



Teaching Nutrition to Youth

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Knowledge, attitude and practice are the three domains of learning that traditionally provide the framework for nutrition education research. But as practitioners, we are ultimately interested in practice. That is, we are interested in what people *do* when it comes to making food choices. What people *know* is secondary. In this article, I will outline some strategies for teaching nutrition that will help young people *practice* good nutrition.

I frequently ask people about the factors that influence their food choices. Stop reading for a minute and make your own list.

What are these factors? Taste. Culture. Family likes and dislikes. Cost. What's available. Convenience. Season. Advertising. This is just the beginning of the list I typically get. Do you notice that knowledge is not on the list? It usually is not mentioned.

Though of course knowledge can influence food choices, it is not a fundamental food choice factor, even among very knowledgeable people. When I think of what to eat for dinner, I might picture what's in my refrigerator or what would taste good or perhaps I would be stimulated by a magazine recipe and would start a mental shopping list. At this stage of food choice, knowledge is not a conscious factor.

In my work as a nutrition educator, I have learned to minimize the information I teach so that knowledge can be an unconscious factor driving food choice. In fact, extra information can actually distract or interfere with making food choices. I used to spend lots of time teaching about the nutrients in food. While this might be an interesting avenue of scientific inquiry, it has little bearing on what someone might choose for breakfast.

So, how do you help young people make healthy food choices? There are two parts to the answer to this question. First, we have to be able to define what healthy food choices are, and second, to decide on the information young people need to know to be able to make healthy food choices.

What are healthy food choices?

To answer this question, let's turn to *Canada's Food Guide*. In its simplicity, the *Guide* provides a wonderful framework for educators. There are three principles underlying the food guide: variety (*Enjoy a wide variety of foods from the four food groups*), balance (choosing *recommended amounts* from the food groups), and moderation—by following the tips on food selection from each food group (*Make each Food Guide Serving count*).

The first two principles are probably the most appropriate starting points for nutrition education. And if you are worried about omitting messages about choosing lower fat foods, or using less salt or sugar, stop and think for a moment about how well you would be helping young people towards a healthier diet simply by making sure they are getting a variety of foods in the recommended amounts from each of the food groups.

It is understatement to say that variety is critical to good nutrition. We know that people eat the food they are familiar with. People who are familiar with a wide variety of foods eat a wide variety of foods. We also know that people who eat a wider variety of foods have better diets than those who don't eat a wide variety. Unfortunately, most people are familiar with an astonishingly narrow variety of foods. So simply increasing the number of foods we are familiar and comfortable with will improve our diets!

By introducing the concept of balance—choosing recommended amounts from the food groups—we can refine the definition of good food choices. This concept actually involves two major skills: knowing how to sort foods into the food groups and knowing about Food Guide Servings.

Food choices can be further refined by using the principles of moderation: Choose lower fat foods more often, make at least half of your grain products whole grain each day, eat at least one dark green and one orange vegetable each day, and so on. This chunk of nutrition skills is appropriately tackled only after the principle of balance is well digested! This is usually most appropriate for secondary school students and adults who have already put the nutrition basics into practice.

Teaching Healthy Nutrition Practices

The best place to start nutrition education is with the principle of variety. This is the basis of the nutrition education program offered by the BC Dairy Association to early primary (kindergarten, grade 1) teachers. The program involves lots of food experiences through reading, writing and of course, cooking and tasting.

While five- and six-year olds may be able to memorize some information about food group classification, this is not a skill they can readily apply to making their own meal or snack choices. In contrast, trying new foods is a skill five- and six-year olds can actually use. For example, after several experiences with raw broccoli in class (reading about it, cutting it up for snack, watching peers eat it, tasting it) a child might ask to have broccoli at home. This is very significant in terms of practicing good nutrition.

Working on variety can readily be extended to youths and adults. Familiarity builds slowly with repeated exposures, and tastes change with time. A child who hated broccoli at age eight might be willing to discover the pleasures of this vegetable at age twelve.

The principle of balance can be introduced to older primary children. At this age children can begin to apply classification skills by selecting a balanced meal or nutritious snack. Notice once again the focus is not on knowledge, but on what kids can do with the knowledge. It is crucial to make the knowledge of four food groups meaningful by applying the knowledge to breakfast, lunch, dinner, snacks, or meals in restaurants.

Balance is also the basis of the adult low-literacy booklet, “Tips for Healthy Eating,” developed by the BC Dairy Association. It is interesting to note that we actually have the same nutrition education goal for older primary children as we do for adults. The difference in how we teach the two groups is more to do with how long it takes and how much practice the two audiences need. Grade two students need ten lessons, while adults only need one session.

To complete learning about balance means learning about Food Guide Servings. Serving size is a complex concept. To apply knowledge of serving size, one has to be able to count the number of Food Guide Servings eaten from each food group for a whole day. So now you have to be able to think about a whole day, not just a meal. And you have to be able to integrate classification skills with the skill of analyzing for serving size. And you have to be able to make use of the information you learn about your eating to plan changes to your day, if necessary, so that you will be in balance. The earliest this concept can be introduced is with older elementary students—those who are about 10–12 years old. The program used by the BC Dairy Association for grade 4–6 students accomplishes these goals very successfully in ten lessons. Older students will be able to tackle these skills with less practice—so you will be able to accomplish the same process in fewer sessions.

Positive Nutrition Attitudes

In closing, I would like to make a few remarks about the attitude you convey about nutrition as you teach. So often nutrition messages are negative, as we eternally qualify choices: “Well yes, white bread is in the Grain Products group, but whole wheat bread would really be a better choice.” What we communicate by remarks of this nature is that something is wrong with the white bread choice. Instead, save the white bread qualification for young people who are already successfully getting a balance in their diet.

Unfortunately, surveys of young people in BC and Canada show that very few are actually getting a balanced diet. Our evaluation of grade 5 students in BC showed that only 4% meet the minimum number of daily servings recommended from each food group (1). The Adolescent Health Survey II by the McCreary Centre shows that about 53% of BC youth (grades 7–12) fail to meet the minimum recommended servings for the Milk Products food group, 75% fail to meet the minimum number of servings for the Vegetables and Fruit Group and 75% fail to meeting the minimum number of servings from the Meat & Alternatives food group (2). This was backed up by the more recent Canadian Community Health Survey, which showed that 62–68% of 9–13 year olds consume less than the recommended number of servings of Vegetables and Fruit. The same survey also shows that 61–83% of 10–16 year olds consume less than the recommended number of servings of Milk Products (3).

Clearly, with the vast majority of young people you will need to build some feelings of confidence in making food group choices and simply acknowledge that yes, white bread is in the Grain Products group. The principle of variety will help round out choice within a food group. It’s a major step for people to make balanced meal or balanced day food selections instead of omitting food group selections. In an effort to achieve balance, people tend to moderate their food choices, as it’s difficult to get enough food group servings if many of your selections are energy-dense foods high in fat or sugar.

When you focus on food group selections, you get to talk about all the foods you *can* eat instead of having to pressure people not to eat certain foods. The focus on the positive message goes a lot further towards encouraging good nutrition practices than does the focus on the negative message. Let people feel successful about being able to choose from food groups, even if you know their sections can be further refined. By letting people feel successful about making food choices now, you are building motivation for making more changes later.

1. Mercer, Bill. An Examination of British Columbia Dairy Foundation's "Food Sense" Program. Applied Research and Evaluation Services, UBC, 2006.

2. McCreary Centre Society. Healthy connections—Listening to BC Youth. Highlights from the Adolescent Health Survey II. 1999, p.13.

3. Garriguet, Didier. Overview of Canadians' Eating Habits 2004. Statistics Canada. Nutrition: Findings from the Canadian Community Health Survey, Ottawa, 2006.