



Nature's Underwater Pharmacy: The Healing Power of Coral Reefs

Have you ever put medicine on a cut? Dolphins do this, too! Scientists saw bottlenose dolphins in the Red Sea do something strange. The dolphins waited in line to rub against certain corals and sea sponges. When the dolphins pushed against these sea creatures, the corals and sponges released a slimy mucus. Scientists tested this mucus and found 17 chemicals that work just like medicine! Dolphins often get skin problems like rashes and infections. Rubbing against the coral acts like a healing lotion, killing germs and helping skin heal. This smart behavior is called *zoopharmacognosy*, which is when animals know how to use nature to treat their own illnesses.



Dolphins are not alone. Humans also study coral reefs to find new drugs. Scientists recently found a hidden world of microbes living inside corals. These tiny living things make an amazing variety of unique chemicals. Scientists call coral reefs a giant “molecular library.” Some of these special ocean chemicals can fight germs that normal drugs cannot kill. Scientists hope that some of the chemicals from coral reefs will cure human diseases in the future.

Sadly, these underwater pharmacies are in danger. Climate change makes the ocean warmer, causing deadly coral bleaching. Also, an increase in carbon dioxide gas in the water causes *ocean acidification*. This change in ocean chemistry weakens coral skeletons and makes it harder for them to grow. If coral reefs die, both dolphins and humans lose out. But there is still hope! Scientists recently discovered that some coral reefs are strong enough to survive a warmer climate. There are over 165,000 square kilometers (64,000 square miles) of these resilient reefs in the Caribbean, Pacific, and Atlantic Oceans. We must work hard to protect these special reefs, keep the dolphins’ natural medicine, and save our own future medical cures! ❖



gorgonian
coral



leather
coral



Ircinia
sponge

Rubbing up against certain corals and sponges helps keep bottlenose dolphins’ skin healthy.