Inuit Tuttarvingat



Inuit Food Security 2011 Selected Bibliography

Prepared by Catherine Carry and Carys Carrington

August 2011





Inuit Food Security: 2011 Selected Bibliography

© Copyright 2011 National Aboriginal Health Organization

ISBN: 978-1-926543-57-4

Authors: Catherine Carry and Carys Carrington

OAAPH [now known as the National Aboriginal Health Organization (NAHO)] receives funding from Health Canada to assist it to undertake knowledge-based activities including education, research and dissemination of information to promote health issues affecting Aboriginal persons. However, the contents and conclusions of this report are solely that of the authors and not attributable in whole or in part to Health Canada.

Inuit Tuttarvingat (formerly known as the Ajunnginiq Centre) of the National Aboriginal Health Organization will advance and promote the health and well-being of Inuit individuals, families and communities by working in strong partnerships to collect information and share knowledge.

Inuit Tuttarvingat's six main goals are:

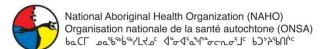
- 1. Conduct and promote research to enhance the health and well-being of Inuit.
- 2. Increase understanding and awareness of the health issues affecting Inuit.
- 3. Facilitate and promote research that is ethical, balanced, relevant, and useful to Inuit.
- 4. Support and promote Inuit in pursuing health careers.
- 5. Preserve and promote Inuit traditional knowledge and healing practices.
- 6. Provide Inuit with knowledge of environmental health risks.

Inuit Tuttarvingat, National Aboriginal Health Organization

220 Laurier Ave. West, Suite 1200 Ottawa, Ontario K1P 5Z9 Canada

Tel: (613) 237-9462

Toll-free: 1-877-602-4445
Fax: (613) 237-8502
E-mail: inuit@naho.ca
Web site: www.naho.ca/inuit



Introduction

Over the last decade, concern about the extent of global food security and insecurity has grown. The World Health Organization (WHO) defines food security as existing when:

- "all people at all times have both physical and economic access to enough food for an active, healthy life;
- the ways in which food is produced and distributed are respectful of the natural processes of earth and are thus sustainable;
- both the consumption and production of food are governed by social values that are just and equitable, as well as moral and ethical;
- the ability to acquire food is ensured;
- the food itself is nutritionally adequate and personally and culturally acceptable; and
- the food is obtained in a manner that upholds human dignity."¹

Government agencies, community-based organizations, and researchers are trying to understand the many factors at the global, national, community and individual levels that contribute to food insecurity. At the same time, they are building awareness and developing new approaches to ensure that everyone has access to safe, nutritious, and culturally appropriate food.

In 2004, Inuit Tuttarvingat (then known as the Ajunnginiq Centre) of the National Aboriginal Health Organization produced *Hunger in the Arctic: Food (In)Security in Inuit Communities, A Discussion Paper.*² Since then, results from a range of research studies and papers on Inuit food security issues have become available. Awareness within governments and organizations has risen significantly, as has community level programming to assist those who are food insecure. Inuit Tapiriit Kanatami (ITK), the national organization in Canada representing Inuit in the four regions – Nunatsiavut (Labrador), Nunavik (northern Quebec), Nunavut, and the Inuvialuit Settlement Region in the Northwest Territories – has led in several food security initiatives, and held regional consultations towards the development of a national Inuit food security strategy.

Inuit Tuttarvingat currently is developing an Inuit food security on-line learning tool. Partnering researchers in this project include: Dr. James D. Ford, Dr. Laurie Chan, and Dr. Chris Furgal of McGill University, the University of Northern British Columbia, and Trent University, respectively. For our initiative, we reviewed many research articles and publications, and have produced this selected bibliography. Ten key sources have been annotated, which include research articles, grey (unpublished) literature, and reports.

² Boult, D.A. (2004). Hungeri nthe Arctic: Food (in)security in Inuit communities, a discussion paper. Ajunnginiq Centre National Aboriginal Health Organization. www.naho.ca/documents/it/2004_Inuit_Food_Security.pdf

1

¹ World Health Organization. (2011). Food Security. <a href="https://www.euro.who.int/en/what-we-do/health-topics/disease-prevention/nutrition/policy/six-key-areas-of-the-action-plan/ensuring-a-safe,-healthy-and-sustainable-food-supply/food-security
² Boult, D.A. (2004). Hungeri nthe Arctic: Food (in)security in Inuit communities, a discussion paper. Ajunnginiq Centre,

Co-author Carys Carrington, a Masters of Public Health student at the University of Waterloo, compiled the bibliography between January and March 2011 as a practicum assignment. The selected entries have been used as well to populate a catalogue of themes for potential inclusion in the Inuit food security learning tool. Partnering researchers, web searches, and Inuit Tuttarvingat's hard-copy library contributed to the article search. Constraints resulting from the project's funding and the co-author's practicum period limited the number of documents collected, annotated, and reviewed for cataloguing and inclusion here, and as such, this bibliography should not be considered exhaustive.

Health Canada's Aboriginal Diabetes Initiative provided funding for this initial bibliographic research.

Annotated Selection

Beaumier, M., Ford, J. D. (2010). Food insecurity among Inuit women exacerbated by socioeconomic stresses and climate change. *Canadian Journal of Public Health*, 101(3), 196-201.

In Canada, Nunavut has the highest incidence of food insecurity at over 50 per cent of Inuit households. Studies have indicated negative impacts of economic, social, cultural and climatic changes on food systems and the serious implications of food insecurity for the health and well-being of women. This study examines the impact of climate change on Inuit women's food systems, using a case study from Igloolik, Nunavut. It deepens our understanding of the interaction among various stresses that affect the food security of women. The study notes the high prevalence of food insecurity among women and identifies multiple determinants of the condition that arise from changing lifestyles and climate-related stresses. This study confirms the need for better food security interventions that target Inuit women at all levels.

Full article online at: http://journal.cpha.ca/index.php/cjph/article/view/1864/2099

Boult, D. A. (2004) *Hunger in the Arctic: Food (In)security in Inuit communities – a discussion paper*. Ottawa: Ajunnginiq Centre - National Aboriginal Health Organization.

This discussion paper serves as a general overview of issues that affect Inuit food security. By way of a literature review, the paper analyzes the major findings of a report on the pilot Food Mail Programs in Kugaaruk, Nunavut. The health implications of food insecurity and factors that impact food security are covered, including Northern retail food operations, accessibility and availability of traditional foods and community/regional and government initiatives on food security. The paper concludes that more investigation is needed to make viable recommendations that will effectively address the food security concerns of Inuit.

Full report online at: www.naho.ca/documents/it/2004 Inuit Food Security.pdf

Chan, H. M., Fediuk, K., Hamilton, S., Rostas, L., Caughey, A., Kuhnlein, H., ... Loring, E. (2006). Food security in Nunavut, Canada: Barriers and recommendations. *International Journal of Circumpolar Health*, 65(5), 416-431.

This study assesses community perceptions of food availability and accessibility of the traditional and market food systems among Inuit in Nunavut, Canada. Respondent data, gathered from focus groups comprised of community members, is analyzed by theme. Perceptions of the presence of barriers to food security, especially to traditional foods, are common. Low income levels, high harvesting costs, addictions, and lifestyle and cultural changes are counted as the main obstacles to food security. In addition, participants suggest financial support for community hunts, education, and increased access to affordable and nutrient-rich store foods as ways to counteract these barriers to food security.

Full article online at: http://ijch.fi/issues/655/655 Chan.pdf

Ford, J. D. (2009). Vulnerability of Inuit food systems to food insecurity as a consequence of climate change: A case study from Igloolik, Nunavut. *Regional Environmental Change*, 9(2), 83-100.

This paper discusses a conceptual model developed for Igloolik, Nunavut, to examine how climate change makes Inuit food systems vulnerable to food insecurity. Determinants of food system vulnerability as shown by the model include exposure, sensitivity and adaptation to climate-related risks. Based on the of climate extremes in 2006 on food security, the paper identifies and characterizes processes that alter food security vulnerability in the context of climate change. Consecutive years of extreme and unfavourable climate conditions can compromise food security despite the highly adaptive capacity of Igloolik Inuit, especially those dependent on traditional foods and those living on low incomes.

Full article online at: www.springerlink.com/content/7h87k1m12471514q/fulltext.pdf

Ford, J. D., & Beaumier, M. (2009). Food insecurity among Inuit women in Igloolik, Nunavut: The role of climate change and multiple stressors. Final report for Health Canada's Climate Change Adaptation in Northern First Nations and Inuit Communities Program. Montreal: McGill University.

This report discusses the effect of climate change on the food security of Inuit women in Igloolik, Nunavut who are particularly susceptible to food insecurity. The potential impacts of climate change on Inuit food systems are illustrated. According to the report, the community is experiencing instances of transitory as well as chronic food insecurity. Researchers outline how vulnerability to food insecurity is linked to a complex interaction of three factors: social, economic, and environmental conditions. The report identifies areas where specifically targeted interventions could be useful in combating food insecurity. However, it also describes the challenges to these possible solutions, which include the lack of both food insecurity-monitoring systems, and long-term financial and community commitment.

Ford, J. D., & Berrang-Ford, L. (2009). Food security in Igloolik, Nunavut: An exploratory study. *Polar Record*, *45*(3), 225-236.

The degree of food insecurity among Inuit communities in Nunavut far exceeds that of Canada as a whole. This paper examines the prevalence of food (in)security, in the Inuit community of Igloolik, Nunavut, identifying high-risk groups and determinants that impact on food security. Food surveys show that food insecurity is experienced by more than half of the sample population, which is troubling as poor nutritional status is known to be detrimental to physical and mental health. Women and those whose diets consist primarily of market foods are at the highest risk for food insecurity. The authors note that further research is required to investigate the key trends described in this study. Unearthing trends will contribute towards the goal of identifying and determining how policy and intervention initiatives can be introduced to reinforce Inuit food systems.

Abstract available at:

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=5794328

Glacken, J. B. (2008). *Promising practices for food security: Draft summary report*. Ottawa: First Nations and Inuit Health Branch, Health Canada.

This report reviews current programs and initiatives targeting food security within Inuit and First Nations communities. The author examines the resources necessary for the success of these programs, their strengths and weaknesses, and the barriers and facilitators that affect their implementation. The report describes the promising food security practices that are required for an initiative to be successful Which include the increased availability of nutritious food, capacity building, strong partnerships, creative approaches, and secure and adequate financial support.

Myers, H., Powell, S., & Duhaime, G. (2004). Setting the table for food security: Policy impacts in Nunavut. *The Canadian Journal of Native Studies XXIV (2)*, 425-445.

This article highlights the increasing levels of food insecurity in Nunavut, in terms of the four conditions of food security (availability, accessibility, acceptability and adequacy of food) and the social, economic and environmental factors that impact food security status. Discussed in the report are a number of federal and territorial legislative and policy initiatives having either beneficial or harmful food security impacts. These include the federal Food Mail Program and *Firearms Act* as well as Nunavut social assistance programs, hunter support, country food development, and gas subsidy programs. The authors conclude by drawing attention to policy recommendations/changes that are needed to address the four conditions of food security.

Full article online at: www2.brandonu.ca/library/cjns/24.2/cjnsv24no2 pg425-445.pdf

Power, E. (2007). Food security for First Nations and Inuit in Canada – Background paper. Ottawa: First Nations and Inuit Health Branch, Health Canada.

This paper draws attention to the issue of food security in the First Nations and Inuit population. Key factors in determining the level of food security are outlined and include poverty, unemployment, food sharing, climate change, environmental contamination, land access, traditional knowledge, access to and availability of market foods, and other social concerns. The author explains the importance of closing the research gaps in relation to these determining factors, and describes what food insecurity means for these populations as well as the shortcomings of current food security initiatives.

Qaujigiartiit Arctic Health Research Network Nunavut. (2009). Food security in Nunavut: A knowledge sharing tool for policy and decision-makers. Iqaluit.

This report compiles information to build a knowledge-sharing tool for policy- and decision-makers involved in food security. The roles of traditional foods and practices as well as climatic conditions are also discussed. A list of current initiatives and projects geared towards improving food security in Nunavut demonstrates that work is being done. The report also addresses some of the barriers to food security, and the positive and negative aspects of existing programs. The experience of food insecurity for individuals is described in the paper through links news headlines that underscore its everyday reality.

Report available online at: http://www.qhrc.ca/apps/Docs/displayDocs.aspx?cat=10

Selected Bibliography

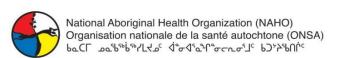
- Anctil, M. (2008). Survey highlights. Nunavik Inuit Health Survey 2004, Qanuippitaa? How are we? Quebec: Institut national de santé publique du Québec & Nunavik Regional Board of Health and Social Services.
- Beaumier, M., & Ford, J. D. (2010). Food insecurity among Inuit women exacerbated by socioeconomic stresses and climate change. *Canadian Journal of Public Health*, 101(3), 196-201.
- Boult, D. A. (2004). *Hunger in the Arctic: Food (in)security in Inuit communities a discussion paper*. Ottawa: Ajunnginiq Centre National Aboriginal Health Organization.
- Chan, H. M. (2006). Food safety and food security in the Canadian Arctic. *Canadian Polar Commission*, *Fall/Winter*, 1-3.
- Chan, H. M., Fediuk, K., Hamilton, S., Rostas, L., Caughey, A., Kuhnlein, H., ... Loring, E. (2006). Food security in Nunavut, Canada: Barriers and recommendations. *International Journal of Circumpolar Health*, *65*(5), 416-431.
- Damman, S., Eide, W. B., & Kuhnlein, H.V. (2008). Indigenous peoples' nutrition transition in a right to food perspective. *Food Policy*, *33*, 135-155.
- Desjardins, E. (2010). *Synthesis paper: Food security and chronic disease*. Ottawa: Food Security Knowledge Initiative, Public Health Agency of Canada.
- Duhaime, G., Chabot, M., Fréchette, P., Robichaud, V., & Proulx, S. (2004). The impact of dietary changes among the Inuit of Nunavik (Canada): A socioeconomic assessment of possible public health recommendations dealing with food contamination. *Risk Analysis*, 24(4), 1007-18.
- Egeland, G. M., Charbonneau-Roberts, G., Kuluguqtuq, J., Kilabuk, J., Okalik, L., Soueida, R., & Kuhnlein, H. V. (2009). Back to the future: Using traditional food and knowledge to promote a healthy future among Inuit. In: K. N. Kuhnlein, B. Erasmus & D. Spigelski (Ed.). *Indigenous Peoples' food systems: The many dimensions of culture, diversity and environment for nutrition and health* (pp. 9-22). New York: Food and Agriculture Organization of the United Nations.
- Egeland, G. M., Pacey, A., Cao, Z., & Sobol, I. (2010). Food insecurity among Inuit preschoolers: Nunavut Inuit Child Health Survey, 2007-2008. *Canadian Medical Association Journal*, 182(3), 243-248.
- Egeland, G., & Inuvialuit Settlement Region Steering Committee. (2010). *International Polar Year Inuit Health Survey 2007-2008: Health in transition and resiliency Inuvialuit Settlement Region.*Montreal: Centre for Indigenous Peoples' Nutrition, McGill University.
- Egeland, G., & Nunavut Steering Committee. (2010). *International Polar Year Inuit Health Survey 2007-2008: Health in transition and resiliency Nunavut*. Montreal: Centre for Indigenous Peoples' Nutrition, McGill University.

- Egeland, G., & Nunatsiavut Steering Committee. (2010). *International Polar Year Inuit Health Survey* 2007-2008: Health in Transition and Resiliency Nunatsiavut. Montreal: Centre for Indigenous Peoples' Nutrition, McGill University.
- Erber, E., Beck, L., De Roose, E., & Sharma, S. (2010). Prevalence and risk factors for self-reported chronic disease amongst Inuvialuit populations. *Journal of Human Nutrition and Dietetics*, *23* (Suppl 1), 43-50.
- Erber, E., Beck, L., Hopping, B. N., Sheehy, T., De Roose, E., & Sharma, S. (2010). Food patterns and socioeconomic indicators of food consumption amongst Inuvialuit in the Canadian Arctic. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 59-66.
- Erber, E., Hopping, B. N., Beck, L., Sheehy, T., De Roose, E., & Sharma, S. (2010). Assessment of dietary adequacy in a remote Inuvialuit population. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 35-42.
- Ford, J. D. (2009). Vulnerability of Inuit food systems to food insecurity as a consequence of climate change: A case study from Igloolik, Nunavut. *Regional Environmental Change*, *9*(2), 83-100.
- Ford, J. D. (no date). Food in Igloolik: Issues and concerns *Report of research findings to the community of Igloolik*. (Unpublished paper). Depoartment of Geography, McGill University, Montreal(no other data)
- Ford, J. D., & Beaumier, B. (2011). Feeding the family during times of stress: Experience and determinants of food insecurity in the Inuit community of Igloolik, Nunavut. *The Geographical Journal*, *177*(1), 44-61.
- Ford, J. D., & Beaumier, M. (2009). Food insecurity among Inuit women in Igloolik, Nunavut: The role of climate change and multiple stressors. Final report submitted to Health Canada's Climate Change Adaptation in Northern First Nations and Inuit Communities Program. Montreal: McGill University.
- Ford, J. D., & Berrang-Ford, L. (2009). Food security in Igloolik, Nunavut: An exploratory study. *Polar Record*, 45(3), 225-236.
- Glacken, J. B. (2009). Food security interventions: Evidence of effectiveness synthesis project. Ottawa: Public Health Agency of Canada.
- Glacken, J. B. (2008). *Promising practices for food security: Draft summary report*. Ottawa: First Nations and Inuit Health Branch, Health Canada.
- Goldhar, C., Ford, J. D., & Berrang-Ford, L. (2010). Prevalence of food insecurity in a Greenlandic community and the importance of social, economic and environmental stressors. *International Journal of Circumpolar Health*, *69*(3), 285-303.
- Guyot, M., Dickson, C., Paci, C., Furgal, C., & Chan, H. M. (2006). Local observations of climate change and impacts on traditional food security in two northern Aboriginal communities. *International Journal of Circumpolar Health*, 65(5), 403-415.

- Hopping, B. N., Erber, E., Beck, L., De Roose, E., & Sharma, S. (2010). Inuvialuit adults in the Canadian Arctic have a high body mass index and self-reported physical activity. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 115-119.
- Hopping, B. N., Erber, E., Mead, E., Roache, C., & Sharma, S. (2010). High levels of physical activity and obesity co-exist amongst Inuit adults in Arctic Canada. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 110-114.
- Hopping, B. N., Erber, E., Mead, E., Sheehy, T., Roache, C., & Sharma, S. (2010). Socioeconomic indicators and frequency of traditional food, junk food, and fruit and vegetable consumption amongst Inuit adults in the Canadian Arctic. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 51-58.
- Hopping, B. N., Mead, E., Erber, E., Sheehy, C., Roache, C., & Sharma, S. (2010). Assessment of dietary adequacy in a remote Inuvialuit population. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 35-42.
- Johnson-Down, L., & Egeland, G. M. (2010). Adequate nutrient intakes are associated with traditional food consumption in Nunavut Inuit children aged 3-5 years. *Journal of Nutrition*, 140(7), 1311-1316.
- Kuhnlein, H. V., Receveur, O., Soueida, R., & Egeland, G. M. (2004). Arctic Indigenous Peoples experience the nutrition transition with changing dietary patterns and obesity. *Journal of Nutrition*, *124*, 1447-1453.
- Laidler, G. J., Ford, J. D., Gough, W. A., Ikummaq, T., Gagnon, A. S., Kowal, S., ... Irngaut, C. (2009).

 Travelling and hunting in a changing Arctic: Assessing Inuit vulnerability to sea ice change in Igloolik,
 Nunavut. *Climate Change*, *94*(3-4), 363-397.
- Lambden, J., Receveur, O., Marshall, J., & Kuhnlein H. V. (2006). Traditional and market food access in Arctic Canada is affected by economic factors. *International Journal of Circumpolar Health*, 65(4), 331-340.
- Ledrou, I., & Gervais J. (2005). Food insecurity. *Health Reports*, (Statistics Canada catalogue 82-003) 16(3), 47-51.
- Mead, E., Gittelsohn, J., De Roose, E., & Sharma, S. (2010). Important psychosocial factors to target in nutrition interventions to improve diet in Inuvialuit communities in the Canadian Arctic. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 92-99.
- Mead, E., Gittelsohn, J., Kratzmann, M., Roache, C., & Sharma, S. (2010). Impact of the changing food environment on dietary practices of an Inuit population in Arctic Canada. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 18-26.
- Mead, E., Gittelsohn, J., Roache, C., & Sharma, S. (2010). Healthy food intentions and higher socioeconomic status are associated with healthier food choices in an Inuit population. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 83-91.
- Myers, H., Powell, S., & Duhaime, G. (2004). Setting the table for food security: Policy impacts in Nunavut. *The Canadian Journal of Native Studies XXIV*, 425-445.

- Nancarrow, T. L., & Chan, H. M. (2010). Observations of environmental changes and potential dietary impacts in two communities in Nunavut, Canada. *Rural Remote Health*, 10(2), (1370 on-line).
- Pacey, A., Nancarrow, T., & Egeland, G. M. (2010). Prevalence and risk factors for parental-reported oral health of Inuit preschoolers: Nunavut Inuit Child Health Survey, 2007-2008. *Rural and Remote Health*, 10(2), 1368-1380.
- Pakseresht, M., Mead, E., Gittelsohn, J., Roache, C., & Sharma, S. (2010). Awareness of chronic disease diagnosis amongst family members is associated with healthy dietary knowledge but not behaviour amongst Inuit in Arctic Canada. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 100-109.
- Pakseresht, M., & Sharma, S. (2010). Validation of a culturally appropriate quantitative food frequency questionnaire for Inuvialuit population in the Northwest Territories, Canada. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 75-82.
- Pakseresht, M., & Sharma, S. (2010). Validation of a quantitative food frequency questionnaire for Inuit population in Nunavut, Canada. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 67-74.
- Power, E. (2008). Conceptualizing food security for Aboriginal people in Canada. *Canadian Journal of Public Health*, *99*(2), 95-97.
- Power, E. (2007). Food security for First Nations and Inuit in Canada: Background paper. Ottawa: First Nations and Inuit Health Branch, Health Canada.
- Qaujigiartiit Arctic Health Research Network Nunavut. (2009). Food Security in Nunavut: A knowledge sharing tool for policy and decision-makers. Iqaluit.
- Sharma, S. (2010). Assessing diet and lifestyle in the Canadian Arctic Inuit and Inuvialuit to inform a nutrition and physical activity intervention programme. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 5-17.
- Sharma, S., Gittelsohn, J., Rosol, R., & Beck, L. (2010). Addressing the public health burden caused by the nutrition transition through the Healthy Foods North nutrition and lifestyle intervention programme. *Journal of Human Nutrition and Dietetics*, 23 (Suppl 1), 120-127.
- Vozoris, N. T., & Tarasuk, V. S. (2003). Household food insufficiency is associated with poorer health. *Journal of Nutrition*, 133(1), 120-126.
- Wesche, S. D., & Chan, H. M. (2010). Adapting to the impacts of climate change on food security among Inuit in the Western Canadian Arctic. *Ecohealth*, 7, 361-373.



And Decime Inuit Tuttarvingat



©Copyright 2011 National Aboriginal Health Organization ISBN: 978-926543-57-4