



# Jr. Chef Club II

## Living with *MyPyramid*

### Lesson 1



## Educator Information

### Preparing to Teach the Lesson

#### Healthy Lifestyles

This lesson is mostly a review of material covered last year in Jr. Chef Level 1. It brings together the MyPyramid food and physical activity concepts and applies them to healthy lifestyles. The concept of balancing the foods we eat with the physical activity we do is presented.

A healthy lifestyle is one in which a person takes responsibility for making choices that promote health. Although a healthy lifestyle includes habits such as not smoking and personal safety behaviors, this lesson only discusses healthy eating and physical activity behaviors.

#### MyPyramid

The lesson reviews all the MyPyramid concepts presented last year; review Educator Notes for Level 1 if you need to refresh these facts in your own mind. Be sure to respond verbally to each answer the students give as you ask them review questions, and be positive and encouraging even if their answers are only partially correct.

The recommended consumption amounts are included again here for your convenience:

#### Daily Recommended Amounts of Each Food Group For Moderately Active Children and Teens

Children who are very active will need to slightly increase the grains, vegetables and meat & beans. MyPyramid allows for a limited number of “extra” high sugar, high fat foods. For children, the amount of “extra” food and calories is very small.

When addressing nutrition needs, Jr. Chef uses a MyPyramid serving equivalents approach for changes (increases), not specific calorie levels for children.

#### Girls and Boys

	4–8 Years Old	9–13 Years Old	14–18 Years Old
Grains	4–5 ounces	5–6 ounces	6–8 ounces

Vegetables	1½ cups	2–2½ cups	2½–3 cups
Fruits	1½ cups	1½–2 cups	2 cups
Milk	2 cups	3 cups	3 cups
Meat & Beans	3–4 ounce equivalents	5 ounce equivalents	5–6 ounce equivalents

### Physical Activity

Although MyPyramid reminds consumers to be active through the symbol of the person climbing the steps, it is helpful for discussion purposes to also use one of the youth activity pyramids. Youth activity pyramids show a variety of activities—aerobic ones to do daily, strength training (muscle building) to do occasionally, sedentary ones to do once-in-a-while. Discuss types of activity, how often to be active (daily) and how long (60 minutes or more each day).

### Calories

A calorie is a unit of measurement. One calorie is the amount of heat required to raise the temperature of one gram of water one degree Celsius. Food has calories that we consume and our body turns them into energy for growth, maintaining body functions and physical movement.

The body uses calories in four different ways:

- *Body functions* (called basal metabolic rate): Energy for organ function such as the heart beating, lungs breathing, growing, repairing tissues, blood production, brain function, heat production for body temperature, etc. About 65–75 percent of the calories we use every day are used for maintaining basic body functions. Muscles burn more calories, even at rest, than fat tissue. So the more muscles a person has, the more calories are spent on basal metabolism (just staying alive).
- *Food digestion*: The energy it takes to break down food, digest it, absorb it and transport the nutrients to where they are needed comprises about 10 percent of the amount of calories we burn each day. We cannot alter how many calories the body spends on digestion.
- *Growth*: Throughout childhood, there are certain periods where our bodies are grow rapidly. It takes so much energy (calories) for growth of bones and muscles that it is difficult for a child to eat all the calories needed in a day to provide for maximum growth. A good example is the adolescent growth spurt. To prepare for this, our bodies store extra energy for 2–3 years beforehand to use (burn) when the body starts growing bone and muscle tissue rapidly. Extra energy is stored as adipose (fat tissue) that is used up when the body starts through this period of physiological development. That is why ‘twens’ often may have more soft tissue on their bodies. It is important to recognize that this soft tissue is important to maximize growth potential for the adolescent growth spurt. But it is

also critical that the food eaten is nutrient-dense to provide for all the vitamins and minerals needed to build the support tissues during these periods.

*NOTE: In teaching nutrition and energy needs to youth, emphasize getting the needed servings from MP food groups versus specific calorie levels. Because youth of this age start getting body image conscience, focusing on specific calories needs may promote calorie counting at the expense of healthy food intake. This can lead to unhealthy eating habits that last a lifetime.*

- *Physical activity:* Whether it's walking to school, playing at recess or doing chores around the house or yard, physical activity uses up about 15–20 percent of our calories. We CAN alter how many calories we use in physical activity. The more activity we do, the harder we do it and the longer we do it, the more calories we burn.

The macronutrients (carbohydrates, protein, and fat) provide different amounts of calories.

Carbohydrates have 4 calories per gram of carbohydrate.

Protein has 4 calories per gram of protein.

Fat has 9 calories per gram of fat.

Anytime a person eats more calories than are burned up in a day, fat is stored; it doesn't matter which of the macronutrients have contributed the extra calories. However, you can see that fat is a concentrated source of calories. It has more than twice as many calories as carbohydrates and protein. Thus, when fats are in food, the food is much higher in calories (calorie-dense). Fatty foods often taste good so sometimes it is easy to eat too many of them, and end up taking in more calories than we need in a day. Keep in mind that it doesn't matter which foods one eats—if more calories are consumed than are burned up, the body stores them as fat.

### **Balancing Food with Activity**

Ideally, food intake (energy taken in) should be in line with how active we are in order for the body to maintain an appropriate weight. Those who are sedentary most of the time—sitting, standing, etc. need fewer calories than those who are more active. Sedentary people will want to eat the amounts of food at the low end of the range described in the lesson. People, who are more active, such as more than 30–60 minutes a day of physical activity, will eat at the upper end of the range. For example, if the recommendation is to eat 5–6 ounces of grains a day, a sedentary person would eat 5 ounces while a more active person would aim for 6 ounces.

If a person eats more food (calories = energy) than the body uses in a day, the extra calories are stored as body fat and weight is gained. If a person eats less food than the body needs in a day then the body must use calories it has stored (most as fat tissue).

### **Healthy Habits Now for a Healthy Lifestyle**

The point to emphasize with students is that healthy food choices and daily physical activity will give us a healthy body that feels good and we'll have plenty of energy to do all the things we want to do. Muscles that stay toned through physical activity and support the skeleton so it is easier to move. Physical activity also creates chemicals in the body that make a person feel better (happier etc). Developing these habits now is important; research indicates that habits established in childhood are frequently carried into adulthood. Students are setting the stage now, for their lifelong health.