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Coral found to be eating plastic waste in the ocean

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Researchers found that coral tried to eat small pieces of plastic, raising renewed concerns for the level of plastic waste floating in the ocean.

CORAL HAS JOINED a growing list of marine organisms that have been found ([pdf](#)) to eat plastic floating in the ocean, but researchers warn it is probably not good for them. The finding adds more weight to the calls for plastic waste in the ocean to be addressed.

Mia Hoogenboom from James Cook University said she and her colleagues captured some scleractinian coral — often called brain coral because some look like a human brain — from the Great Barrier Reef.

In the lab, the scientists ground up a blue ice-cream container, "we used a very sophisticated technique - with a lemon zester," joked Dr Hoogenboom. Coral feeds by filtering the water around them for edible particles. So they sprinkled the ice-cream container flakes in with the corals and watched what happened for 48 hours.

"There's some studies to show that coral avoid certain types of plankton so we were testing to see whether plastics were something they would actively avoid. They didn't. They consumed them straight away," said Dr Hoogenboom.

The corals join sea birds, turtles, worms, bacteria and marine plankton as organisms that have been shown to eat plastic floating in the ocean.

In some creatures, the plastic blocks their digestive system causing the animal to starve to death with a full belly.

"In a lot of organisms the plastic become a block in the gut cavity. We're doing some follow-up studies to see whether particular compounds in the plastics do get incorporated into the coral tissues," she said.

"Even if there was no toxic effect from the plastic compounds, it's still having a negative effect on the organism because it's blocking their normal feeding activity."

After Sydney Harbour was found to have high levels of microplastics in its sediment, the NSW Environment Minister Rob Stokes [last year called for](#) a phase out of products containing 'microbeads', small spheres of plastics added to body washes for exfoliation purposes.

Following Dr Hoogenboom's findings, a spokesperson for the Queensland Environment and Heritage Protection office echoed those calls.

"The Queensland Government ... would be keen to work with other states and the Australian Government to develop a co-ordinated approach to this issue," she said in an emailed statement.

"Given the potential impacts on the reef and other marine environments there is significant interest in looking at the issue of plastics in the environment and mechanisms to prevent them from entering waterways where they break down into microplastics."

Adam Walters, head of research for Greenpeace applauded the move, particularly as microbeads were not the only source of microplastics in the ocean.

"A lot of small plastic comes from big plastic. What happens is large plastic objects enter the ocean and get exposed to UV and they get brittle and degrade into many small pieces. So it's great that they're stopping this stuff that you literally pour down the sink from entering the marine environment but a lot of the small plastic just comes from big bits of plastic too."

He called for plastic manufacturers to have greater stewardship of their product for the whole of its life.

"Plastics are going to be around forever. They're such a useful product. We just have to ensure that we do recycle them... There's no silver bullet for this. It's just about everyone doing their bit everywhere and obviously the creators of these products have a large role to play."



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