

## TOXIC INGREDIENTS IN SUNSCREENS

Here's what you can expect to find in high street brands:-

- Octyl methoxycinnamate (OMC) is one of the most frequently used chemical UV filters worldwide. OMC easily penetrates the upper layer of the skin and, when exposed to UV radiation, generates free radicals in skin cells.
- Oxybenzone (benzophenone-3), octyl-dimethyl-PABA and octinoxate all hormone-disrupting and oxybenzone is also shown to be damaging to algae and coral formation, leading it to be banned in Hawaii.
- 4-Methyl benzylidene camphor (4-MBC) Laboratory tests on rats exposed to 4-MBC revealed that male rats born to mothers exposed to this compound had lower testes weight, experienced delayed puberty and decreased adult prostate weight. Human trials found that both OMC and 4-MBC were readily absorbed through the skin and were detectable in urine. There is also a study that shows pituitary change showing up as hypothyroidism.
- Padimate O (2-Ethylhexyl-4-dimethylaminobenzoate ) shown to bioaccumulate in the liver and kidneys of fish.
- Fragrance chemicals As many as 150 chemicals can be used in the catch-ingredient 'fragrance/parfum' on an ingredient list. One family of chemicals often found there are called phthalates which are the 'sticky, plasticiser' chemicals that make a fragrance long-lasting. What phthalates have also been shown to do, however, is be harmful to our reproductive systems as potent endocrine disruptors.

### DIY OPTIONS

Here's details of ingredients that you can use in your own sunscreen (from Wellness Mama. [www.wellnessmama.com/beauty/homemade-sunscreen](http://www.wellnessmama.com/beauty/homemade-sunscreen))

Ingredients like almond oil (or olive oil), coconut oil, Shea butter, beeswax yellow beads (for the moisturising base), Carrot seed oil, Raspberry seed oil, vitamin E oil (for extra anti-oxidant sun protection) Non-nano zinc oxide powder (as the actual sunscreen agent, available from [www.thesoapery.co.uk/products/zinc-oxide-powder](http://www.thesoapery.co.uk/products/zinc-oxide-powder)). Essential oils (optional if you want fragrance or vanilla extract. Don't use citrus based oils though as these cause your skin to be photosensitive).

You can simplify things right down by using your own body lotion (non-toxic version) and adding zinc oxide powder.

The zinc oxide ingredient needs to be above 18% of total volume to be protective against UVA/B rays. Ideally 22-25%. You can't get too much zinc from zinc oxide in natural sunscreens. The particles are too big to penetrate it's the NANO Zinc in those super-thin sunscreens that spray or glide on that you risk zinc overload from.



You will need to reapply more often and after swimming as they are not waterproof. Key also is to not overprotect to the point where you cause a deficiency in Vitamin D. Allow yourself a little splash of sun on bare skin for at least your legs and arms, for 15 minutes, 10 minutes if really fair and make sure this isn't smack bang in the middle of the day and speak to your health professional to decide what's best for you. Sun exposure itself isn't the only factor linked to skin cancer. Many nutritional factors, such as optimal vitamin D levels or even reducing harmful omega-6 vegetable oils, can have a big impact on skin health. Getting enough antioxidants in our diet from colourful fruits and veg also plays a big role.

We need vitamin D for so many of our body's functions and adequate levels show added protection against cancer risks, particularly breast cancer, as well as bone and immune system health to name a couple. Our 'overprotecting' and indoor lifestyles can be contributing to the re-emergence of Rickets and other low-vitamin-D related immune and hormonal issues, which is crazy, BUT we do have to be careful nonetheless especially in the strong sun when we are on holiday and out in it for much of the day. So how do we strike a balance? 10-20 minutes unprotected gentle sun per day in the earlier part of the morning or late afternoon. There's a great sun-safe app called UV Index Now UVI Mate that gives you a traffic light system approach to enjoying safe sun time when you can, from wherever you are in the world.



