# Alaska Native Traditional Food Security Tool Development and Validation

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# MW CTR-IN



American Indian Alaska Native Clinical & Translational Research Program



UAA Institute for Circumpolar Health Studies UNIVERSITY of ALASKA ANCHORAGE



### Availability

Access

# FOOD SECURITY

**Stability** 

Utilization

# TRADITIONAL FOOD SECURITY

#### FOOD SECURITY

Availability Alaska Native/Inuit Culture Decision-Making Power and Management Health and Wellness Stability Accessibility

ICC-Alaska. 2015. Anchorage, AK.



ALASKAN INUIT FOOD SECURITY CONCEPTUAL FRAMEWORK: HOW TO ASSESS THE ARCTIC FROM AN INUIT PERSPECTIVE



# TRADITIONAL FOOD SECURITY

# ICC goals

- Utilize the Alaskan Inuit Food Security Conceptual Framework to guide development of research questions and projects.
- Increase understanding of food security through the identification of combined variables. Allow for community-level identification of interconnecting stressors and drivers to identify level of vulnerability
- Establish ecological baseline data rooted in IK
- Move toward a co-production of knowledge approach, based on the use of both IK and science.

## **Traditional Food Security and Health:**

#### Identifying risk and resilience factors in St. Paul, AK





St. Paul, AK. Population: Approx. 400

# **RESEARCH TIMELINE**



Validation data collected September 2022

Forthcoming: Validation analyses & results

## Traditional Food Security and Dietary Quality



### Partnering with ACSPI & CAB

Create a TFS assessment tool with in-depth interviews w/ St. Paul residents

Validate TFS assessment tool

Asses TFS and Dietary Quality, and examine associations

# Research Activities



Partnering with ACSPI, research review

Community advisory board

Interviewing 10% of St. Paul residents

Creating a traditional food security assessment tool

# Community Advisory Board

7 Alaska Native St. Paul Residents

- Unangan Elders
- ACSPI Tribal President
- Active hunters and fishermen/women
- Local schoolteacher

- 3 women, 4 men
- Age range: Early 30s to 70s

# Interviews

29 Alaska Native St. Paul residents

- Wide range of ages (18-81 years old; avg 47.8)
- Wide range of TF experience/use
  - Unangan Elders
  - Active hunters and fishermen/women
  - Community members who are less frequent harvesters
- 14 Men, 14 Women
- 8 open-ended questions about access and barriers, use, storage/processing, changes over time, relationship with health

## **Interview Questions for TFS tool development**

- 1. <u>How do you get traditional foods</u>? From whom? Where? Trade?
- 2. What are three things that make **<u>getting traditional foods possible</u>**?
- 3. Would you **prefer eating more traditional foods** than you can get?
- 4. What do you do when you (and your household) <u>**run out of, or want more traditional foods**?</u>
- 5. What are three things that **make it hard or harder to get traditional foods**?
- 6. Are traditional foods **<u>important</u>** to you? Why or why not?
- 7. Do you feel like traditional foods are **important for the mental and/or physical health** of you and your family? If yes, how?
- **8.** Can you tell me about <u>any changes</u> you've noticed that have affected traditional food harvest? If yes, what are they?

### Accessibility & Availability

- 1. Access to traditional territories (FS)
- 2. Ability to live off the resources of the land, water and air (FS)

1. Variety – number of different animals and plants in the area (may also be referred to as biodiversity)

2. Knowledge of how to obtain, process, store and consume traditional foods (FS)

### Top 7 things that make it <u>possible</u> to get traditional foods on St. Paul

- 1. Sharing and trading
- 2. Other hunters and fishermen/women
- 3. Access to a boat
- 4. The Community Seal Harvest
- 5. Land transport (trucks, hondas)
- 6. Traditional knowledge
- 7. The island, the land

# Top 7 things that make it <u>hard to</u> get traditional foods on St. Paul

- 1. Limited land transport (trucks, hondas)
- 2. Ammo shortage, lack of supplies
- 3. Time/work conflict
- 4. Fish and animals are harder to find
- 5. Bad weather, bad conditions
- 6. Lack of childcare
- 7. Lack of knowledge of how to get them



How do you get traditional foods? (n=29)			
How?	St. Paul	Rural AK	<u>Urban AK</u>
Myself	<b>24</b> (83%)	<b>4</b> (14%)	2 (7%)
Immediate family	<b>24</b> (83%)	<b>4</b> (14%)	5 (17%)
Extended family	<b>15</b> (52%)	<b>9</b> (31%)	<b>3</b> (10%)
Friends	<b>18</b> (62%)	5 (17%)	<b>4</b> (14%)
Other	<b>13 (</b> 49%)	1 (3%)	<b>3</b> (10%)

Salmon from Atka, Unalaska, Akutan, Bethel, Dillingham, Anchorage & Kenai Moose from Anch & Fairbanks Seal from St. George

## What do you do when you/your HH run out of, or want more traditional food?



## Alaska Native/Inuit Culture

- 1. Value of food (FS)
- 2. Spirituality (FS)
- 3. Language and terminology (FS)
- 4. Education and transfer of knowledge
- 5. Sharing systems (FS)
- 6. Respect (FS)
- 7. Celebrations, games and feasts (FS)
- 8. Social interaction (FS)
- 9. Dance, art and music (FS)

- 10. Self- and cultural identity (FS)
- Clothing and tools (FS)
   Maintaining Inuit leadership and knowledge holders (FS)
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- 13. How to be within the environment (cosmology) (FS)
- 14. Time constraints (FI)
- 15. Gathering, processing, storing and consuming traditional foods (FS)
- 16. Physical safety (e.g., navigation skills)
- 17. Knowledge of food systems of yesterday and today (FS)
- 18. Relationship with animals (socio-ecological system) (FS)

6 of people said that traditional foods are important to them, their family, and their community because...

"My family and I appreciate food from the land" "Traditional foods are healthy" "It is our culture and history" "It is who we are, it is part of our identity" "We love it and prefer it to store-bought food"

### Decision-making power & management

- 1. Ability to manage lands, waters and resources (FS)
- 2. Power dynamics self-regulation (FS)
- 3. Perceived and actual reality of control over fate (FS)
- 4. Strength of co-management structures (FS and FI)
- 5. Loss of resource benefits and income (FI)
- 6. Federal and state regulations/jurisdiction (FS and FI)
- 7. User conflict (FI)
- 8. Burden of conservation (FI)
- 9. Increase in competition (FI)
- 10. Taxation without representation and representation with low understanding of Inuit culture and Inuit ecological regions
- Respect for and equality of knowledge systems (IK and science)(FS)
- 12. Preparedness for large disturbances, such as preparedness for oil and emergency response (FS)
- 13. Meaningful, equitable involvement in research (FS)

## ST. PAUL

### Bycatch/Trawling/Overfishing Climate change Less ice Warmer waters Garbage/Contaminants (mercury, microplastics)

### Health and Wellness

1. Environmental integrity and productivity to withstand habitat destruction (FS)

- 2. Increased vulnerability throughout the food chain (FI)
- 3. Degradation of healthy food systems and overall health (FI)
- 4. Nutrition ability to access and absorb (FS)
- 5. Mental health (FS and FI)
- 6. Mixed diet of traditional and non-traditional foods (FI and FS)

# TOP 3 REASONS traditional foods are important for your health, according to St. Paul residents:

- 1. Traditional foods are healthier than other types of food
- 2. Traditional foods are fresh, organic, and not processed
- 3. Traditional foods are high in iron and other vitamins



## **Stability**

- 1. Adapt to changes (FS)
- 2. Rapid speed of change (FI)
- 3. Inuit mental security confidence in the legal protections for the environment from harmful actions, such as those that result from pollution. Legal protection for the Inuit culture against forced assimilation. (FS)
  4. Integrity of interconnected systems marine, terrestrial, cultural, etc. (FS and FI)
  5. Hope (FS)

#### 6 of people interviewed had noticed changes that affected traditional food harvest over the past few years, including...

- Fewer halibut and/or halibut in worse condition (smaller, skinnier)
- Fewer seals on island
  - Bycatch/trawling has created problems for animals & harvest
  - Climate change and warmer waters
  - Fewer berries, possibly because of less snow cover in winter
  - Fewer birds and bird eggs on island

### **Benefits for community**

- Create meaningful indicators of TFS
- Inform food security planning
- Inform climate change and disaster planning for ACSPI Tribal Government
- Provide key information to community members in order to make decisions about different programs/resource allocations within the community

#### Alaska cancels Bering Sea king, snow crab seasons

#### **COMMERCIAL FISHING**

Closures reflect concerns over population collapse of both species after bleak surveys.

#### **Hal Bernton**

Seattle Times



### Forthcoming

- Finalize validation analyses (n=36)
- Create meaningful indicators of health (Alaska INBRE grant)
- Examine the relationship between TFS and health indicators
- Community co-production of knowledge with laboratory and western scientific knowledge training (Interdisciplinary NSF CIVIC grant)



## THANK YOU ACSPI, ST. PAUL CAB MEMBERS, ST. PAUL COMMUNITY MEMBERS

## AND YOU!

# MW CTR-IN





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