



Addressing Nutrition Insecurity with Traditional Foods

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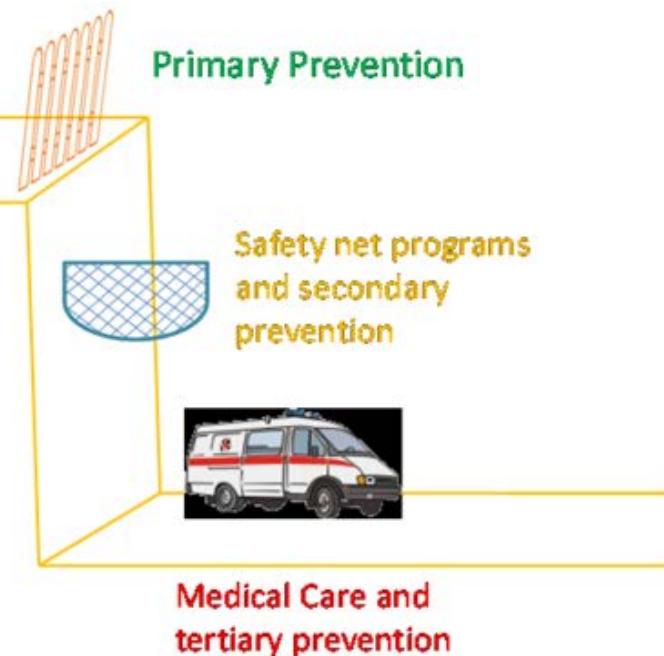


Photo credit: National Geographic

Social determinants of health



Current medical model



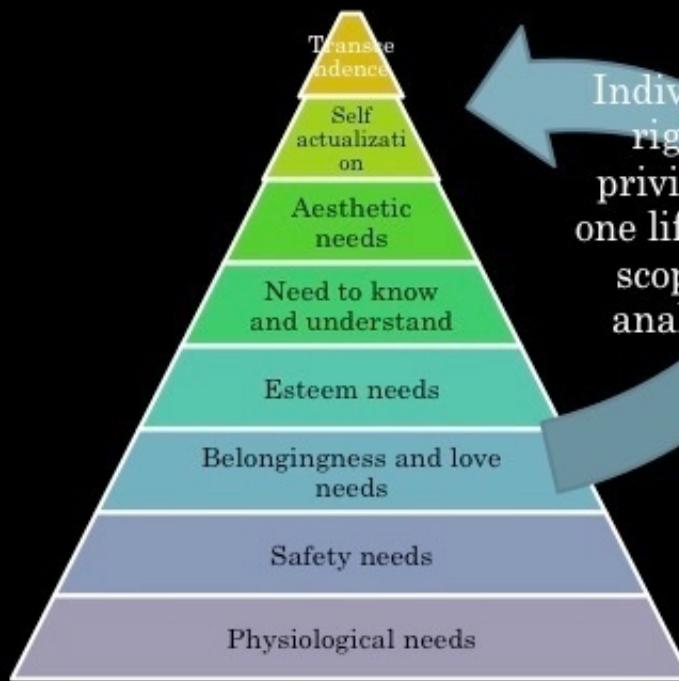
Domains of Health Influence



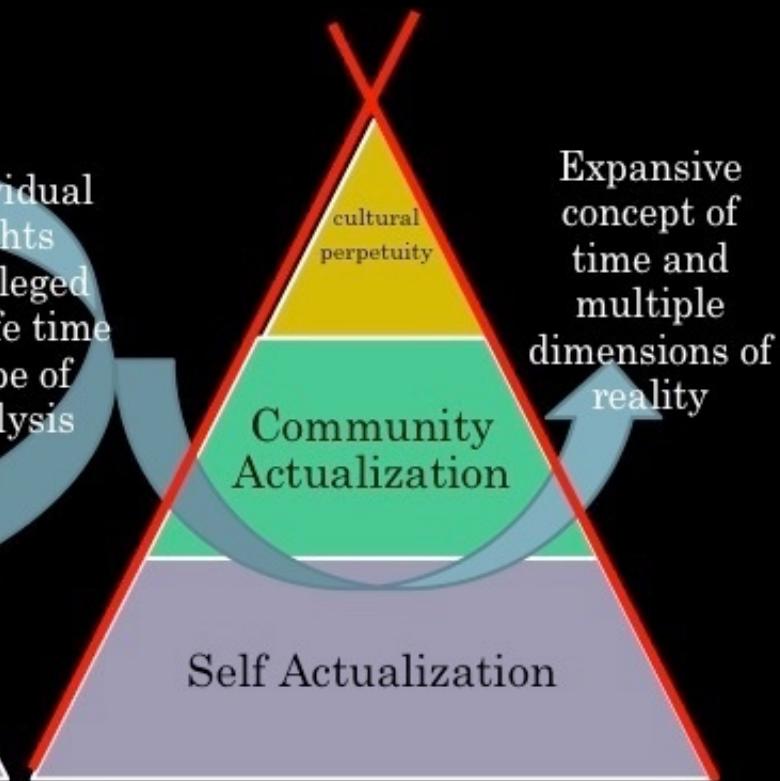
<http://www.countyhealthrankings.org>

MASLOW'S HIERARCHY OF NEEDS (INFORMED BY BLACKFOOT NATION (ALTA))

Western Perspective



First Nations Perspective



Huitt, 2004; Blackstock, 2008; Wadsworth,

ALASKA SPORTSMAN: THE BEST HUNTING SPOTS

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for Alaskans Only

Alaska

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Outside
Their Door

CAN NATIVES SUSTAIN THE
SUBSISTENCE LIFESTYLE?

RANGER'S



Declines in traditional marine food intake and vitamin D levels from the 1960s to present in young Alaska Native women

Diane M O'Brien ^{(a1) (a2)}, Kenneth E Thummel ^(a3), Lisa R Bulkow ^(a4), Zhican Wang ^(a3) ... 

DOI: <https://doi.org/10.1017/S1368980016001853> Published online: 28 July 2016

Abstract

To measure the trends in traditional marine food intake and serum vitamin D levels in Alaska Native women of childbearing age (20–29 years old) from the 1960s to the present.

We measured a biomarker of traditional food intake, the $\delta^{15}\text{N}$ value, and vitamin D level, as 25-hydroxycholecalciferol (25(OH)D₃) concentration, in 100 serum samples from 20–29-year-old women archived in the Alaska Area Specimen Bank, selecting twenty-five per decade from the 1960s to the 1990s. We compared these with measurements of red-blood-cell $\delta^{15}\text{N}$ values and serum 25(OH)D₃ concentrations from 20–29-year-old women from the same region collected during the 2000s and 2010s in a Center for Alaska Native Health Research study.

The Yukon Kuskokwim Delta region of south-west Alaska.

Alaska Native women (*n* 319) aged 20–29 years at the time of specimen collection.

Intake of traditional marine foods, as measured by serum $\delta^{15}\text{N}$ values, decreased significantly each decade from the 1960s through the 1990s, then remained constant from the 1990s through the present ($F_{5,306}=77.4$, $P<0.0001$). Serum vitamin D concentrations also decreased from the 1960s to the present ($F_{4,162}=26.1$, $P<0.0001$).

Consumption of traditional marine foods by young Alaska Native women dropped significantly between the 1960s and the 1990s and was associated with a significant decline in serum vitamin D concentrations. Studies are needed to evaluate the promotion of traditional marine foods and routine vitamin D supplementation during pregnancy for this population.

[Export citation](#)[Request permission](#)

O'Brien, D.M., Thummel, K.E., Bulkow, L.R., Wang, Z., Corbin, B., Klejka, J., Hopkins, S.E., Boyer, B.B., Hennessy, T.W. and Singleton, R. (2016) 'Declines in traditional marine food intake and vitamin D levels from the 1960s to present in young Alaska Native women', *Public Health Nutrition*, , pp. 1–8. doi: 10.1017/S1368980016001853.

Nutrition transition Rickets

25-Hydroxycholecalciferol concentration

$\delta^{15}\text{N}$ value Stable isotope ratios

Arctic health

Circumpolar health



American
Diabetes
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Lower Prevalence of Impaired Glucose Tolerance and Diabetes Associated With Daily Seal Oil or Salmon Consumption among Alaska Natives

1. Amanda I Adler, MD, PHD,
2. Edward J Boyko, MD, MPH,
3. Cynthia D Schraer, MD and
4. Neil J Murphy, MD

Researchers identify cause of gastrointestinal disorder affecting Inuit

ANDRÉ PICARD - PUBLIC HEALTH REPORTER
THE GLOBE AND MAIL

Last updated Monday, Dec. 01 2014, 6:48 PM EST



Congenital Sucrase-isomaltase Deficiency (CSID)

<http://www.theglobeandmail.com/news/national/researchers-identify-cause-of-gastrointestinal-disorder-affecting-inuit/article21845977/>

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“Let foods be your medicine”

-Hippocrates



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Prenatal and Postnatal Flavor Learning by Human Infants

Julie A. Mennella, PhD, Coren P. Jagnow, MS, Gary K. Beauchamp, PhD

[Author Affiliations](#)

ABSTRACT

Background. Flavors from the mother's diet during pregnancy are transmitted to amniotic fluid and swallowed by the fetus. Consequently, the types of food eaten by women during pregnancy and, hence, the flavor principles of their culture may be experienced by the infants before their first exposure to solid foods. Some of these same flavors will later be experienced by infants in breast milk, a liquid that, like amniotic fluid, comprises flavors that directly reflect the foods, spices, and beverages eaten by the mother. The present study tested the hypothesis that experience with a flavor in amniotic fluid or breast milk modifies the infants' acceptance and enjoyment of similarly flavored foods at weaning.

This Article

PEDIATRICS Vol. 107 No. 6 June 1, 2001
pp. e88
(doi: 10.1542/peds.107.6.e88)

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Traditional Foods Infant Feeding



Patti Kanayurak and her boy Connor (Barrow, Alaska). Photo used with permission.







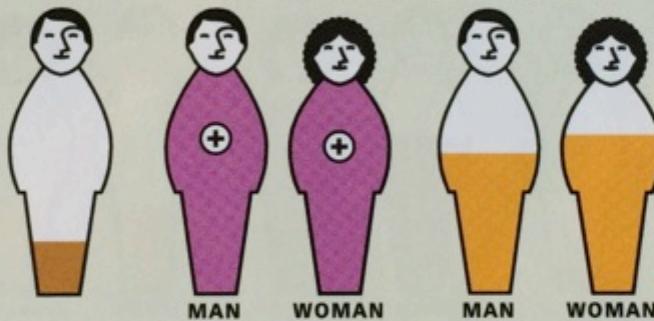


FIREWEED NUTRITION INFORMATION

Fireweed is an excellent source of Vitamins A & C, and a good source of fiber



FIBER VITAMIN A VITAMIN C



HEART FRIENDLY

- Fat free
- Very low in sodium

NUTRITION INFORMATION

Per serving - 1 cup: raw

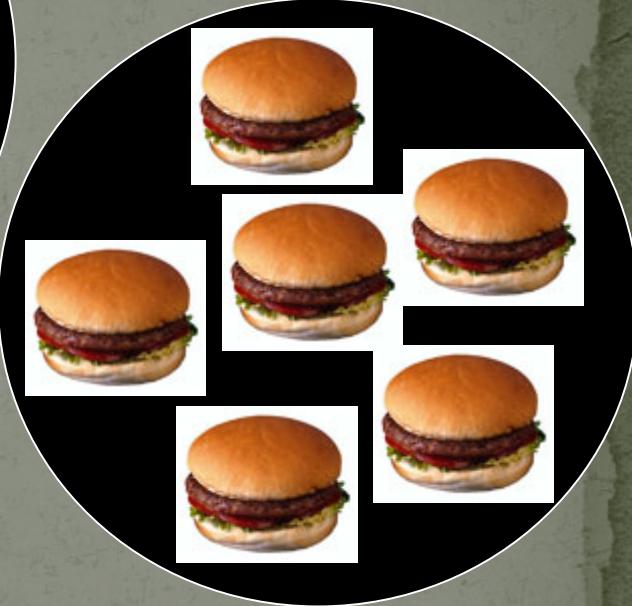
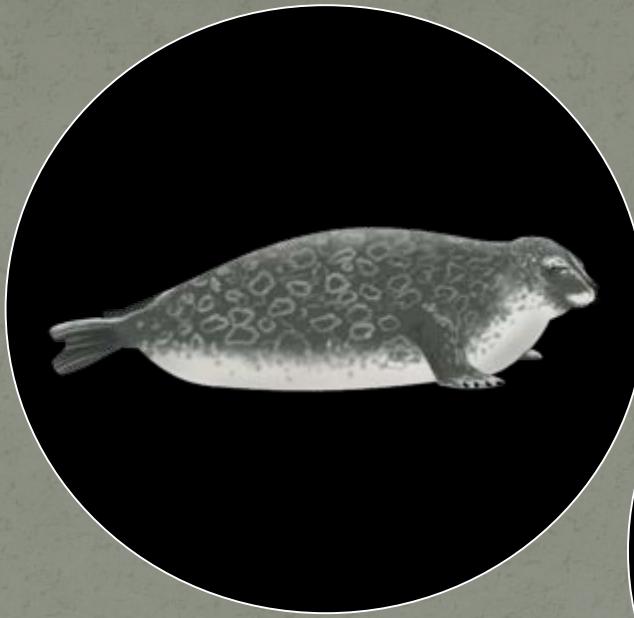
Calories	24
Protein	2 g
Carbohydrate	3 g
Fat	0
Calories from fat	0 %
Saturated fat	NT*
Dietary Fiber	3 g
Cholesterol	NT*
Sodium	28 mg
Vitamin A	3146 IU
Vitamin C	55 mg
Iron	1 mg

*Not Tested





IRON

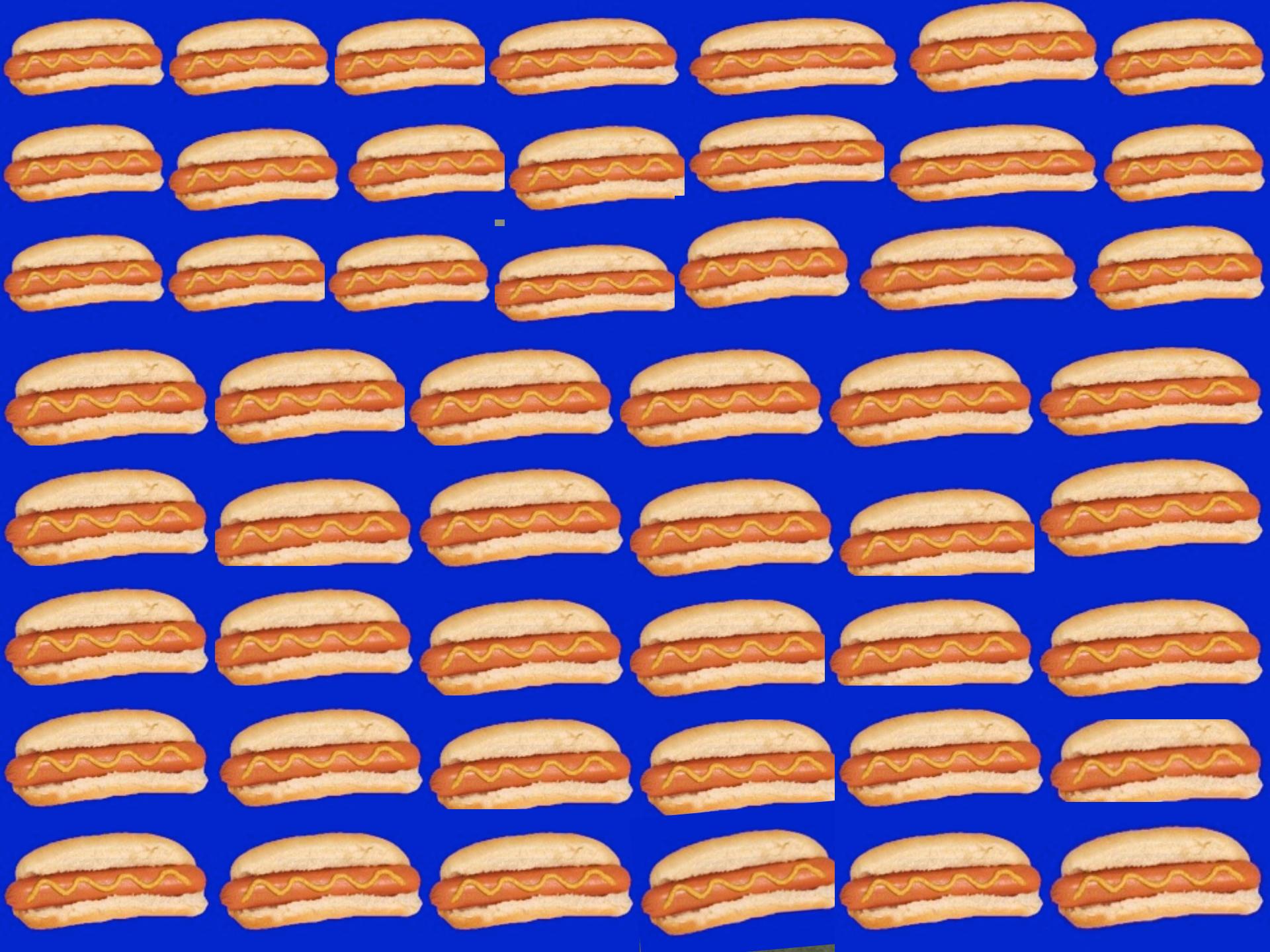


IRON....



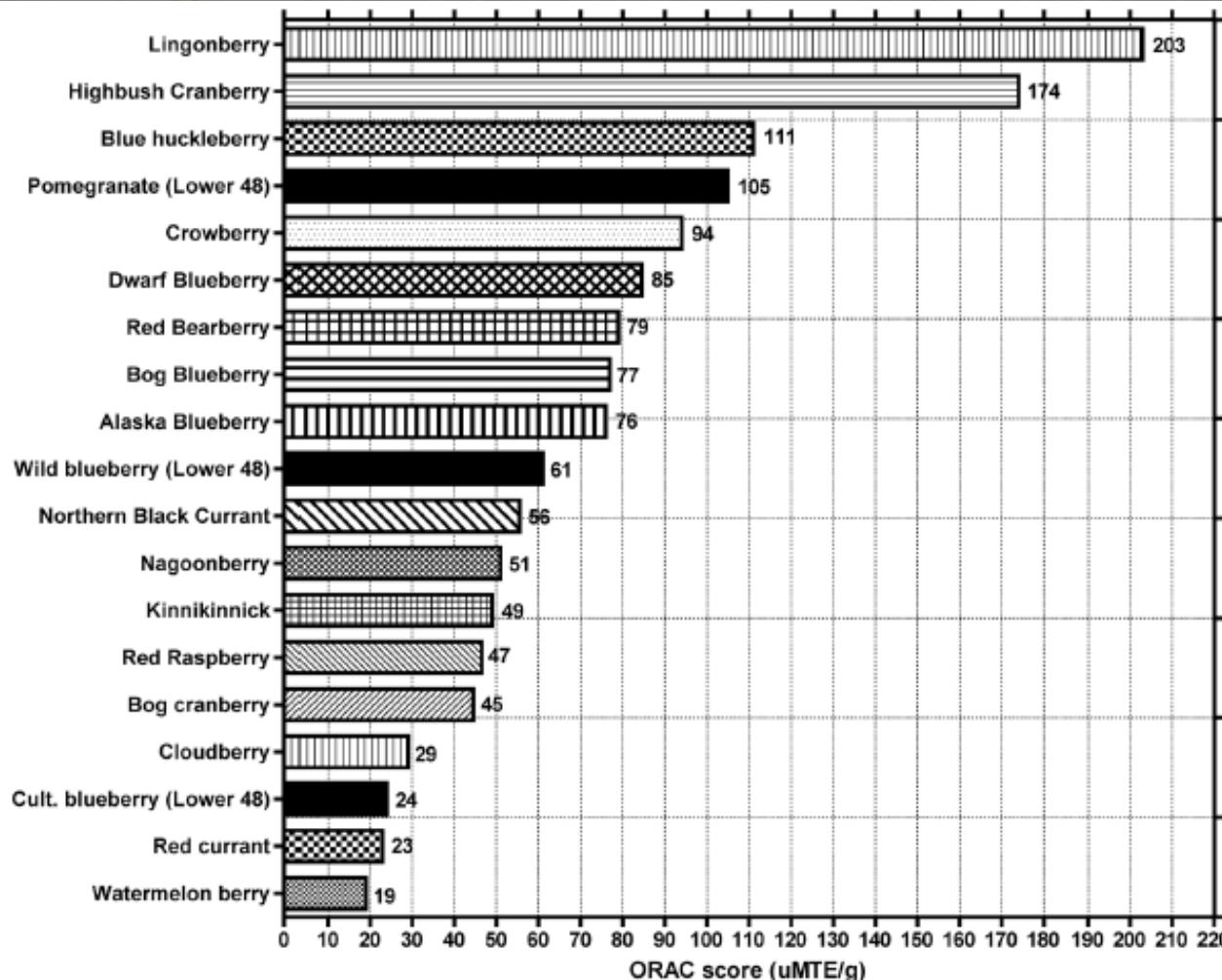
how many hotdogs?

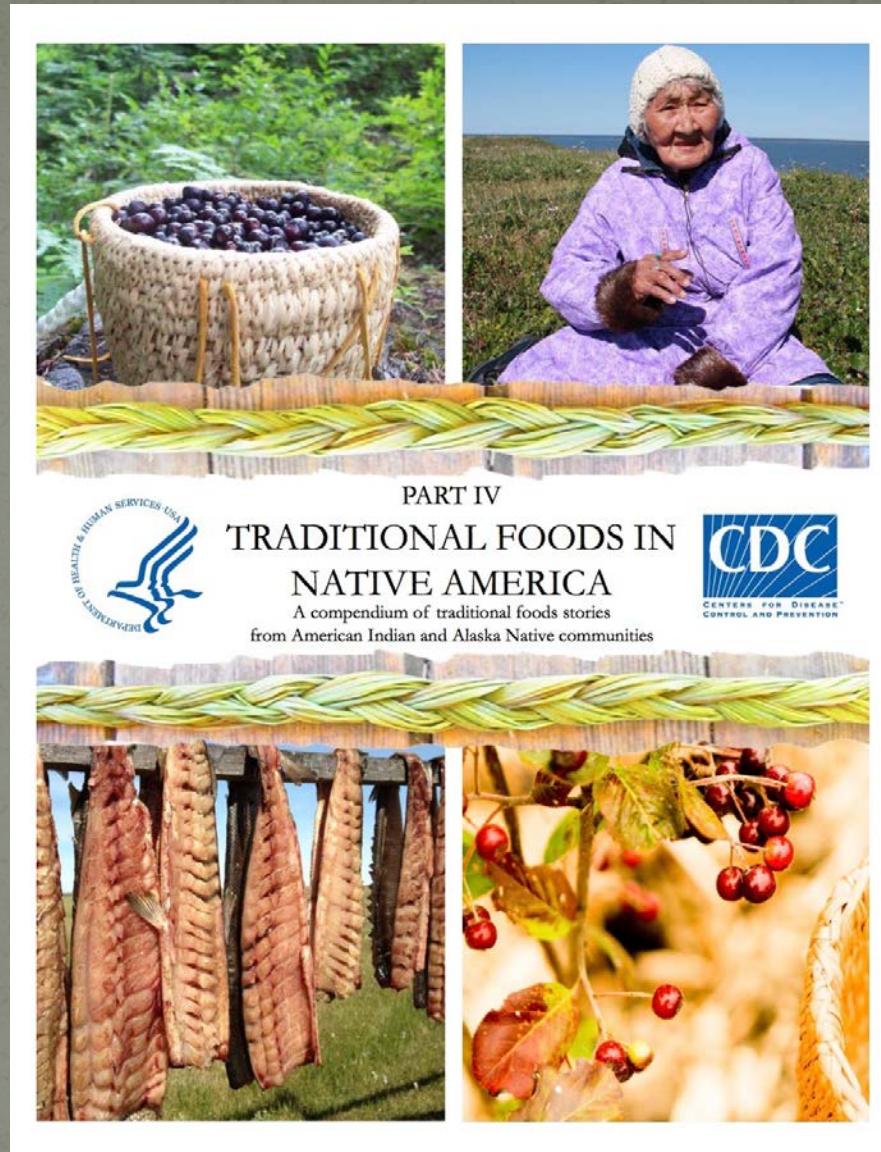
Country food is good for you and your family



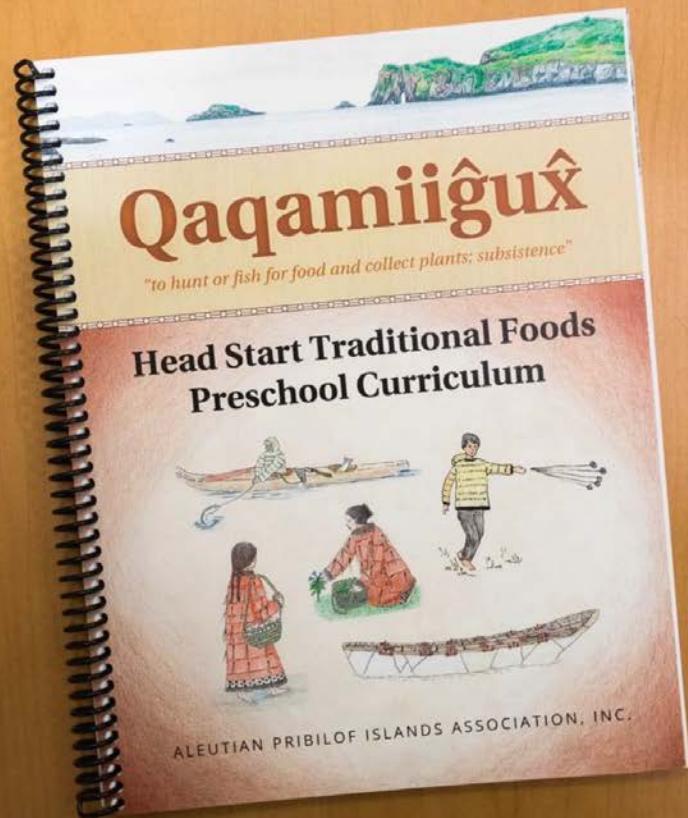


Comparison of berries





<https://www.cdc.gov/diabetes/ndwp/pdf/part-iv---traditional-foods-in-native-america.pdf>



The Head Start Traditional Foods Preschool Curriculum, prepared by the Aleutian Pribilof Islands Association, is being used starting this month in communities in the Unangax region from Sand Point to St. Paul. (Loren Holmes / Alaska Dispatch News)



Igiugig residents take on 6-week traditional food challenge as a health experiment

Every month in 2017 they have taken their weight, blood pressure, blood sugar and heart rate. They will compare the results from before and after the challenge.

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Culture is Medicine



“We are free to be who we are – to create our own life out of our past, and out of the present. We are our ancestors. When we heal ourselves, we also heal our ancestors – our grandmothers, our grandfathers, and our children. When we heal ourselves, we heal Mother Earth.”

~Dr. Rita Pitka Blumenstein

