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PREVALENCE AND DETERMINANTS OF FOOD INSECURITY in QEQERTARSUAQ, GREENLAND

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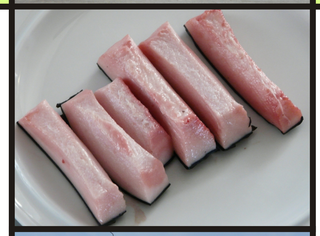
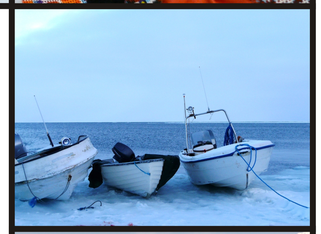




Research Aim and Objectives

This study identifies and characterizes the prevalence of food insecurity in Qeqertarsuaq, western Greenland, and describes the processes and conditions limiting the access, availability, and quality of food.

Rationale

The isolated location of many Greenlandic communities and a reliance on traditional foods leave the local food system particularly sensitive to climate variability and change with implications on food security. In this context, developing a baseline understanding of the prevalence and experience of food insecurity and its determinants has been identified as a research priority (Egeland et al. in press, White et al. 2003).

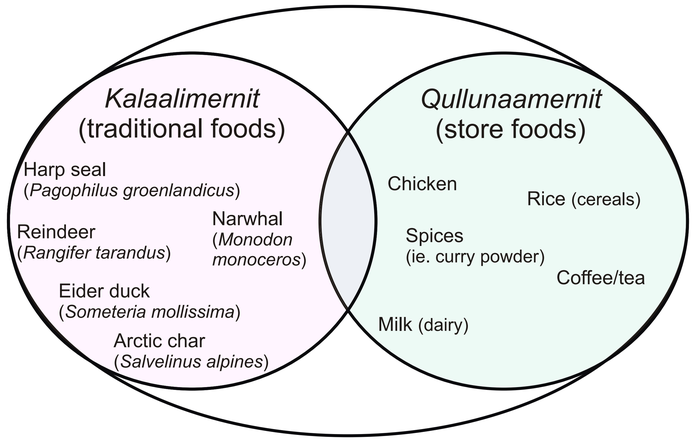
Context

Qeqertarsuaq (pop. 1055) is located on Disko Island off the west coast of Greenland (Figure 1). The community is 90% *Kalaallit* (Greenlandic Inuit) and residents pursue traditional subsistence livelihoods of hunting and fishing in conjunction with wage employment.

Figure 1: MAP OF QEQERTARSUAQ, WESTERN GREENLAND

Locally harvested animals known as *kalaalimernit* or "Greenlandic" foods are widely consumed and are a highly valued component of the local diet. In addition to traditional foods, store foods (or *qallunaamernit*, "Danish" foods) are an important component of the Qeqertarsuaq food system (Figure 2).

Figure 2 : THE QEQERTARSUAQ FOOD SYSTEM



Study Design and Methodology

A mixed methods approach was employed consisting of qualitative and quantitative methods that emphasized the observations and knowledge of community members.

Data collection methods:
- 61 food surveys (61% response)
- 75 semi-structured interviews (63% response)
- key informant interviews
- participant observation (8 weeks)

Findings: Prevalence of food insecurity

Prevalence of food insecurity was found to be 8% in Qeqertarsuaq (90% CI:2.4-14).

While this is relatively low when compared with an estimated 64% in Igloolik (Ford and Berrang-Ford 2008) and 83% in Kugaruuk, Nunavut (Lawn and Harvey 2003) using a similar food survey, interview results reveal access to nutritionally rich and culturally relevant Greenlandic foods is restricted for women, non-hunters and Elders.

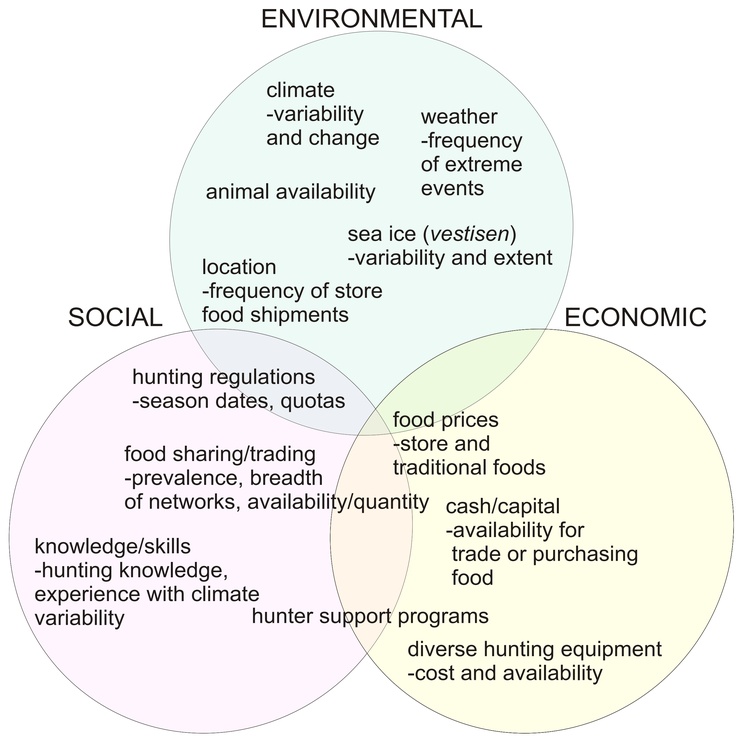
Stresses decreasing traditional food access for these vulnerable subpopulations may increase in future with the threat of climate change.

"If the climate gets warmer like in recent years, some animals might disappear. We might have to adapt that they aren't allowed anymore. You cannot control the nature." - Laila

"Being a full-time hunter has no future. I would rather say to my kids don't like Greenlandic food because in future it will be more difficult to get."
-Kristian

Findings: Determinants of food insecurity

Figure 3: SOCIAL-ECONOMIC-ENVIRONMENTAL DETERMINANTS OF FOOD INSECURITY IN QEQERTARSUAQ



Findings: Vulnerability to food insecurity

The vulnerability of residents to food insecurity is influenced by the exposure of the food system to stressors, and the capacity of the system and the community to adapt to these stressors.

FACTORS INFLUENCING VULNERABILITY TO FOOD INSECURITY

Exposures:
-sea ice variability and reduction (decreased availability of harp seal)
-eider duck migration shift (outdating hunting season dates)
-isolated location of community (unpredictable store food shipments)

Adaptive capacity facilitators:
-food system diversity (incl. traditional and store foods)
-food sharing/trading
-hunter support programs
-experience-based knowledge (ie. experience with climate variability)

Adaptive capacity barriers:
-high food prices
-centralized resource management strategies (slow response to climate changes)