Hunger Module 6 - Akshayuk Pass Expedition





"Starvation is a matter of not having enough food to eat, not a matter of there being enough food to eat." -A.K. Sen

In the previous module we asked the question, "what would happen to you if you had to live off the land and feed yourself without any outside help; without even the use of a gun?" For the duration of the i2P Akshayuk Pass expedition, the youth ambassadors have been asked to consider this question. They are to keep track of all the 'food' they see during the course of the expedition. By food is meant anything edible on the land; which in the Akshayuk Pass largely

amounts to berries and animals. The purpose of this exercise will be to demonstrate how difficult it is to find food on the tundra, let alone capture it.

It should be acknowledged that that this exercise does not reflect fully the practice of the local Inuit who hunt almost exclusively along coastal areas where most wildlife live. There is likely to be little wildlife deep in the Akshayuk Pass. Nonetheless the exercise is worthy as a demonstration of how difficult it can be to find food in a world with ever diminishing resources.

Hunger was a common enemy of the Inuit. Often the lean times of the year were the early fall and late spring, when the ice and snow were not firm or set and traveling by foot, dog team, or more recently snow mobile is difficult. Without an effective way to travel, it is difficult to capture prey. There are countless exam-

Did You Know?

On average, a person dies every second because of hunger. That is 4000 people every hour, 100,000 a day, 36 million a year, and 58% of all deaths worldwide (2001 – 2004 estimates) ples of hunger and starvation among the Inuit, perhaps the best documented in modern times being the death from starvation of a significant percentage of the population of the Padlimuit in the Keewatin region of the Arctic in the 1950s. This was principally due to the failure of the caribou herd, the Padlimuit's main source of food, to appear on its usual migratory route. Allegedly, one third of the population died. The elders who still

recall this famine do not remember it as unique, but rather as a regular occurrence.

EATING WITH THE INUIT



Because food was sometimes difficult to come by, the Inuit people learned to be very resourceful to limit the hunger that they experienced. The Inuit were hunters and fishers who followed the migration of animals that were their principle source of food. The animals that were most commonly hunted were whales, walruses, caribou, seal, polar bears, muskoxen, and birds. However, when the animals they traditionally hunted were sparse, the Inuit would also hunt less commonly eaten animals, such as foxes. Although farming is impossible in the Arctic due to the extreme weather conditions, the Inuit would gather and preserve naturally occurring plants such as grasses, tubers, roots, stems, berries, and seaweed (*kuanniq* or edible seaweed). Therefore, the Inuit diet was based largely on meat and was high in protein and very high in fat; traditionally, the Inuit obtained 75% of their daily caloric intake from fat! When animals were suddenly unavailable, as occurred with the Padlimuit in the face of the failure of the caribou herd to appear, starvation would result.

FOOD SECURITY

The starvation of the Padlimuit Inuit occurred during a time in Canadian history when the country was prosperous and the average Canadian had plenty to eat. To put it in perspective, the starva-



tion occurred when Ray Zahab was XX (or before he was born).

Today, for most Americans and Canadians the notion that there may not be enough food available to feed oneself or one's family is completely foreign. Yet in many parts of the world food shortages are common. The measure of someone's ability to reliably feed themselves is called food security. Food security encompasses two parts:

- 1. the availability of food
- 2. Access to food.



Figure 1: Estimated regional distribution of hunger in 2009 (in millions), and increase from 2008 levels (%). (Source: Food and Agriculture Organization of the United Nations, press release: "more people than ever are victims of hunger".)

A household is considered food secure when there is enough food so that people are not hungry. Between 2005 and 2007, 88.9 to 89.1 percent of US households were food secure. In 2007 the median American family spent \$42.50 per person for food each week.

WORLDWIDE FOOD CRISIS

There is currently an abundance of food in the Developed Countries (like the United States and Canada), and individuals living in these countries largely have the resources to purchase food. However, the rest of the world is not so fortunate and we are currently in a worldwide food crisis. In 2009, world hunger

is to reach a historic high with 1.020 billion people (~1/6 of world population and 100 million more than 2008) will be hungry every day.

The regions of the world most affected by the food crisis are (see Figures 1 and 2):

- Asia and the Pacific has the largest number of hungry people (642 million);
- Relative to its population size, Sub-Saharan Africa has the highest percentage of undernourishment (32%);
- Near East and North Africa have the largest increase in the number of hungry people (+13.5%);
- Although Latin America and the Caribbean have shown signs of improvement, the number of hungry people in this region also increased (+12.8%).



Figure 2: Population of undernourished individuals (%) (sources: United Nations World Food Program's interactive "hunger map" and Food and Agriculture Organization of the United Nations, "The State of Food Insecurity in the World" (2006))

Class Exercise:

Obtain some common food items in the grocery store. Establish what the ingredients of these food items are. Try and establish where these ingredients come from. Some ingredients may come from countries where people do not have enough to eat.

Food for thought...

WHY IS THE WORLD IN A FOOD CRISIS?

The current food crisis is the result of the world economic crisis, which has resulted in lower incomes and higher unemployment. The food crisis is not actually caused by a shortage of food in the world, but rather by the inability of many people to afford food. The inability to purchase food has been compounded by rising food prices. At the end of 2008, food cost 24% more than it did two years earlier.

Thus it is the distribution of wealth, not

food that underlies the high levels of world hunger. What this inability to purchase food translates to is millions of hungry people. The toll of hunger on the mental and physical wellbeing of these hungry and starving people is significant.

A HUNGRY BODY

When the human body becomes malnourished and doesn't get enough vitamins, nutrients or energy, then the body becomes starved. Because the body is not obtaining energy from outside sources (i.e. food) it undergoes a process called *catabolysis*, which means that the body begins to use its own muscle and fat for energy to fuel vital systems. In other words the body begins to consume itself to survive. Movement becomes painful; the muscles are weakened because they



Figure 3: Domestic wheat prices in selected countries and international benchmark (US \$ per ton). (source: Food and Agriculture Organization of the United Nations, press release ; "More People then ever are victims of hunger" (2009)

have been broken down for energy. Eventually the stomach also begins to atrophy (waste away). Because the perception of hunger is related to the percentage of the stomach that is empty, an atrophied stomach means a lower perception of hunger. The skin becomes cracked because individuals who are starving are too weak to sense thirst, and become severely dehydrated. Additional symptoms of starvation include apathy, listlessness, withdrawal, organ damage and increased likelihood of infectious disease. Few people die directly from starvation, instead their weakened body succumbs to an infectious disease.

ADAPTING TO FOOD SHORTAGES

If a population is in chronic food debt, the population responds by *stunting*, or decreasing body size. If a mother is malnourished then her child's growth is stunted; this stunting cannot be reversed. Malnutrition during pregnancy can result in infant and child mortality, but if a child survives, then he or she is better adapted for an environment low in nutritional resources because a smaller child needs fewer calories to survive.

Did You Know?

On average, a child dies every 5 seconds because of hunger. This is 700 children every hour, 16,000 each day, 6 million each year, and 60% of all child deaths (2002 – 2008 estimates)