

DO SUNSCREEN PRODUCTS HARM THE COASTAL MARINE ECOSYSTEM?

When new products based on mixtures of several chemicals become widely used, and the use of these products increases exponentially, it is reasonable to expect some sort of environmental impact, at least on specific ecosystems. Therefore, the recent finding that **sunscreen products** may cause deleterious effects in the **coastal ecosystem** is not surprising. Sunscreen products contain organic and/or inorganic UV chemical filters, as well as a variety of other ingredients, as for example preservatives, coloring agents and fragrances. What is surprising, however, is that this potential environmental problem has not been given the attention it deserves – until this year.



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Findings on the effects of sunscreen products on the coastal ecosystem have been published in June in the scientific journal PLOSone. The study (Sunscreen products as emerging pollutants to coastal waters) has been carried out by a team of investigators based in Spain. Antonio Tovar-Sánchez (Department of Global Change Research, Mediterranean Institute for Advanced Studies, Esporles, Balearic Island, Spain) and collaborators evaluated the potential effects of commercial sunscreens released in nearshore waters by beachgoers.

During August-September 2011 the researchers sampled surface nearshore waters of three beaches around Majorca Island and conducted laboratory studies to evaluate the presence of chemicals released from sunscreens in coastal seawater and its effect on the marine phytoplankton. Results from the study show that **sunscreen products are a significant source of organic and inorganic chemicals that reach the sea with potential ecological consequences on the coastal marine ecosystem**, inhibiting the growth of some species of marine phytoplankton or adding essential micronutrients that may stimulate the growth of others.

The investigators do not discuss the long-term effects of coastal seawater contamination by chemicals contained in sunscreen products – for example, will the effects of contamination occurring mostly during the Summer months persist during the Winter?

It's clear that at least a year-long analysis is necessary to truly understand the long-term impact of sunscreen products on marine phytoplankton. However, it is important to be aware that even seemingly harmless actions, in this case using sunscreen products, may results in deleterious effects on the environment.

Source: <http://theglobalfool.com/do-sunscreen-products-harm-the-coastal-marine-ecosystem/>