



Sun cream soothes a burning issue

We all know that sun cream can protect our skins from sunburn. Now a new chemical which repairs the damage while at the same time protecting against it will undergo trials in the next couple of years.

When our skin burns, iron is released which exacerbates the inflammation and pain of the sunburn; this process can also produce free radicals, a type of atom that can lead to skin cancer.

The new chemical being developed by researchers at the universities of Bath and Nottingham releases an ingredient which mops up the iron. This reduces the inflammation and pain and also prevents the build up of the free radicals.

The researchers are currently testing prototypes of the chemical in the laboratory using human skin cultures, and they expect to be trialling it with volunteers in the next two or three years.

The project has shown that the most effective chemical is a chelator, a drug that binds to and exports iron from the body. However, long-term use of a chelator can be toxic for cells as it starves them of the iron needed for normal biological processes.

The researchers, Dr Charareh Pourzand, from the University of Bath and Dr James Dowden, of Nottingham University, had to find a chelator which was strong enough to export the excess iron out of cells, but that would not have an adverse effect on other essential cellular processes. After three years of research, the team has designed two commercially attractive prototypes.

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