing other jobs,” says Joel Mainland of the Monell Chemical Senses Center in Philadelphia. So it is not unexpected to find receptors in skin, but it is a surprise to learn that they are involved in wound healing.

Read the full, original story: [Skin's ability to 'smell' seems to help it heal itself](#)