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Responsibility

# Australian researchers find microplastics in mussels

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By Responsible Seafood Advocate

## Flinders University: Single-use plastics were the 'main offender'

Ocean microplastics are so pervasive that they are being found in variable concentrations in blue mussels and in near-shore waters off of southern Australia's favorite beaches, new research has discovered.

Researchers at Flinders University in Adelaide are warning about the presence of microplastics in current human food supplies, including farmed and wild-caught seafood.

"Our findings shed light on the urgent need to prevent microplastic pollution by working with the communities, industries and government to protect these fragile marine systems," said Professor Karen Burke da Silva, senior author of an [article](https://www.sciencedirect.com/science/article/abs/pii/S0048969722019684?via%3Dihub) (<https://www.sciencedirect.com/science/article/abs/pii/S0048969722019684?via%3Dihub>), published in *Science of the Total Environment* titled "Microplastics in intertidal water of South Australia and the mussel *Mytilus* spp.; the contrasting effect of population on concentration."

The Flinders team sampled microplastics on 10 popular beaches across South Australia and measured low- to medium-sized microplastic fibers (less than 5 mm) in mussels to analyze the pollution and



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determined that single-use plastics were the “main offender,” according to professor Burke da Silva. “Apart from the harvesting of blue mussels, we also need to consider the impact of microplastic particles entering other parts of the human food chain with microplastic pollution expected to increase in the future.”

An advertisement banner for Devi Seafoods. On the left and right sides, there are images of cooked shrimp on a plate with garnishes. In the center, the text reads "SHRIMP SUPPLY SOLUTIONS FROM THE SOURCE" in bold, black, uppercase letters. To the right of the text is the Devi Seafoods logo, which consists of a stylized orange and blue flame-like shape above the text "Devi Seafoods" and the email address "contact@deviseafoods.com" below it.

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Microplastic levels tended to be more abundant in samples near larger towns and cities, the researchers noted, adding that trillions of microplastic particles exist in the world’s oceans, with the highest concentrations found on the seafloor in the Maldives and the lowest reported in surface waters in the Antarctic Southern Ocean.

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## Author

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**RESPONSIBLE SEAFOOD ADVOCATE**

[editor@globalseafood.org](mailto:editor@globalseafood.org) (<mailto:editor@globalseafood.org>).

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