

## Sunless tan now a reality!

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**Scientists create chemical that can change skin color without going in the skin.**



Scientists have answered the woes of spending hours and hours on sunbeds to achieve the perfect bronzed tone. Better yet, everyone will react to the chemical in the same way.

After 10 years of research, scientists have come up with a drug that could help people tan without exposure to the sun. The drug stimulates cells that produce the pigment that absorbs ultraviolet light. However, further tests are needed to safeguard against potential side-effects in humans.

According to a news source, the drug allowed red-haired mice to develop a deep tan. Like their pale-skinned human counterparts, the mice are particularly susceptible to the damaging effects of the sun's ultraviolet rays.

Professor David Fisher, who led the work at Massachusetts General Hospital explains "It would not actually be a fake tan, it would be the real thing. It would just be sunless." People with darker skin have a far lesser risk of melanoma, the deadliest form of skin cancer – the darker skin pigment distributes the sun's harmful UV rays more widely, limiting the radiation damage that often sparks cancerous cells.

Whether a person tans or burns is down to a gene called MC1R. The study found that a small molecule, called an SIK inhibitor, could essentially turn the melanin production process on, allowing us to tan without sun. Tests carried out by Fisher and co. found that applying the chemical to the skin not only darkened the skin, but improved its resistance to radiation damage.

The scientists tested the substance on samples of human skin kept in laboratories and found that it darkened in proportion to the dosage applied. The tan lasted several days.

In animal tests, red-haired mice became almost jet black in a day or two with a strong enough dose, said a news source. When the dosage was removed, normal skin regeneration meant the color faded within a week or so.

Researchers are aiming to create a cream that develops a tan which absorbs harmful UV rays like traditional sun screens without exposure to sunlight.