

New screening, detection and extraction methods for priority contaminants in seafood

March 2 2015

The EU-funded ECsafeSEAFOOD project is improving seafood safety in Europe by assessing food safety issues related to contaminants present in seafood as a result of environmental contamination, and evaluating their impact on public health.

The [project](#)'s multidisciplinary team has developed new, sensitive and rapid screening, detection and extraction methods for priority [contaminants](#). ECsafeSEAFOOD specifically focuses on priority contaminants that have not yet been regulated in the EU, including those originating from [harmful algal blooms](#) and those associated with marine litter. These contaminants include microplastics, pharmaceuticals, endocrine (gland) disrupting compounds, [personal care products](#) (e.g. musks), marine biotoxins, and heavy metals (e.g. methylmercury).

Currently, ECsafeSEAFOOD partners are finalising optimisation tools for assessing the toxicological impact of the contaminants. These tools will provide a better indication of the adverse effects of contaminants on human health. ECsafeSEAFOOD researchers have also examined the benefits and risks associated with processing and cooking seafood, based on the potential for unregulated contaminants to be absorbed by marine organisms as well as the effects of global warming on bioaccumulation and elimination of contaminants.

An online consumer tool which provides details of the benefits and risks of consuming different species of seafood is currently in development. This will enable consumers, health professionals and seafood producers

to utilise some of the results of ECsafeSEAFOOD directly.

Dr Antonio Marques, ECsafeSEAFOOD project coordinator, said: "We are now halfway through the project and have already had great success. The progress has been enormous and interesting outputs are beginning to emerge. All the project partners are enthusiastic and eager to begin sharing the project's unique results."

The advances made by the project so far were presented at the fifth ECsafeSEAFOOD coordination meeting, hosted by AZTI-Tecnalia in Bilbao, Spain, from 11-12 February 2015. The project's major results to date will also be detailed in an upcoming ECsafeSEAFOOD special issue of *Environmental Research* journal entitled: "Non-regulated [environmental contaminants](#) in [seafood](#): contributions of the ECsafeSEAFOOD project".

More information: For more information about the ECsafeSEAFOOD project, please visit: www.ecsafeseafood.eu

Provided by AquaTT

Citation: New screening, detection and extraction methods for priority contaminants in seafood (2015, March 2) retrieved 14 May 2024 from <https://phys.org/news/2015-03-screening-methods-priority-contaminants-seafood.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.