



Where I work Antonella Leone

Photographed for *Nature* by
Elisabetta Zavoli.

Despite the stings, sampling jellyfish in the Mediterranean Sea off Italy is the best part of my work.

Because the Mediterranean has warmed, coastal jellyfish populations have been increasing. I have been finding ways to use this resource since 2011. And, as part of the European-Union-funded GoJelly project, my team and I have been evaluating jellyfish as a potential food for the past four years.

Every summer, we collect jellyfish, usually by gathering them in nets from the boat. But we sometimes dive into the sea to catch them directly with hand nets. The jellyfish in this picture, *Rhizostoma pulmo*, was not happy to swim with us, but this species' sting is mild.

Although jellyfish are not usually considered food in Europe, they have been eaten in southeast Asia for millennia. To prevent their highly perishable tissue from spoiling, Asian cooking methods historically use aluminium salts, but the amount of aluminium that remains after treatment is not allowed under European rules.

We found that organic calcium salts create

a safe food. I like that this sea creature might help our fishers and chefs to offer a meal that could be more sustainable than fish is.

GoJelly also aims to extract bioactive compounds from jellyfish to look for potential food supplements and additives, cosmetic compounds or pharmaceuticals. We have studied bioactive peptides from *R. pulmo* that have antioxidant and anti-inflammatory properties.

In traditional Chinese medicine, jellyfish are considered useful against arthritis and other inflammatory diseases. My aim is to scientifically demonstrate the link between anti-inflammatory extracts and the medicinal effects attributed to jellyfish.

Studying our catch is interesting, but not as fun as days out on the boat. Jellyfish are beautiful animals. Some species just drift with the waves and currents, but *R. pulmo* is an active swimmer – and a very elegant one.

Antonella Leone is a biochemistry researcher at the National Research Council – Institute of Science of Food Production in Lecce, Italy.

Interview by James Mitchell Crow.

Correction

This article erroneously stated that magnesium sulfate creates a safe food. In fact, it is organic calcium salts.