

## Plastic nanoparticles affect behavior and fat metabolism in fish

## February 22 2012

Nanoparticles have many useful applications, but also raise some potential health and ecological concerns.

Now, new research shows that plastic nanoparticles are transported through the aquatic food chain and affect fish <u>metabolism</u> and behavior.

The full report is published Feb. 22 in the open access journal <u>PLoS</u> ONE.

Exposing fish to nanoparticles slowed their feeding behavior, and also affected metabolic parameters including weight loss and <u>cholesterol</u> <u>levels</u> and distribution.

The authors, led by Tommy Cedervall, Lars-Anders Hansson and Sara Linse of Lund University in Sweden, suggest that their results could be useful for developing assays to test for nanoparticles and investigate potential biological risks associated with them.

**More information:** Cedervall T, Hansson L-A, Lard M, Frohm B, Linse S (2012) Food Chain Transport of Nanoparticles Affects Behaviour and Fat Metabolism in Fish. PLoS ONE 7(12): e32254. doi:10.1371/journal.pone.0032254

Provided by Public Library of Science



 $Citation: Plastic \ nanoparticles \ affect \ behavior \ and \ fat \ metabolism \ in \ fish \ (2012, February \ 22)$ 

retrieved 28 April 2024 from

https://phys.org/news/2012-02-plastic-nanoparticles-affect-behavior-fat.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.