Did You Know Sunscreen Causes Coral Bleaching?

What is Coral Bleaching?
• Expulsion of symbiotic zooxanthellae from hard corals
• UV Filters in Sunscreen cause increased viral infections in zooxanthellae

(References: Danovaro, Bongiorni, Corinaldesi, Giovannelli, Damiani, Astolfi, & Pusceddu, 2008)

Why we should care:
• Coral Reefs provide the structural foundation for many ocean ecosystems.
  • Biodiversity
  (Komyakova, Heid, & Jones, 2013)
• Direct (tourism/recreation) and indirect (waterways to oceans) pollution
  (Amine, Gomez, Halwani, Casellas, & Fenet, 2012)
• The health of the ocean is intimately tied to the health of all world ecosystems, including landlocked locations.
  • Temperature regulation

Sunscreen UV Filters:
• Octinoxate
• Benzophenone-2
• Oxybenzone (Benzophenone-3)
• Octocrylene

are some of the harmful active ingredients in sunscreen that cause coral bleaching and in some marine organisms they cause endocrine system disruptions.

(References: Danovaro, Bongiorni, Corinaldesi, Giovannelli, Damiani, Astolfi, & Pusceddu, 2008)
(Downs et al., 2013)
(Downs et al., 2015)

Solution:
Use physical UV blockers, such as non-nano zinc oxide or titanium dioxide instead of chemical UV filters.

Reef-Safe Sunscreens:
• Raw Elements SPF 30 Certified Natural Sunscreen
• Kokua Sun Care Hawaiian Natural Zinc Sunscreen Lotion, SPF 50
• Blue Lizard Australian Mineral Sunscreen Lotion, Sensitive, SPF 30+
• All Good Sunscreens
• Bare Republic Sunscreens
• Suntegrity Natural Mineral
• Neutrogena Sheer Zinc Dry-Touch Sunscreen Lotion, SPF 30
• Etc.

(References: EWG, 2020)