



Akiak
Akiachak
Alakanuk
Andreafsky
Aniak
Anvik
Atmautluak
Bethel
Bill Moore's Slough
Chefornak
Chevak
Chuathbaluk
Chuloonawick
Crooked Creek
Eek
Emmonak
Georgetown
Grayling
Hamilton
Holy Cross
Hooper Bay
Kasigluk
Kipnuk
Kongiganak
Kotlik
Kwethluk
Kwigillingok
Lime Village
Lower Kalskag
Marshall
Mekoryuk
Mountain Village
Napaimute
Napakiak
Napaskiak
Newtok
Nightmute
Nunam Iqua
Nunapitchuk
Ohogomiut
Oscarville
Paimute
Pilot Station
Pitka's Point
Quinhagak
Red Devil
Russian Mission
Scammon Bay
Shageluk
Sleetmute
St. Mary's
Stony River
Toksook Bay
Tuluksak
Tuntutuliak
Tununak
Umkumiut
Upper Kalskag

DAN WINKELMAN
PRESIDENT AND CEO
YUKON-KUSKOKWIM HEALTH CORPORATION

U.S. SENATE COMMITTEE ON INDIAN AFFAIRS

**Legislative Field Hearing titled, “The Impact of the
Historic Salmon Declines on the Health and Well-Being of Alaska Native
Communities Along Arctic, Yukon, and Kuskokwim Rivers” located in Bethel,
Alaska.**

November 10, 2023

Good afternoon Vice Chairman Murkowski and members of the committee. I am Dan Winkelman and the President and CEO of the Yukon-Kuskokwim Health Corporation (YKHC). Thank you for the opportunity to testify on salmon.

YKHC is a tribal health organization of 58 federally-recognized Alaska Native tribes which was formed to administer a comprehensive health care delivery system for the communities of the Yukon-Kuskokwim region. For more than fifty years, we have provided health care services to the people of the region under a Self-Governance Compact with the Indian Health Service under Title V of the Indian Self-Determination and Education Assistance Act.

YKHC serves a remote, isolated service area approximately the size of the State of Oregon. This region is the traditional home to Alaska’s indigenous Yup’ik, Cup’ik, and Athabascan people, and is not connected to the road system. As of the 2010 Census, 89% of the residents are Alaska Native, around half of the population speaks the Yup’ik or Cup’ik language at home, and most follow a subsistence lifestyle.

YKHC provides a wide variety of community, social, and population health services to all 30,000 residents of the region. Our health system includes 41 village clinics, 5 subregional clinics, a regional hospital, skilled nursing facility and other regional services and programs.

A. Alaska Salmon Promotes Healthy People and Culture

A healthy lifestyle begins at home, and for generations families in this region have relied upon the return of salmon to subsist throughout the year. This renewable natural resource has been vital to our health and our culture.

The health benefits of Alaska salmon are well known. Alaska salmon is a complete, high-quality protein, as well as a key source of marine Omega-3 fatty acids and is naturally high in many essential vitamins and minerals including vitamin D, selenium, and potassium.

Protein is known to promote satiety and stabilize blood sugar. It helps build lean body mass and is necessary to make hormones and enzymes. Omega 3 fatty acids lower triglycerides and increase levels of good cholesterol. Lower triglycerides and higher HDL can lead to decreased risk of death following a myocardial infarction and reduced complications following cardiovascular events. It can also decrease inflammation in the body and improve brain health. Selenium is one of the most crucial nutrients for maintaining and improving immune function; while potassium deficiency is a concern across the United States and can lead to hypertension, kidney stones, and poor bone health.

B. Studies Support the Health Benefits of Salmon

The health benefits of Alaska salmon are supported by scientific studies. Traditional diets in the YK region have incorporated salmon at higher rates than consumed in other parts of the country. Studies conducted in the YK region have shown that people who consume moderate amounts of fish are less likely to develop some chronic diseases.¹ In addition, studies not specific to the YK region involving hundreds of thousands of participants eating modest amounts fish, especially species higher in amounts of Omega 3 fatty acids such as the salmon eaten in the YK region, reduces risk of coronary death by 36% and total mortality by 17%.²

Accordingly, the USDA recommends a diet rich in vitamin D and Omega fatty acids, and current dietary guidelines from US Department of Health and Human Services and the USDA recommend that Americans increase their seafood intake to twice per week.

C. Lack of Salmon Negatively Impacts Our Health and Culture

Historically, the people of the YK region have easily met the recommendations above with many people consuming salmon almost daily, until recent salmon closures. A diet rich in nutrient dense foods compared to energy dense foods, translates to only needing a small portion of the food to reap the benefits. Access to nutrient dense foods and consuming smaller portions helps to maintain healthy weight and decreases development of diet-related health conditions.

However, when fish is not available, meals are supplemented with store-bought, highly processed foods that contain added sugars, salts, saturated fats, and often less protein. Diets become more energy dense instead of nutrient dense which can lead to an increase in unhealthy weight gain and increased rates of chronic disease development. Finally, when fish and other nutrient-dense seafoods are not accessible in the region, we are deprived of this culturally significant food that is well known to be the lifeblood of the region.

¹ Makhoul Z, Kristal AR, Gulati R, et al. Associations of very high intakes of eicosapentaenoic and docosahexaenoic acids with biomarkers of chronic disease risk among Yup'ik Eskimos. *Am J Clin Nutr.* 2010;91(3):777-785. doi:10.3945/ajcn.2009.28820

² Mozaffarian D, Rimm EB. Fish intake, contaminants, and human health: evaluating the risks and the benefits. *JAMA.* 2006 Oct 18;296(15):1885-99. doi: 10.1001/jama.296.15.1885. Erratum in: *JAMA.* 2007 Feb 14;297(6):590. PMID: 17047219.

D. Appropriate Funds for Scientific Research

Significantly more scientific research monies need to be appropriated to determine why our salmon are not returning and how we can develop solutions to mitigate against this current salmon disaster we are living through so our grandchildren do not have to live through it too. With these vital monies, the University of Alaska could become the experts needed for ending this crisis, or at least assist the federal, state and tribal governments with developing science-based solutions so that we can rebuild our important salmon runs.

The recommendations that you hear today will help to improve the availability of our salmon, our nutritious food for Alaska Natives whose health care status, despite years of significant progress, continues to lag behind other populations in Alaska and the rest of the United States.

Quyana for the opportunity and honor to provide testimony today.

Sincerely,

YUKON-KUSKOKWIM HEALTH CORP.

A handwritten signature in black ink, appearing to read "Dan Winkelman". The signature is fluid and cursive, with a large initial "D" and "W".

Dan Winkelman, President and CEO