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Fish excretions help keep oceans healthy

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The digestive systems of fish play a vital role in maintaining the health of the oceans and moderating climate change, researchers said on Thursday.

Computer models showed how bony fish produced a large portion of the inorganic carbon that helps maintain the oceans' acidity balance and was vital for marine life, they said.

The world's bony fish population, which includes about 90 per cent of marine species and estimated to produce 812 million to two billion tonnes, helped to limit the consequences of climate change through its effect on the carbon cycle, University of British Columbia researchers reported in the journal Science.

"This study is really the first glimpse of the huge impact fish have on our carbon cycle--and why we need them in the ocean," writes researcher Villy Christensen and his colleagues.

Calcium carbonate is a white, chalky material that helps control the acidity balance of sea water. It forms crystals in the gut of bony fish and is then excreted in chalky solids.

It helps regulate how much carbon dioxide oceans would be able to absorb from the atmosphere in the future, the researchers said.

"Because of the impact of global climate change, fish are likely to have an even bigger influence on the chemistry of our oceans in the future," lead author Rod Wilson said.

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