

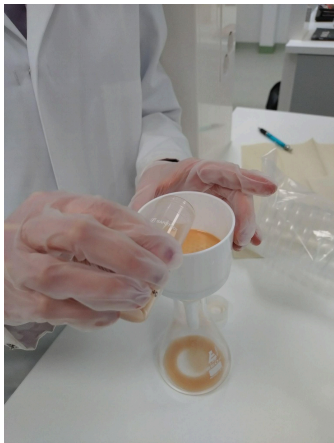


1. Fieldwork and Sample Acquisition

High school students actively participate in environmental sampling, harvesting local fish specimens from their nearby water body. This hands-on experience initiates the data collection process and fosters a connection to the local ecosystem.

2. Sample Preparation: Gut Removal

Following meticulous field guidelines, students carefully dissect the fish specimens in a controlled lab environment. This crucial step involves extracting the entire digestive tract (the gut) into a labelled vessel, ensuring accurate tracking of individual data for later comparison.



3. Chemical Digestion and Filtration

The extracted fish guts undergo a chemical digestion process to break down organic material, leaving only the more resilient materials, including microplastics. The resulting solution is then carefully filtered using a vacuum filtration system, concentrating any potential microplastics onto a single filter paper.

4. Microscopy and Microplastic Identification

The filter papers, now containing the concentrated samples, are meticulously examined under a compound microscope. Students scan the samples to identify and classify potential microplastic fragments, fibers, or particles. This step marks the culmination of the laboratory work, revealing the presence and abundance of microplastics within the analyzed fish.

