According to Bellows and Hamm (2003): “Community food security exists when all citizens obtain a safe, personally acceptable, nutritional diet through a sustainable food system that maximizes healthy choices, community self-reliance, and equal access for everyone. This definition implies:

- The ability to acquire food is assured;
- Food is obtained in a manner that upholds human dignity;
- Food is safe, nutritionally adequate, and personally and culturally acceptable;
- Food is sufficient in quality and quantity to sustain healthy growth and development and to prevent illness and disease; and
- Food is produced, processed, and distributed in a manner that does not compromise the land, air, or water for future generations” (Food Security Standing Committee, 2004).

The UN Food and Agriculture Organization (FAO) defines food security as existing “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 life” (FAO, 1996). The BC Ministry of Health has adopted this broad approach to food security and encourages “local, provincial, and national policies to support local food systems” (Ministry of Health Planning, 2003).

Today public interest in nutrition and food security (ranging from worries broadly about the sustainability and safety of systems of agricultural production to the desire for information on the links between vitamin intake and specific diseases) is very high (Ostry, 2006). With growing concerns about a host of food security issues that have emerged in the past decade (e.g., “mad cow” disease cases in Western Canada and bird flu, both with major potential for health and economic impacts), and with increasing publicity and concern about an obesity epidemic, especially among children, government and regional health authorities have also begun to pay attention to food security (Rideout and Ostry, 2006).

As part of the process of monitoring the changing nutrition and food security situation in BC, we have developed baseline indicators against which the nature and extent of future changes in food security can be assessed in different regions of the province. A suite of indicators for nutrition and food security has been selected and these have been mapped to illustrate how nutrition and food security varies across the province and, for some indicators, by gender and age.

What follows is the presentation of 26 maps that describe select indicators of nutrition and food security for much of BC’s population. As breastfeeding is a key to good infant health and health in later life, it is appropriate to begin this section of the Atlas with a map of the regional variation in breastfeeding initiation rates.

The following nine maps focus on children and youth, as it is well known that healthy eating as a child promotes optimal growth and development while helping to prevent various nutrition-related diseases (Kendall, 2003). Six of these nine maps focus on the nutritional policy and learning environment in the school system because children on average consume one-third of their daily food intake while at school (Wechsler, Brener, Kuester, and Miller, 2001). Schools are, therefore, in an excellent position to promote healthy food habits by enacting policies that encourage healthy eating at the school district level and in individual schools (Kendall, 2003).

Several unique surveys have been conducted in the BC school system over the past 3 years. As noted earlier, the McCreary Centre Society conducted surveys in 1992, 1998, and more recently in 2003. This latter survey was conducted in 47 (78.3%) school districts in the province. A total of 1,500 public school Grade 7 to 12 classrooms were randomly selected from the 47 participating school districts. Approximately 30,000 students in these classes completed questionnaires for the 2003 survey. The survey was not conducted in independent schools or among institutionalized youth or those not attending schools. Respondents can be considered to represent about 90% of BC’s high school students.

Several other surveys have been undertaken in the school system. In 2005/06, the Ministry of Education’s School Satisfaction Survey assessed the extent to which Grades 3/4, 7, 10, and 12 students were learning about healthy eating and exercise at school. Maps provided here deal only with Grades 3/4. Two other surveys, one directed to school districts and the other to schools,
were conducted in a joint project by the ministries of Education and Health in the spring of 2005 to determine the types of food sales outlets, the types of more healthy versus less healthy (as defined by nutritional experts) foods and beverages offered for sale in all BC school food outlets, and the extent of nutrition policy implementation in BC school districts and in schools (Ostry, Rideout, Levy-Milne, and Martin, 2005; Rideout, Martin, Levy-Milne, and Ostry, in press). The maps based on results from these school-system-based surveys are described in this section of the Atlas.

Given that BC has, over the past year or so, introduced healthy eating guidelines for schools and several programs to improve the nutritional environment in schools, these indicators provide an important baseline for assessing progress over the next few years.

These school-focused maps are followed by 15 maps based on three questions from the Canadian Community Health Survey (CCHS) illustrating the variation in dietary quality and food availability by region, age, and gender. The first two questions speak fairly directly to the ability of people in BC to access foods that they want to eat and that constitute a balanced diet. The third question assesses the extent to which people in the province are eating according to one of the most important of Health Canada’s Dietary Guidelines. Access to balanced meals and preferred foods and the extent to which people eat according to these guidelines will likely depend on some mix of an individual’s knowledge about healthy eating as well as their access to income and/or home-grown foods, and the cost of food in local stores. The maps based on these three questions provide a rough snapshot of the quality of the diet of British Columbians.

Finally, in keeping with our desire to move to a broader framing of nutrition and food security, we provide a map of farmers markets, which are scattered throughout the province. These markets are outlets where local farmers sell their produce directly to consumers. The development of farmers markets may be important in establishing more direct contact between producers and consumers leading to several advantages, including better pricing for consumers, direct access to consumers for farmers which may lower their costs making their operations more viable, and increased opportunities for basic public education about food production.