The Role of Canadian Consumers in the Food Equation

by Ralph C. Martin

When I was a kid in 4-H in the 1960s, the prevailing story was that there would be more and more people in the world and we as farmers would have to work hard to feed them. At that time there were about 3.5 billion humans on the planet. By Oct 31, 2011 we had doubled to 7 billion. For the most part, farmers have been amazingly effective at producing enough food.

Some say the story is the same today. More people require more food and so we must produce it. I contend that the food equation is more complicated than that.

It is true that the amount of food we require is a function of how many people live on earth. However, the amount of required food is also determined by consumption per person and by waste per person. Overall, the required food equals the number of people multiplied by consumption per person multiplied by waste per person.

In North America, each person on average consumes more than 3700 calories per day. On average, a healthy diet consists of less than 2300 calories per day. In other words, we eat 1.6 times more per person than we need.

Unfortunately, it has been necessary to produce excess food, because we waste 40% of it in Canada, according to a study by Martin Gooch at the George Morris Centre in Guelph. Thus, to have access to the 3700 calories we consume each day, almost 6200 calories are produced. We waste almost 2500 of those calories (40%) and are then left with 3700 calories. The upshot is that we produce more than 2.5 times as many calories (6200) than the 2300 calories we actually need for each Canadian to consume.

Farmers continue to work hard to meet the demand. They are increasingly challenged with unexpected weather events as a result of a shifting climate, less accessible fossil fuels and less stable economic conditions.

What is the Canadian consumer role in the food equation? Obviously, eating the appropriate amount of food will put less stress on ourselves and on the ecosystem from which food is derived. We can also improve our health by eating real food that is well-balanced with calories, protein, vitamins and minerals. Much of the food production and processing system is still designed to offer excess fat, salt and sugar. How much high
fructose corn syrup do we need in soft drinks and snacks? To the extent that we can replace quasi food with healthy food, we can use our limited resources of soil, water and energy more wisely to produce what we actually need.

Consumers can also arrest habits of wasting food. It is doubtful that we set out with the intention to waste food. However, we may only shop once per week, buy plenty for the week, change our minds about menus and then have to throw away produce which is no longer fresh. Perhaps we can’t resist the 2 for 1 deals and the thrill of buying at a low price per 100 grams. Another way to think about the food we buy is to calculate the price per 100 grams of healthy food that we actually eat.

Food represents our cultural and social values and is appropriately associated with feeling good about ourselves and the joy of being convivial with friends and family. Food entertains us. Relationships associated with food are often deepened when the food is traditional in a cultural context. It can be fun to knowingly rise above the shallow appeal of advertisers who suggest we limit our food entertainment to glitzy, convenient food that so blatantly appeals to our taste with excess fat, salt and sugar.

It is dishonest to attribute the tension between required food and what can be produced, to population alone. In many parts of the world, and in some households in Canada, consumption per person and waster per person are much lower than averages in Canada and other developed counties.

For the most part, in North America and Europe, we remain below the replacement birth rate of 2.1 children per woman, over a lifetime. In developing countries, birth rates are also decreasing in areas where poverty is addressed and, especially, where educational opportunities are increasing for girls and women. Here, we need more education pertaining to consumption per person and waste per person. Perhaps then, we too can decrease our consumption and waste parts of the food equation.

*Ralph C. Martin, Ph.D., P.Ag. is the Loblaw Chair, Sustainable Food Production and a Professor at the University of Guelph. Comments welcome at rcmartin@uoguelph.ca*