

**Food,
Health
and
Well-Being**
in British Columbia

Provincial Health Officer's Annual Report 2005

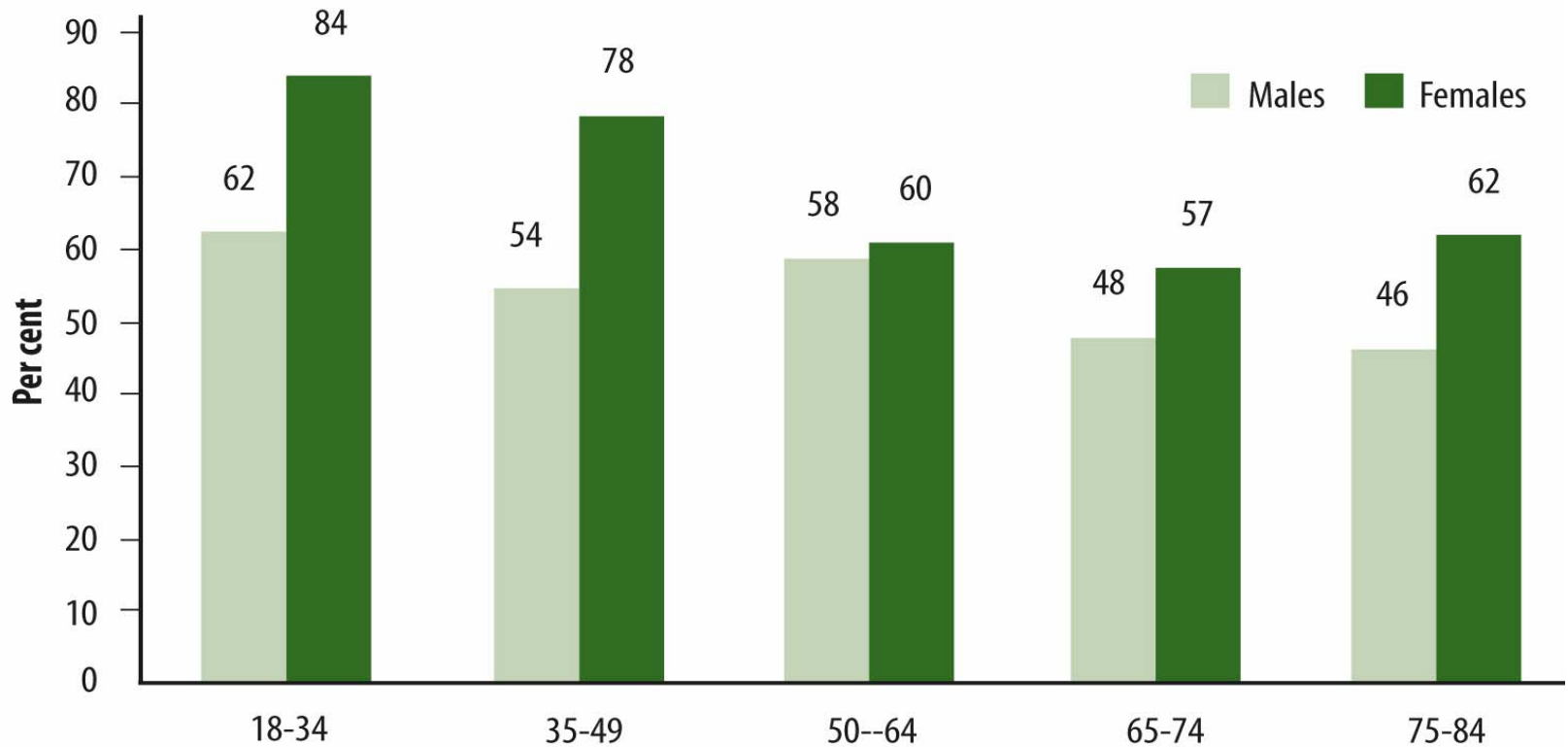
Report overview

- Highlights
- Nutrition and Health
- The Agriculture and Food Processing Sector in BC
- Impact of Unhealthy Eating
- Food Security Among British Columbians
- The Safety and Sustainability of Food and the Food Supply
- Food and the Aboriginal Population
- Recommendations

Chapter 1 – Nutrition and Health

- What is a healthy diet?
- Role of food guides
- Understanding determinants of healthy eating
- Fats, proteins, carbohydrates, vitamins and minerals
- Food fortification
- Dietary needs at specific life stages
- Food allergies
- Physical activity

Percentage of BC Adult Population not Meeting the Suggested Five Servings of Vegetables and Fruits Recommended by Canada's Food Guide to Healthy Eating, BC, 2003*



* The data adjusted for intra-individual variability and weighted by sample weights to provide population estimates.

Source: Jenkins B. & Laffey, P., BC Nutrition Survey, Canada Food Guide Tables,

E451313-011 CFG-V1, 2003. Health Canada

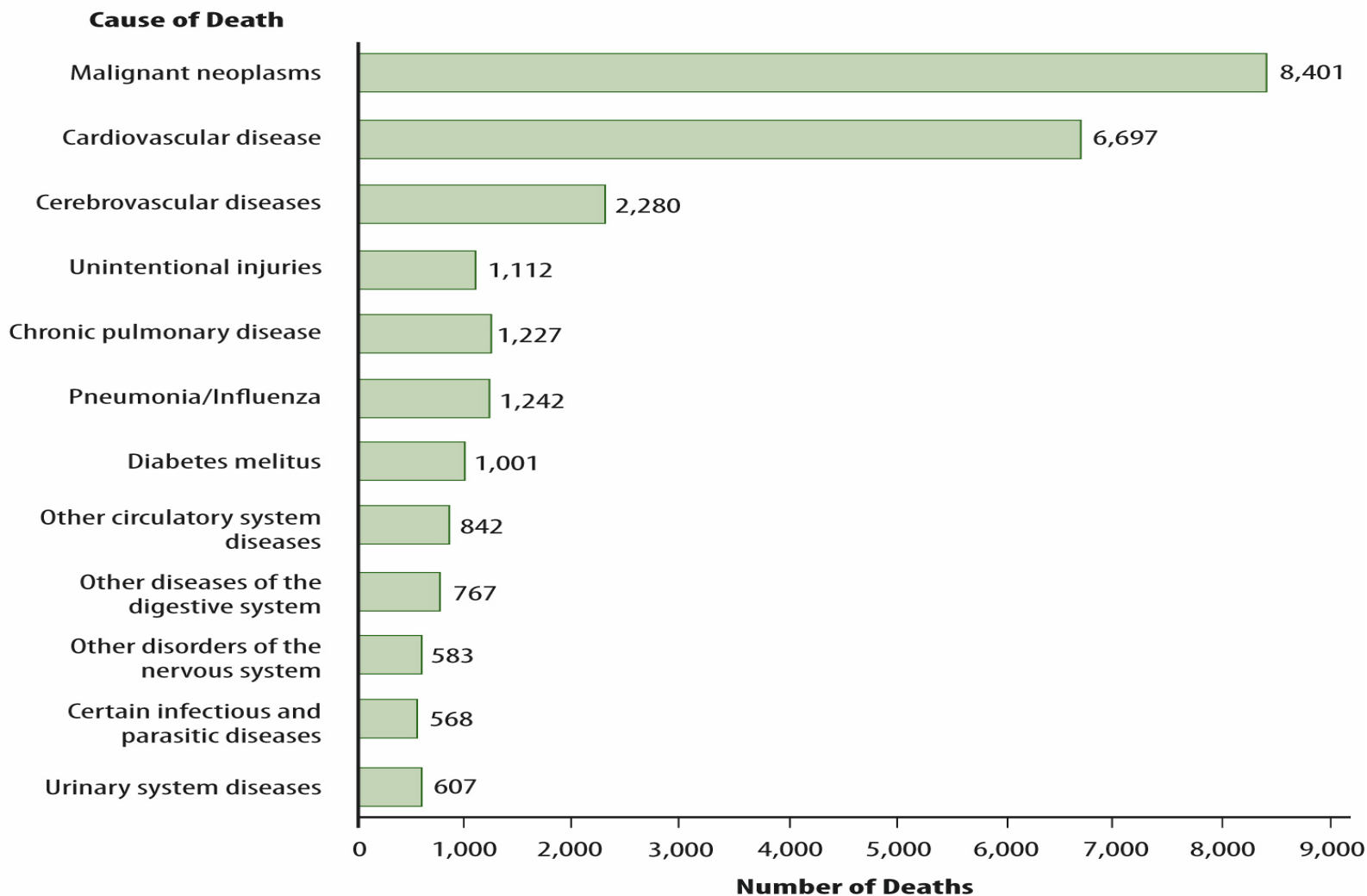
Chapter 2 – The Agriculture & Food Processing Sector in BC

- Protecting BC farmland and supporting farmers
- Food imports: Pros and Cons
- Food miles

Chapter 3 – Impact of Unhealthy Eating

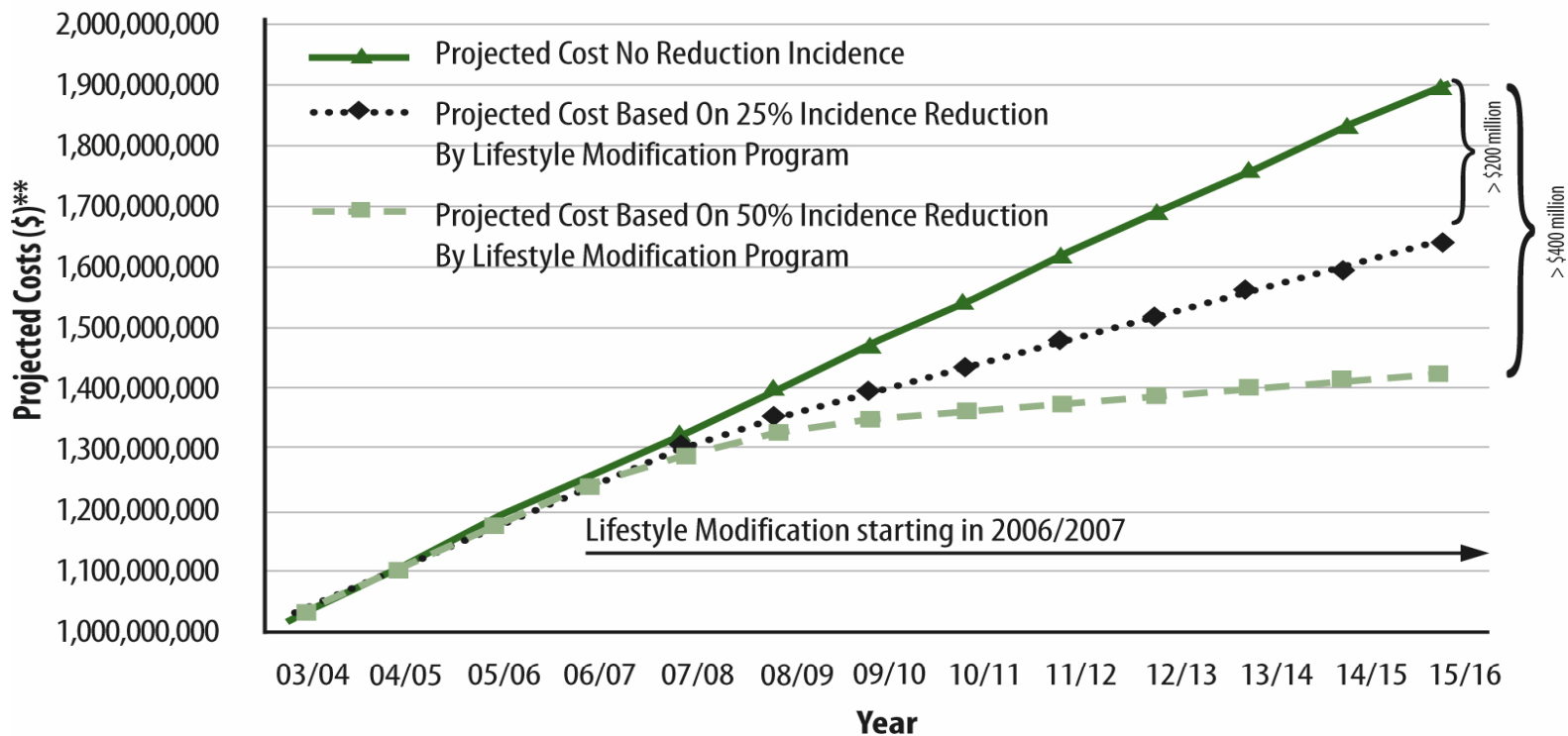
- Diet and chronic disease
 - Cancer, Cardiovascular Disease and Diabetes
- Overweight and obesity
- Obesogenic environment
 - Changing patterns of food consumption
 - Changing patterns of physical activity
- Eating disorders

Twelve Leading Causes of Death, British Columbia, 2004



Source: British Columbia Vital Statistics Agency, 2005

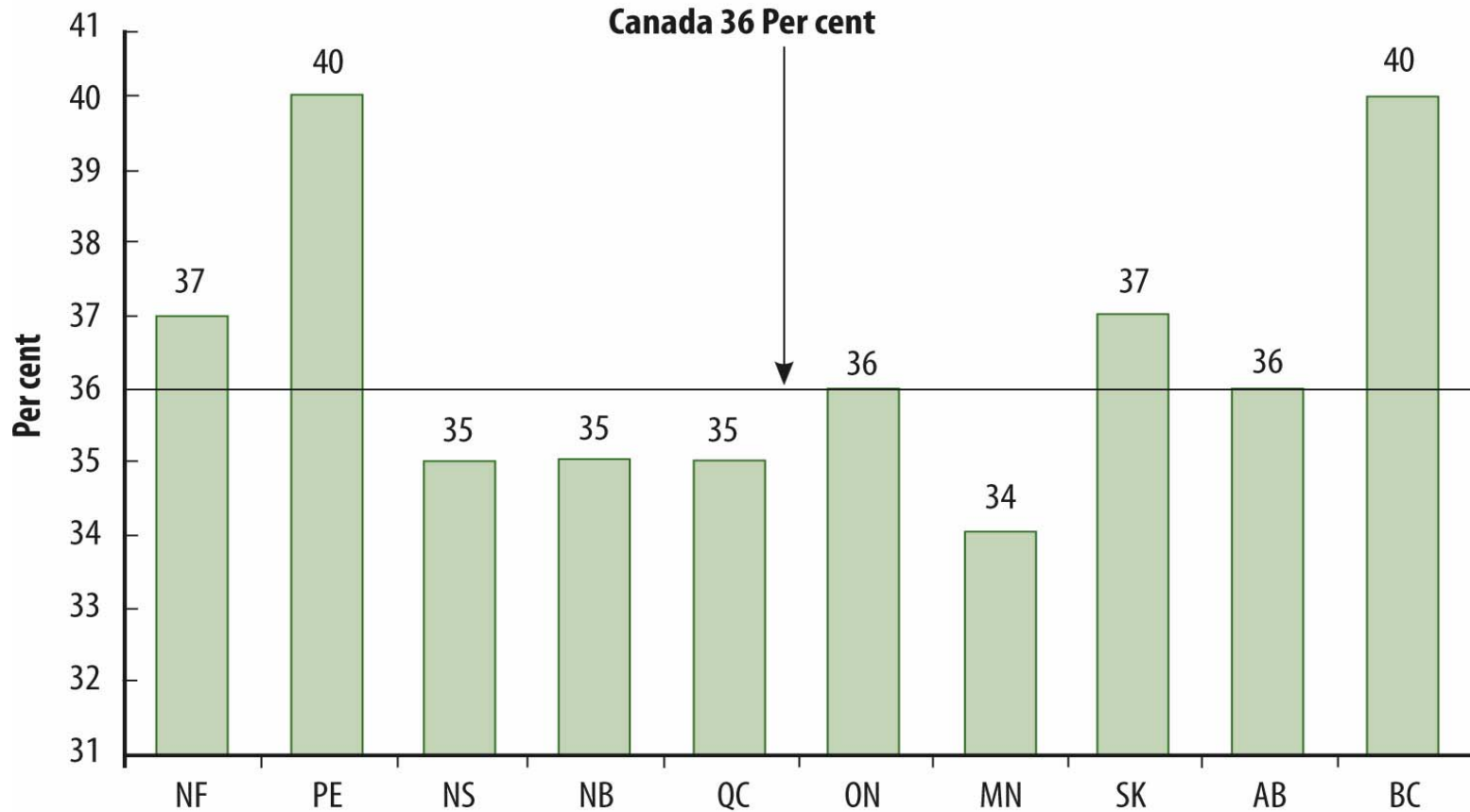
Projected Health Services Costs for Persons With Diabetes With Implementation of Lifestyle Modification Program, BC, 2003/2004 to 2015/2016



Note: For the purpose of this analysis, the resulting estimates were modelled from a widely reported study involving a nutritional and physical activity intervention for non-diabetics at risk of developing diabetes (Diabetes Prevention Program). It must be acknowledged that the results of a specific clinical trial are not necessarily attainable at the population level, but can assist in the development of goals for a population prevention strategy.

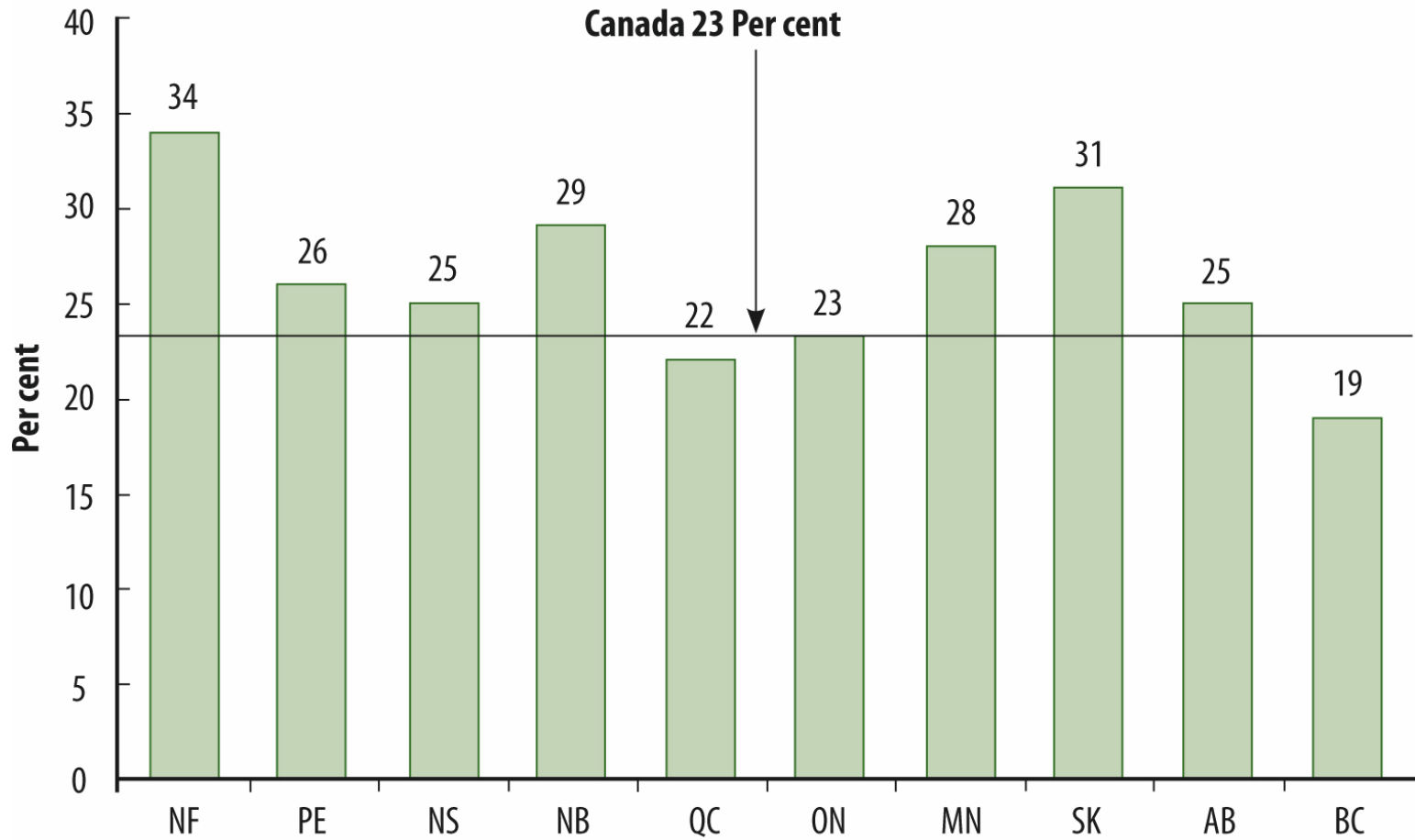
Source: Population Health Surveillance and Epidemiology, Ministry of Health, 2005.

Rates of Overweight, Adults 18 and Over, Canada and Provinces, 2004



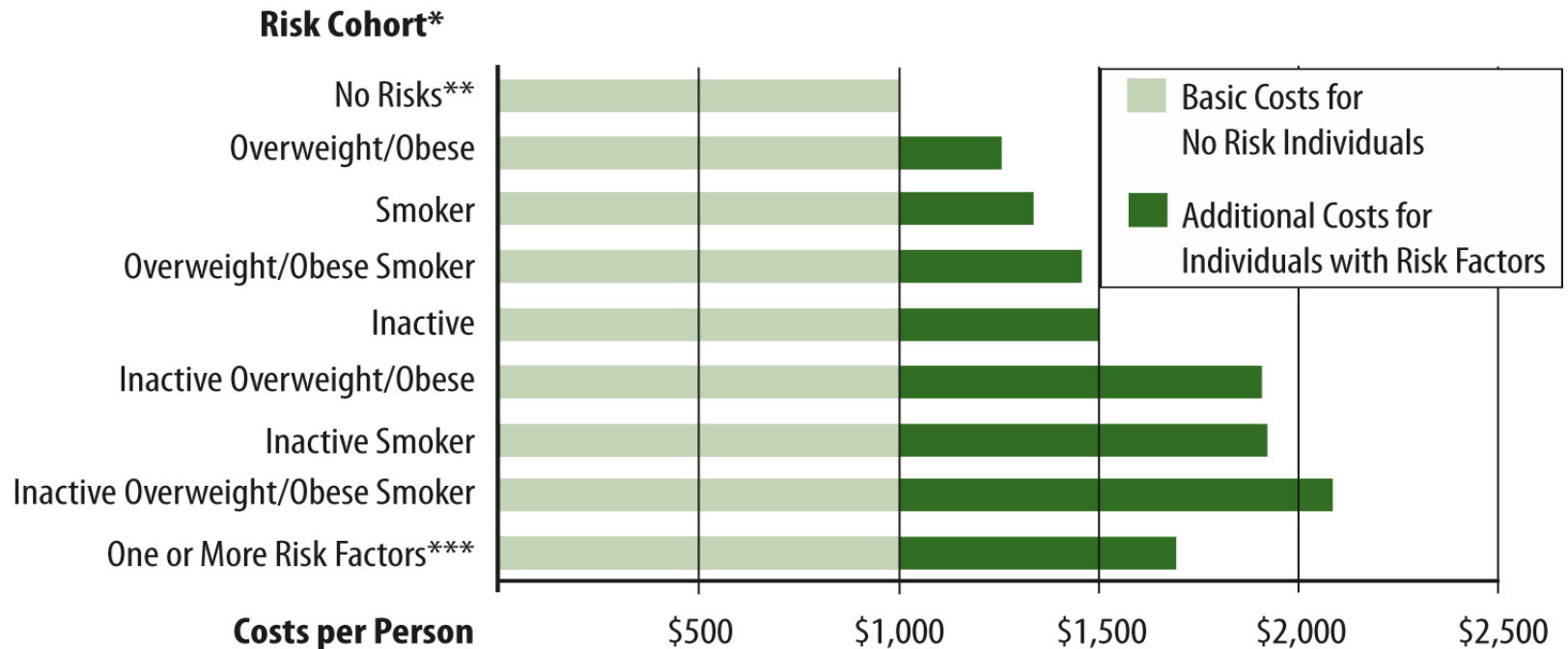
Source: Statistics Canada. 2004 Canadian Community Health Survey.

Rates of Obesity, Adults 18 and Over, Canada and Provinces, 2004



Source: Statistics Canada. 2004 Canadian Community Health Survey.

A Preliminary Estimate of Average Annual Age-Adjusted Per Capita Costs (Hospital, MSP, PharmaCare) for Ages 25 and over, by Risk Cohort, BC, 2001/2002 to 2003/2004



*Based on CCHS 2003 sample for BC who provided a valid Personal Health Number and permission for data linkage.

**Never Daily Smoker, BMI 18.5-24.9, Physically Active or Moderately Active.

***Includes 428 individuals who were non-responders for one or more risk factors, underweight persons, and certain inapplicable other categories.

Source: Population Health Surveillance and Epidemiology, Population Health and Wellness, BC Ministry of Health, 2006.

ActNow BC

- 2010 Targets:
 - 7 out of 10 BC population will be physically active.
 - 5 out of 10 BC population will eat at least 5 fruits and vegetables daily.
 - 310,000 more BC population will meet the Canada Food Guide Recommendations of 5 to 10 fruits and vegetables per day.
 - 7 out of 10 BC population will be at a healthy weight.
 - 349,000 more BC adults will achieve a healthy weight.

Chapter 4 – Food Security Among British Columbians

- What is Food Security?
- Food insecurity among British Columbians
- Impact of food insecurity on vulnerable populations
- How much does healthy food cost?
- Link between hungry households and poor health
- Measures to reduce the impact of poverty
- Food policy councils

Definition of Food Security

- Food security exists when all people at all times have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle.

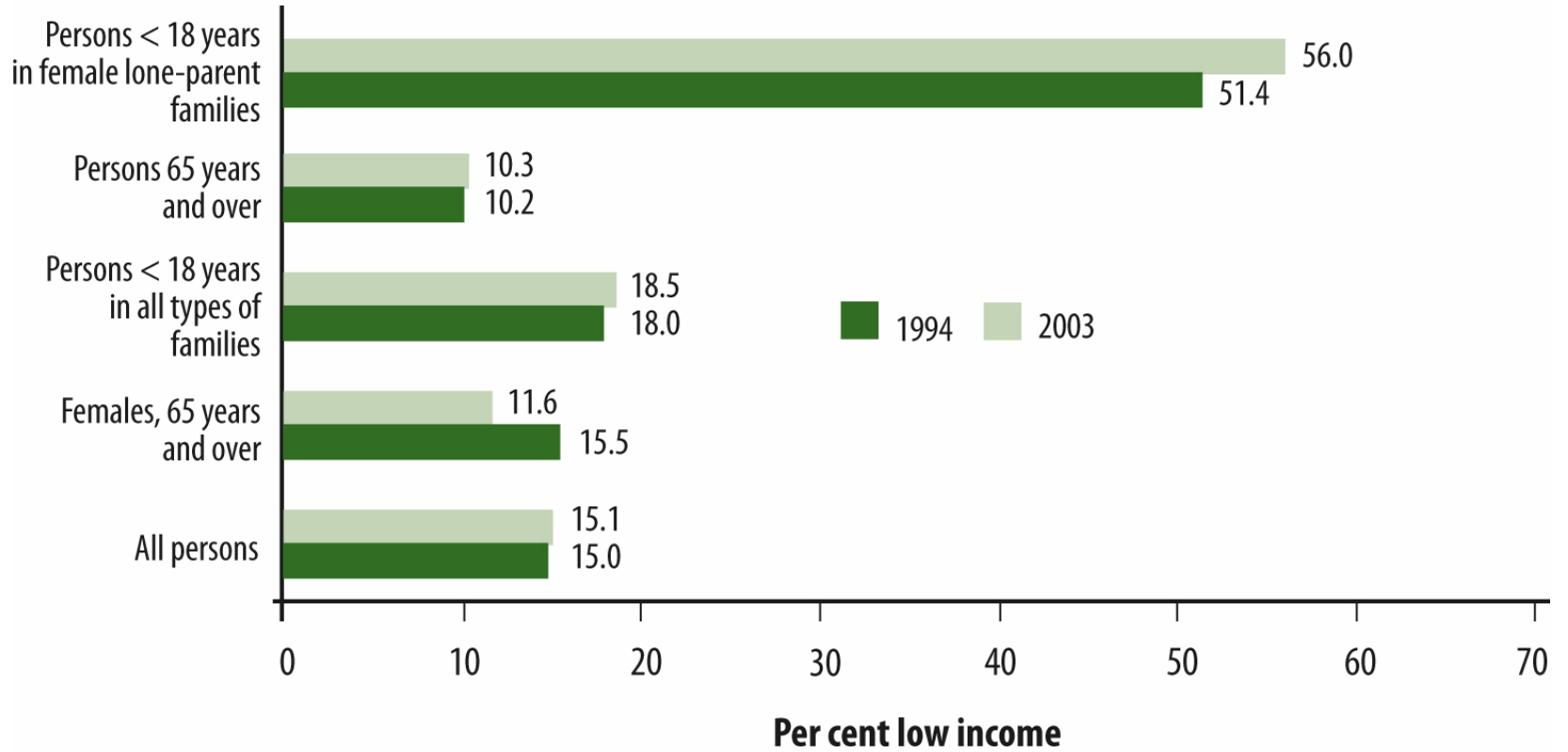
Food and Agricultural Organization

United Nations, 1996

Chapter 4 – Food Security Among British Columbians

- In 2001, 17% of BC population experienced food insecurity. (Canada's average was 15%)
- March 2004: 84,000 people in BC used Food Banks (up 16 per cent from 2003) with over 26,000 users being children.
- Aboriginal people in BC have a standard of living 20% lower than rest of BC population.
 - Due to low income or remote location on reserves, Aboriginal people have difficulty in accessing healthy food.

Prevalence of Low Income After Tax (Selected Groups, BC, 1994 and 2003)



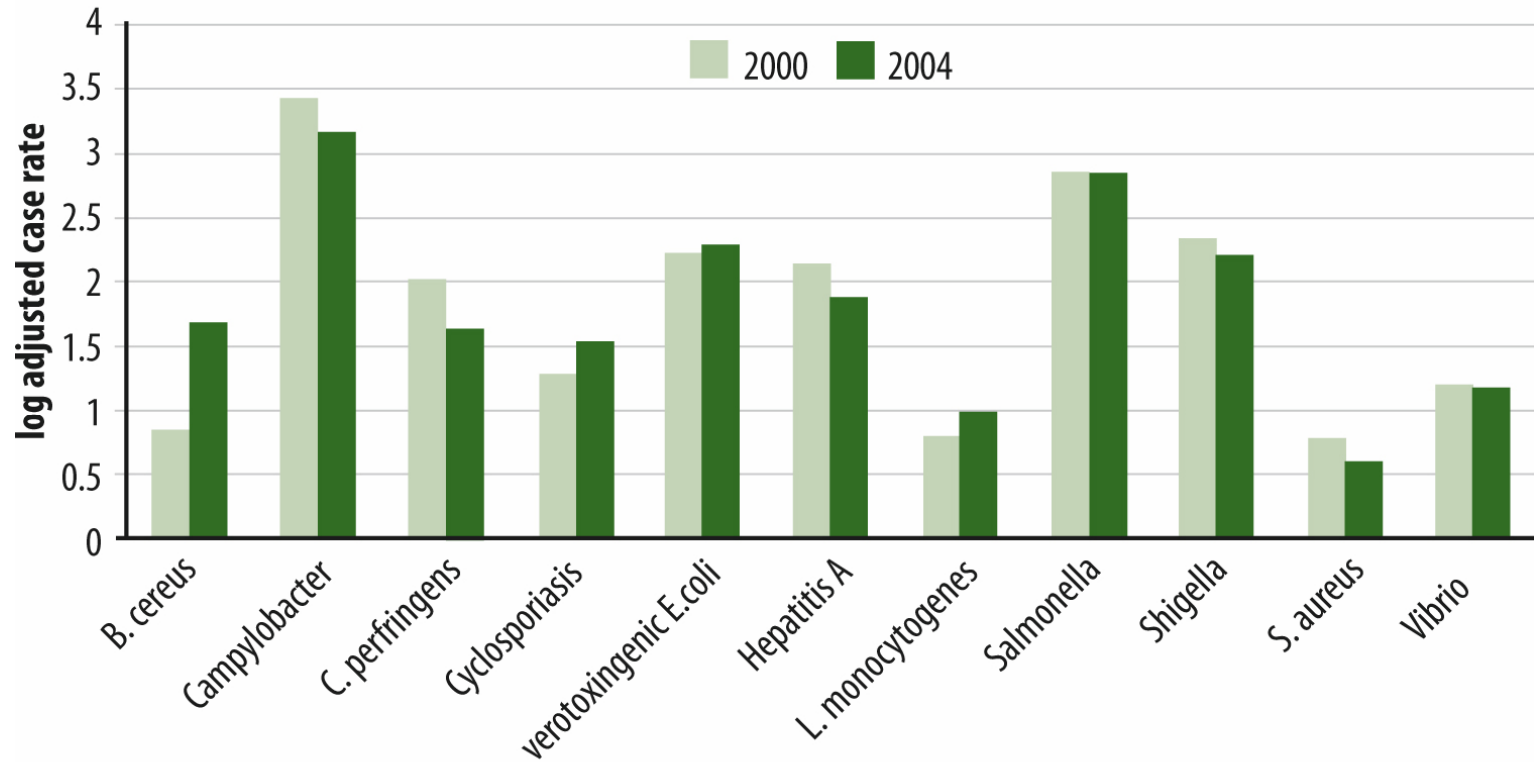
Source: Statistics Canada. (2003). *Income in Canada, 2003*

[Catalogue No. 75-202-XIE; CANSIM Table 202 - 0802]. Ottawa, ON: Statistics Canada.

Chapter 5 – Safety & Sustainability of Food & the Food Supply

- Foodborne diseases
- Risk from food pathogens in BC
- Public health issues in food farming
- Antibiotics
- Growth-promoting hormones in beef
- Mad Cow Disease
- Genetically Modified Organisms
- Seafood and aquaculture
- Steps to ensure food safety

A Comparison of Reported Pathogens Associated with Foodborne Diseases in BC, 2000 and 2004



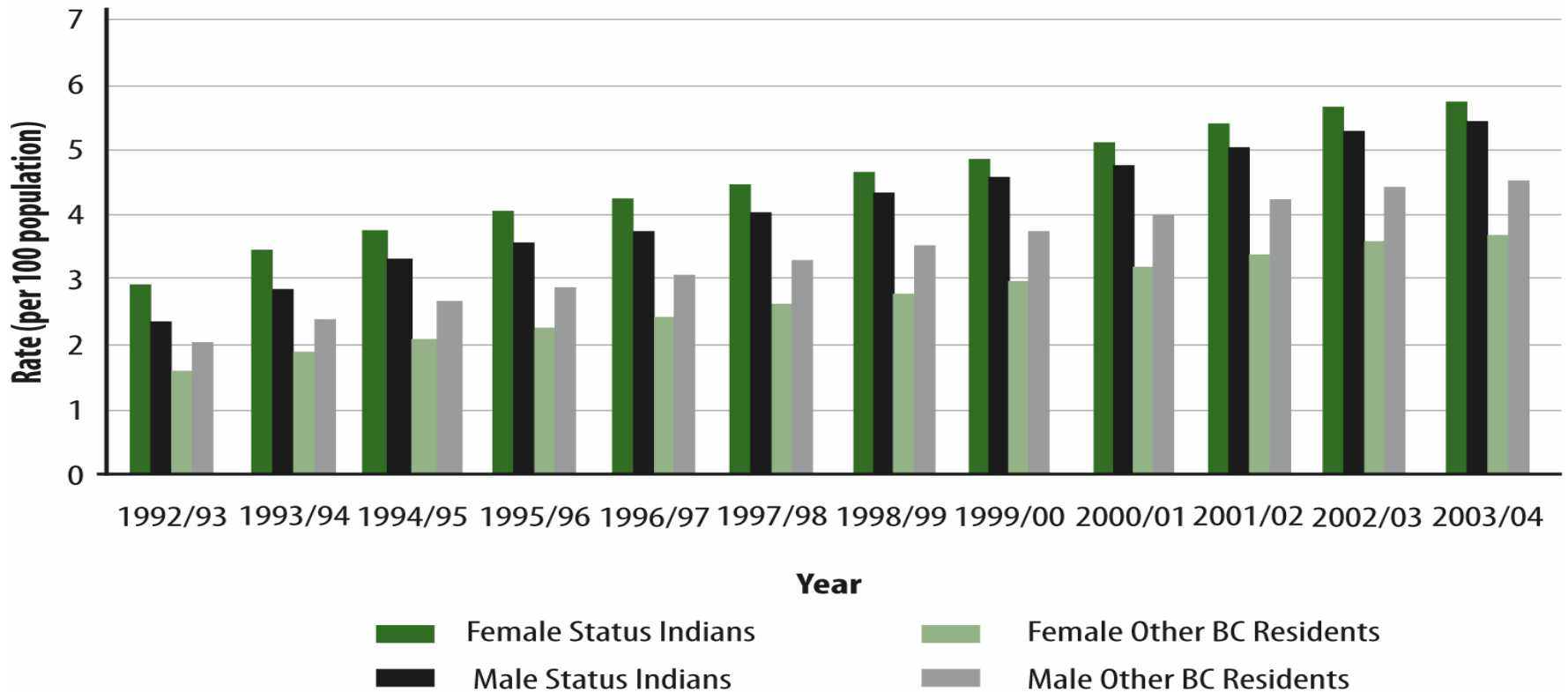
Source: BC Centre for Disease Control, 2004.

¹*S. bongori* is most often found in cold-blooded animals, such as lizards, but has been isolated from pigeons and in rare cases can be cultured from infants less than 13 months old.

Chapter 6 – Food and the Aboriginal population

- Health outcomes in Aboriginal Populations
- Aboriginal diets - Then and Now
- Socio-economic status and access to food
- Food safety in Aboriginal Population
- Impact of chronic disease
- Prenatal challenges
 - Infant mortality rates, breastfeeding rates, and infant anemia

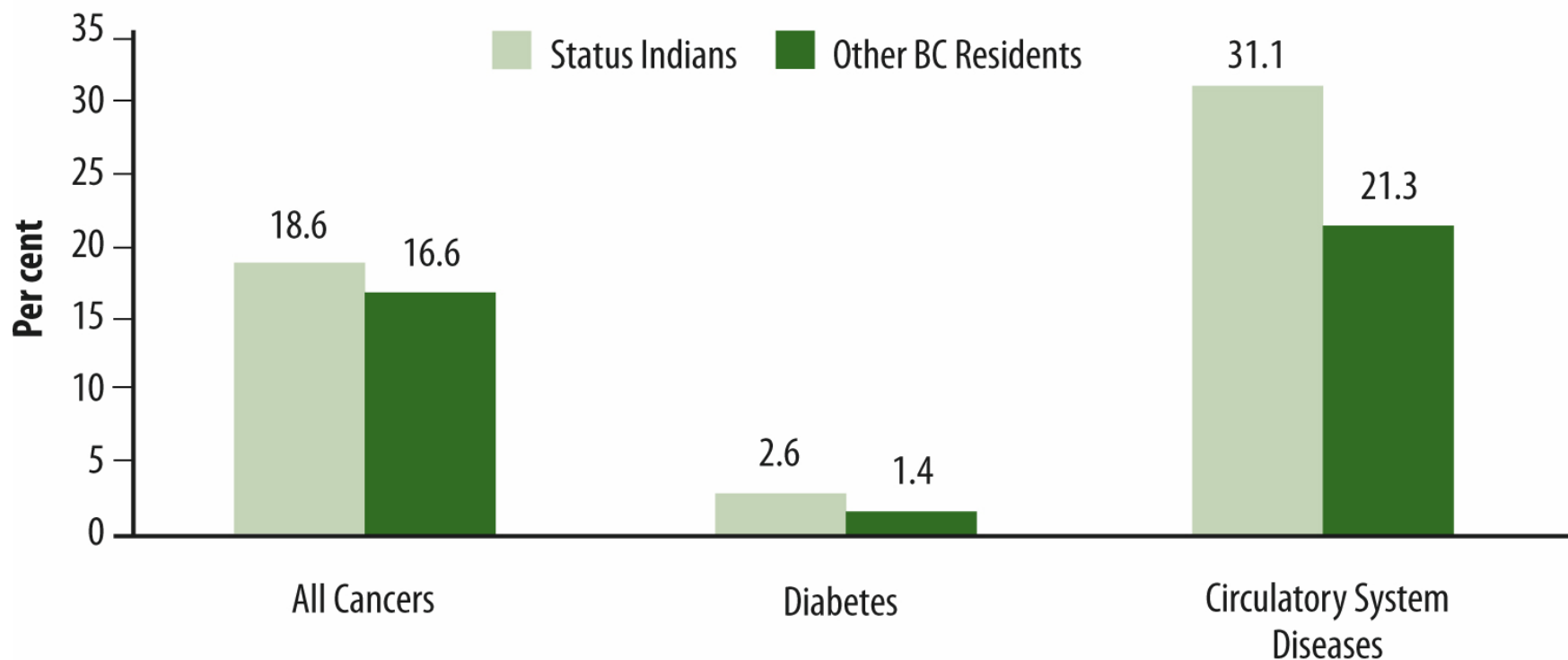
Age-Standardized Prevalence Rates for Diabetes, Status Indians and Other BC Residents, BC, 1992/1993 to 2003/2004*



*Cases for 2003/2004 are adjusted to compensate for incomplete follow-up (12 months) of MSP component of the incident case definition. Trends for all populations are statistically significant ($p < 0.001$).

Source: Population Health Surveillance and Epidemiology, Ministry of Health, 2005.

Age-Standardized Mortality Rates for All Cancers, Diabetes, and Circulatory System Diseases,* Status Indians and Other BC Residents, BC, 2002



* Circulatory system diseases include ischemic heart disease, cerebrovascular disease, and diseases of the arteries.

Source: BC Vital Statistics Agency, 2004

Working Towards Change...

Health cannot be separated from environmental and societal influences surrounding the individual. Facing epidemics of obesity and chronic illness, governments need to strive to create environments that make the healthy choice the easy choice.

Chapter 7 – Recommendations

What can individuals do?

- Eat a healthy diet and increase physical activity.
- Buy locally when possible.
- Follow food safety guidelines.

Chapter 7 – Recommendations

What can communities do?

- Build community capacity for better food access such as community kitchens and gardens.
- Make schools places for healthy food and physical activity.
- Support food policy councils to ensure access for all people regardless of their income or resources.
- Encourage all food handlers to obtain the FOODSAFE certification course.
- Make neighbourhoods safe for families and children to be physically active.

Chapter 7 – Recommendations

What can governments do?

- Commit to protect agricultural land.
- Support ActNow BC to increase food security, reduce obesity, and encourage healthy eating and active living.
- Provide support for healthy schools.
- Monitor and regulate the marketing approaches adopted by the food industry.
- Ensure that income assistance rates are based on the actual cost of living.
- Ensure urban design promotes physical activity and reduces obesity.
- Address food safety issues such as GM foods, sustainable farming, and aquaculture.

Chapter 7 – Recommendations

Steps to Address Food Security & Healthy Eating in the Aboriginal Population

- Ensure healthy and affordable foods are available to Aboriginal communities.
- Support the possibilities of local food production.
- Ensure government policies support communities interested in a re-introduction of traditional diets or their equivalent.

Recommendations for Research

- Better and regular measurement of weights, heights, dietary and exercise habits of the population.
- Investment in evaluation of programs promoting healthier weights and better nutrition.
- Better data collection on the prevalence of persistent contaminants in food.