

Fewer fish, worse health: The climate effect

February 29 2024, by Béatrice St-Cyr-Leroux



Credit: Unsplash/CC0 Public Domain

Over the next 25 years, reduced intake of marine food resources due to climate change will likely have a negative impact on the cardiovascular health of First Nations on Canada's Pacific coast, a new study suggests.

According to modeling based on climate projections, the reduction in [seafood consumption](#) can be expected by 2050 to increase the risk of heart attack in this population by 1.9 to 2.6% for men and 1.3 to 1.8%

for women.

For people aged 50 or over, the increase would be between 4.5 and 6.5%.

These numbers come from a recent study that used data from the First Nations Food, Nutrition and Environment Study (FNFNES), a joint project of the Assembly of First Nations, Université de Montréal and the University of Ottawa.

The study was [published](#) in the journal *FACETS*.

Traditional diets at risk

In British Columbia, the traditional diets of coastal First Nations include a wide variety of marine foods such as fish, shellfish, seaweed and marine mammals. These resources are important sources of protein, micronutrients and omega-3 [polyunsaturated fatty acids](#), and are low in fat.

However, due to the climate crisis, seafood is becoming increasingly scarce. In fact, one half of respondents surveyed in the study said the quantity is already insufficient. For example, the various species of salmon are among the fish most sensitive to [climate change](#), and they are the main source of fatty acids for First Nations.

"From an epidemiological point of view, we know that omega-3 fatty acids are associated with a reduction in [heart disease](#)," said UdeM nutrition professor Malek Batal, one of the lead researchers on the project.

"But sources of these 'good fats' are dwindling year by year, and the other options are often of poor nutritional quality, such as highly

processed foods," said Batal, an expert on the environmental, social, economic and cultural determinants of food choices.

In addition to the lack of alternatives, First Nations people must contend with severe food insecurity (which affects 65% of the population), sedentary lifestyles and discrimination.

"All these factors increase the risk of cardiovascular disease," said Batal, holder of the Canada Research Chair in Nutrition and Health Inequalities.

The right to a healthy diet

The study highlights the urgent need for strategies to improve access to seafood for coastal First Nations, he added. In addition to promoting nutritional and cardiovascular health, seafood enables people to "develop strong cultural bonds, to socialize and to be active, which also improves mental health."

Climate change is not the only barrier to seafood consumption. Lack of time, equipment and [traditional knowledge](#) to obtain the resource and [commercial fishing](#) are also obstacles.

Batal believes efforts must be made to distribute traditional foods, organize fishing expeditions and offer workshops on how to source and prepare new species. Fish farming, which is contributing to the decline of wild species, must be better regulated, in his view.

"Traditional food systems are essential to First Nations; there are no nutritionally and culturally equivalent resources," said Batal.

"Implementing solutions such as the ones we propose in the FNFNES should be part of political, as well as individual, efforts towards reconciliation and decolonization."

More information: Lesya Marushka et al, Potential impacts of reduced seafood consumption on myocardial infarction among coastal First Nations in British Columbia, Canada, *FACETS* (2024). [DOI: 10.1139/facets-2022-0245](https://doi.org/10.1139/facets-2022-0245)

Provided by University of Montreal

Citation: Fewer fish, worse health: The climate effect (2024, February 29) retrieved 27 April 2024 from <https://phys.org/news/2024-02-fish-worse-health-climate-effect.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.