BOX 2.1 Food Matters: Do You Eat Bugs?

The idea of eating insects (called **entomophagy**) may sound strange to most North Americans, but it may be the wave of the future. With 9 billion people expected to inhabit the Earth by 2050, food production will need to double. Farming insects is one way to ensure there will be adequate protein for more people in the same amount of space.

Insects are an excellent source of nutrition. Over 2 billion people in more than 80 countries in the world eat a variety of insects regularly. Edible insects range widely; however, the most consumed species are beetles (and their larvae), caterpillars, bees, wasps and ants. Bugs are an excellent source of protein, with less fat per gram than most meats. Mealworms, for example, have about as much protein, vitamins, and minerals as the same amount of fish or chicken. And, I can say from personal experience, they taste like roasted almonds.

While people who live in forests, deserts, and jungles have easy access to insects through gathering, urban people can benefit from eating bugs as well. In urban areas, eating protein-rich culinary insects decreases the pressure to create faster factory-farmed meat. Industrial meat production is one of the largest contributors to greenhouse gases, especially considering the tons of methane produced by gassy cows. Just as much protein could be farm raised using a fraction of the land and water.

Western culture has not yet embraced the culinary potential of insects. An ethnocentric feeling of disgust (the "yuck" factor) prevents most people from seeking out this alternative, sustainable source of protein. The use of cricket flour, however, masked inside a baked good such as a cookie, seems to be catching on in some adventurous culinary communities.

Ironically, all industrial consumers in North America ingest a percentage of insect parts on a regular basis, since the US Food and Drug Administration (FDA) and Canadian Food Inspection Agency (CFIA) set similar allowable levels according to the food item. Somehow, it is more palatable to eat marine animals with exoskeletons, such as shrimp and lobster, than those on land. But the benefits of culinary insects for the world's growing population are becoming clear.