

Group disputes possible cancer link in cosmetics

Zinc oxide won't penetrate skin layer to reach living cells, it says

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By Kezia Toh

A group representing the interests of cosmetic companies here on Wednesday disputed claims of a possible link between a popular ingredient used in cosmetics and cancer.

The Cosmetic, Toiletry and Fragrance Association of Singapore was responding to a Nanyang Technological University (NTU) study released on Tuesday.

The study pinpointed zinc oxide, a common chemical used in beauty products such as sunblock and cosmetics, as potentially cancerous.

The chemical could be harmful in its nano form where particles are so small that they are absorbed easily into skin cells, according to the study.

The NTU scientists acknowledged that the chances of zinc oxide penetrating healthy skin are very low. But they pointed out that other studies have shown that there is a higher chance of such particles penetrating damaged or cut skin.

The association said on Wednesday that nanoparticles do not pass the stratum corneum - the skin's outmost layer - to reach living cells.

This is because the nanoparticles would group together and create clusters when applied, hence preventing the chemical from penetrating into the skin, said Dr Alain Khaiat, president of the association. The purpose, he explained, is so that products such as sunscreen which uses the nanoparticles can stay on the skin's surface to protect it.

Responding to this claim, the NTU scientists said on Wednesday that 'there is always a possibility that nanoparticles can still exist as single particulates under certain conditions'.

The association represents the interests of cosmetics companies here, and regularly works with the authorities to ensure ingredients in products are safe.

Dr Khaiat, who holds a PhD in biophysics, is also president of Singapore-based cosmetics consultancy firm Seers Consulting. Referring to the NTU study, he said: 'Their study relates to a pure chemical placed in direct contact with living cells that have lost their defence mechanism - a very different situation to applying a cosmetic emulsion on the skin surface.'

This point was also made by the NTU scientists, who pointed out that their laboratory tests were conducted only on commercial cells that were harvested from human skin cells.

Animal testing and human trials are needed before the link between zinc oxide and cancer can be fully established, said the study.

Indeed, governments around the world, including the Asean region, have certified the ingredient as safe for use in cosmetics.

The Health Sciences Authority (HSA) said it has not received any adverse reports related to the use of cosmetic products containing nanoparticle ingredients here. But it added that it will monitor the situation and 'will take into consideration the relevant scientific developments in this area'.

Meanwhile, cosmetics companies are unruffled by the news.

A spokesman for cosmetics giant L'Oréal - which counts brands such as Garnier and Lancôme under its belt - said it is not aware of the NTU study.

But it understands that the chemical does not pose a risk to human health, based on studies by public health authorities worldwide.

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