

Alaska Native People: Diet, Westernization and Health

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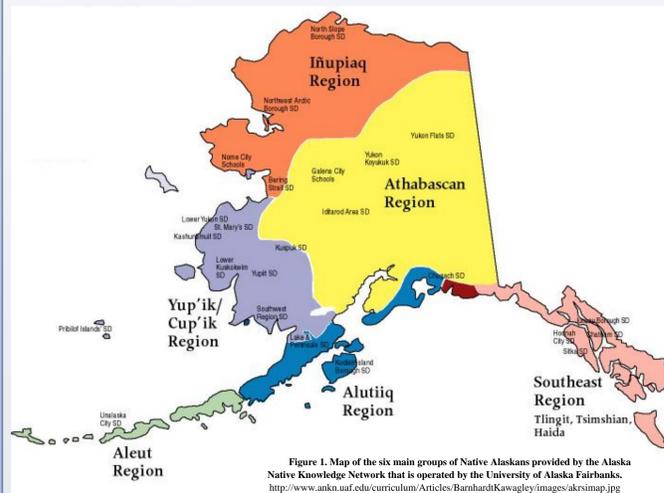


Figure 1. Map of the six main groups of Native Alaskans provided by the Alaska Native Knowledge Network that is operated by the University of Alaska Fairbanks. <http://www.aunf.uaf.edu/curriculum/Articles/BarnhardtKawagley/images/aksmap.jpg>

Abstract

Prior to westernization, the Alaska Native diet was one that included high omega-3 fatty acids and proteins and low in saturated fats and cholesterol. This may or may not provide protection against certain diseases. As westernization continues to change the diet with each new generation, it is of great interest as to how it affects Alaska Native health. Alaska Native health has declined substantially within the last decade, and seems to continuously decline at an alarming rate. Investigating both the changing diet and the effects on Alaska Native health may provide a possible cause for this increasing health problem.

Objective

The objective of this study is to find a possible link between the westernization of the traditional Alaska Native diet and the increase of obesity, type II diabetes and chronic inflammation. The main nutritional intake of interest was omega-3 fatty acids and how it relates to the previously mentioned health problems.

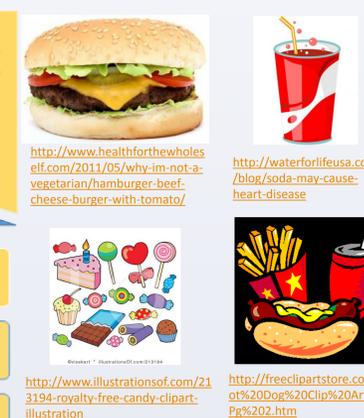
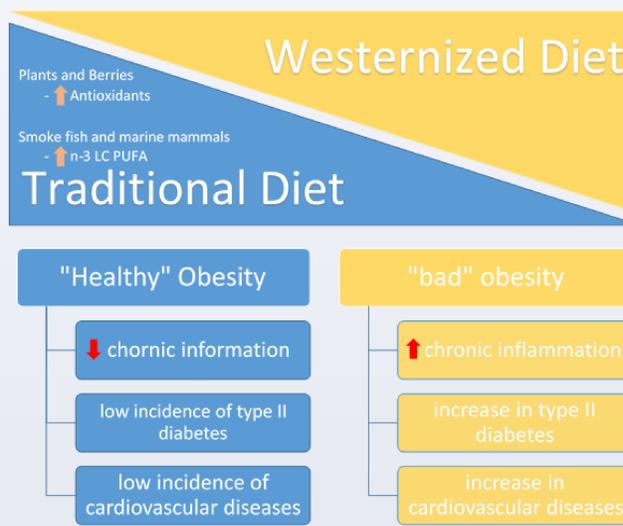
Methods

A review based on both historic and current literature of Alaska Natives including the diet, health status, and what may link them together. Online sources such as JSTOR, Google Scholar, EBSCO Host and other resources available on UAF's library website were used to search keywords such as Alaska Native, diet, omega-3 fatty acids, Alaska Native health, traditional diet, westernization, omega-6 fatty acids, plants, antioxidants, cancer, diabetes, cardiovascular disease and obesity. Other works such as archeological and historical Alaska Native books were utilized along with traditional cookbooks from smaller Alaska Native villages. Since the Alaska Native traditional diet has not been extensively studied all of the sources have been published within the last 16 years, with the exception of looking at past studies of other cultures for comparison.



Some common Alaska Native foods including muktuk, smoked salmon, boiled salmon and seal oil. <http://www.farnorthscience.com/wordpress/wp-content/uploads/2007/11/blueberriesnps.jpg>

Results

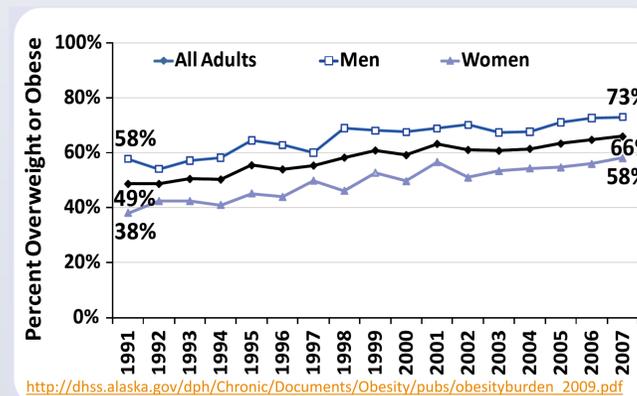


<http://www.healthfortheholeself.com/2011/05/why-im-not-a-vegetarian/hamburger-beef-cheese-burger-with-tomato/>

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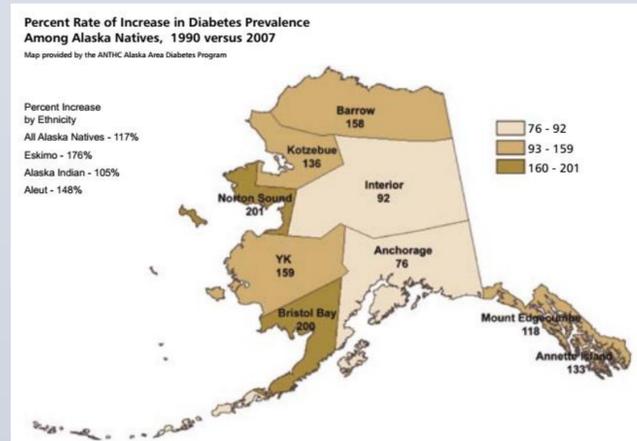
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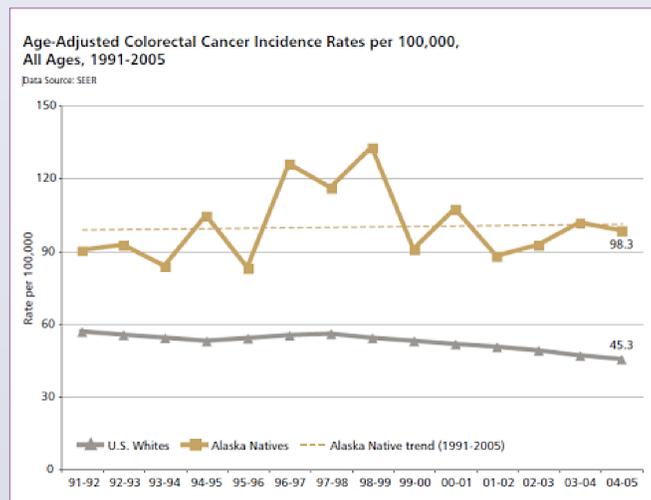


http://dhss.alaska.gov/dph/Chronic/Documents/Obesity/pubs/obesityburden_2009.pdf

The general trend of the prevalence of obesity in Alaskan adults shows an increase from 1991 to 2007 (State of Alaska Department of Health and Social Services, 2009). The Alaska Native Tribal Health Consortium's (ANTHC) 2009 Alaska Native Health Status Report shows that the prevalence of obesity among AN is steadily increasing. This data indicates that as of 2005-2007 the rate of obesity was at 31% of the AN population. This is slightly higher than both Alaska non-natives (25%) and all races of the United States (28%).



That the rate of diabetes has dramatically increased as well as the prevalence of diabetes myelitis (DM), which has increased to an alarming 117% from 1990 to 2007 (Alaska Native Tribal Health Consortium, 2009).



Alaska Native colorectal cancer incidence is also increasing overall with an 8.3% increase from 1991 to 2005 (Alaska Native Tribal Health Consortium, 2009). These fluctuating changes may be a result of the dramatic changes in the AN diet and lifestyle.

Many studies have tried to come up with a solution to end the alarming increase in obesity and other health related problems that are prevalent in Alaska. In the past many people believed that the traditional diet was the reason why there is a high rate of obesity in Alaska Native. More recent studies are leaning toward reintroducing traditional Alaskan foods back into the diet. Efforts to decrease the rates of cancer of Native Hawaiians reported various solutions including reintroducing their traditional diet that is also low in cholesterol and saturated fat and a higher amount of omega-3 fatty acids. All Native Hawaiian participants that tested the effects of a traditional diet showed lower blood serum levels of cholesterol, triglycerides, blood pressure and weight (Hughes et al., 1562). Since the late 1990's Native Hawaiians have started to revert back to their traditional diet that is known to be substantially healthier than westernized diets.



Conclusion

The cause of ANs increasing rates of obesity, diabetes, heart disease and colorectal cancer is still not completely understood. There are many factors that play into these increasing trends and more community based research is needed in order to help the AN people get a better understanding of the causes for these disease, but also potentially help the worlds populations cope with their rising numbers of these diseases as well.

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