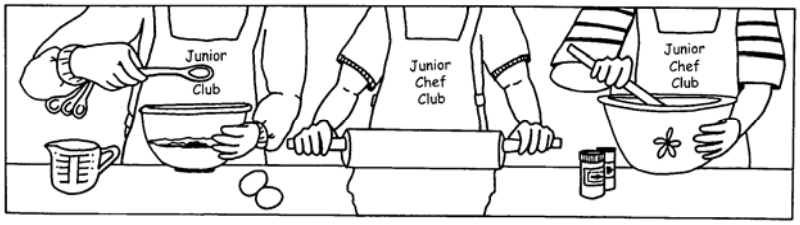

Jr. Chef Club
Lesson 2
"Go" on Grains

Educator Information
Preparing to Teach the Lesson

MyPyramid Graphic

Physical Activity

For the first time in U.S. history, the 2005 USDA's Food Guide includes a graphic to remind consumers to balance food intake with physical activity. The person climbing the steps represents daily physical activity.

In order to be fit, students need to be physically active and provide their bodies with nutritious foods. Neither dietary habits alone nor exercise alone can achieve fitness. The two must work together. Weight may not be a concern for all, but cardiovascular health is a concern for everyone! Physical activity strengthens the heart and lungs while improving the health of arteries. Research has revealed that children as young as the age of seven, who have died from traumatic causes, already have the beginnings of plaque build-up in their arteries. Activity not only keeps fats from building up in the arteries, but it also keeps the lungs and heart in shape, tones muscles, keeps joints in good shape, builds strong bones, prevents constipation and helps to prevent weight gain. It also improves mental outlook and attitude. In short, physical activity helps prevent chronic diseases from getting a head-start in our youth and promotes a positive attitude. Encourage youth to establish a daily habit of physically active.

Eat a Variety of Whole Foods

We eat in order to live and stay healthy. Food gives us energy to move and be active and nutrients to help us grow and stay healthy. Just like cars need fuel to drive, our bodies need food to function. Without food for energy, you could not run or play. The kind of fuel we put into our bodies is important. Just like in a car, poor fuel will give poor performance. Instead of sputtering and lurching like a car does, we might not be able to think as clearly or we might feel tired and grumpy and not want to play or work.

Bodies need nutrients. Water, carbohydrates, protein, fat, vitamins, minerals, and water are nutrients. These are substances that have various jobs to do in the body. If you don't eat foods rich in the nutrients the body needs, you may become ill or your body may not function normally. Fortunately, it's easy to get the nutrients needed from food. MyPyramid shows us how to get the right amounts of nutrients.

Details about MyPyramid and a graphic designed for children can be obtained at www.mypyramid.gov. MyPyramid portrays the concepts published in the 2005 U.S. Dietary Guidelines for Americans (DGA); find out more at http://www.healthierus.gov/dietaryguidelines/. The DGA provide authoritative advice for people two years and older about how good dietary habits can promote health and reduce risk for major chronic diseases.

The broad, colored bands of MyPyramid represent the five food groups plus oils. The wide, lower portion of each band represents foods that are unprocessed or less processed and have very little or no added fat or sugar. Moving up the colored bands means that foods are more processed and have progressively more added fat and/or sugar. Remember, the bands become narrower as the go to the top. This means that a person should eat less of these. Therefore foods we should eat the least of are at the tip, which is small, indicating that high fat, high sugar foods should be eaten sparingly – less than once a day. This concept is portrayed by "Gradient" Posters which show each food group individually along with representative foods that fall into the base, middle and tip of each food group. These posters are explained in the Lesson Plans and will be used throughout the Jr. Chef series when each food group is discussed. The posters will help students visualize what types of foods should be eaten most often and which ones should be eaten less often.

The thin, yellow band represents healthy oils of which some need to be eaten each day. Healthy oils include vegetable oils, margarine with no trans-fats, and foods with healthful oils such as salmon, walnuts, avocados and olives. This band does NOT represent processed foods high in fat such as candy, baked goods, fried foods, etc.

Grains are "Go' foods, providing energy to run, jump and play. Fruits and vegetables are "Glow" foods; full of vitamins, such as A and C, minerals that make skin, hair and eyes have a healthy glow. Protein and dairy foods are concentrated "Grow" foods. We need just a little of them each day to make the body grow. Protein foods are rich in the mineral iron. Dairy foods are rich in calcium.

Each food group has recommended amounts for daily consumption; they will be given in each lesson. It is important to use cups and ounces to teach children how much food to eat. Do NOT have the children calculate how much of each food group to eat based on calories. Focusing on calories at this age may be linked to the development of eating disorders. It is better to state about how much food from each group is recommended for children the age of your students, with a little bit of flexibility for whether they are very active or very sedentary. The information below was developed by the Washington State University Extension MyPyramid Committee and should be followed by University educators:

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 and 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.

It is not appropriate to recommend 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

Putting It Together
MyPyramid suggests eating plenty of grains so it's a good idea to include grain foods with every meal, especially whole grains. Biscuits, made from wheat, are carbohydrate foods for your body to "Go" on. Discuss with students foods that could be eaten with biscuits to get "Glow" and "Grow" foods too?

- For breakfast: add a piece of fruit and some milk.
- For lunch: make a mini-sandwich; cut biscuit in half and stuff with sliced turkey breast/lettuce or tuna salad/lettuce, etc. Serve with a glass of milk and fruit for dessert.
- For dinner: serve with roasted chicken, vegetable and salad. Serve with a glass of milk and fruit for dessert.

Whole Grains
Whole grains have more vitamins, minerals and fiber than processed grains. MyPyramid recommends that half of one's grain foods be whole grains. A whole grain contains all edible portions of the grain—bran, germ and endosperm. Examples are 100 percent whole wheat bread, brown rice, oatmeal, popcorn, etc.

Whole grains cannot be identified by color or by fiber content; one must read the ingredient label. Look for the words "whole" in front of the names of the grain on the ingredient portion of the label. The whole grain ingredient should be the first one listed. To be considered a whole grain food, a food must contain 51 percent or more whole grain ingredients (by weight) and be low in fat (as defined by the DGA).

Determining which foods count as an ounce of whole grain is difficult. As of this writing (2006) there is no standardized label from Food and Drug Administration (FDA) which helps the consumer determine this.

In the absence of an FDA-approved label, the Whole Grain Council developed a symbol for labels that can be used by food producers for a fee; currently it is on over 600 products. The Whole Grain Stamp identifies products at three levels:

Good Source	**Excellent Source**	**100% / Excellent**
a half serving of whole grain	a full serving of whole grain	a full serving AND all grains are whole grain

The Stamp can help consumers get the recommended amount of whole grains each day. If a daily eating plan includes 6 ounces of grains, the goal is to eat 3 ounces (or half) from whole grain foods. Eating three whole grain food products labeled "Excellent Source" or "100 Percent/Excellent" does the trick – or choose products labeled “Good Source” for all six grain servings.

Using a Recipe

Teaching students the proper technique for using a recipe now will help them be successful in the kitchen as they try new recipes on their own. Pass on the following tips to the students:

- Read the entire recipe ingredient list and how to make it before starting to cook. Read it again, if anything is unclear.
- Find where the recipe states how many servings it makes and what size servings they are. Assess whether that is enough for your purposes?
- Preheat the oven, if necessary.
- Collect all the ingredients and equipment for the recipe and place within reach.
- Recipes are usually written with ingredients in the order they are used; and instructions are written in the order they’ll be completed.
- Measure all ingredients accurately with proper measuring tools or equipment.
- Follow the recipe step-by-step to measure, mix and prepare the food. You will need to look back at the recipe many times.

Food Safety-Chefs Keep a Clean Kitchen

Last session discussed the importance of hand washing and keeping hands clean during food preparation. Today, we add the concept of keeping kitchen counters,

faucets and utensils clean. Bacteria on a food can leave bacteria on whatever it touches counters, cutting boards, knives, mixing spoons, other foods etc. WSU Extension recommends using plastic cutting boards to guard against food borne illness. Foods that may have harmful bacteria include raw meats, fish, poultry, eggs, and unwashed fruits and vegetables. After these foods have come into contact with kitchen surfaces, those surfaces should be cleaned by:

- Washing thoroughly with hot water and soap.
- Sanitizing with sanitizing solution (see below).
- Rinsing with warm water.
- Allowing to air dry.

Sanitizing Solution

Be sure to sanitize all surfaces in and around where Jr. Chefs will be setting out or preparing foods. Make a sanitizing solution fresh every day:

3/4 teaspoon *plain* household bleach*
1 quart (4 cups) water

Put in spray bottle and label it; keep away from children. To use, spray on washed surfaces. Leave on for one to two minutes then rinse (cutting boards) or wipe (counter tops) with clean, damp cloth. Mark the spray bottle with the words "Sanitizing Solution" or "Bleach Water." Keep away from younger children and do not drink or spray at another person.

* Do not use bleach with any added ingredients such as scent as it alters the effectiveness of the solution. This very mild bleach solution is also great for telephones, computer mouse and doorknobs, etc., during cold and flu season and does not cause bleaching of colors.

To further prevent the spread of potentially harmful bacteria in the cooking area, use paper towels, rather than dishcloths or sponges, to clean up messes from raw meats, fish, poultry or eggs, and then discard.

Chefs and other people who work in food service often wear plastic gloves to keep bacteria on their hands from getting into the food they are preparing. Always wear gloves when working with foods for students. There should be NO bare-hand contact with any ready-to-eat food (Washington State Food Code, updated 2005). If gloves touch something besides food, they should be removed and thrown away, rather than washed. (Washing gloves presents problems similar to washing hands – if not done thoroughly, some bacteria may remain.) Put on fresh gloves and continue with the food preparation. You will need to explain the importance of wearing gloves and "glove etiquette" to the students, and constantly watch them for touching things besides food and utensils. They will often touch their hair, face, or shoe and you'll need to point out that they need to replace their gloves. Take plenty of gloves! Each Jr. Chef uses two or three pairs per class and there are typically six Jr. Chefs per class.

Measuring
All chefs need to know how to measure. Measuring accurately helps make sure that recipes turn out looking and tasting just right. Different techniques and utensils are used to measure dry and wet ingredients.

Measuring Dry Ingredients

- Use appropriate-sized dry measuring cup.
- Gently spoon dry ingredient into cup until ingredient is above the top.
- Avoid holding over mixing bowl to which ingredients are added.
- Avoid shaking, tapping or pressing the ingredient into the measuring cup.
- Use a flat edge (the backside of a knife) to scrape excess ingredient off and back into its original container. To ensure that any dips around the edges of the measuring cup are filled in, start scraping from the middle of the measuring up and scrap to the right. Then start in the middle again and scrape to the left.
- Use measuring spoons to measure less than ¼ cup. Insert spoon into item to be measured and level it off with a flat edge.

Measuring Liquids

- Place a liquid measuring cup on a flat counter or table.
- Fill to the mark for the amount of liquid needed.
- Bend down to check that the bottom of the liquid line is at the mark for the amount needed. When doing this, the cook's eye should be level with the mark.
- To measure sticky liquids (molasses, honey, corn syrup and oil) rinse the inside of the cup with water first. Measure, and then use a rubber spatula to scrape out the cup.
- Use measuring spoons to measure less than ¼ cup. Pour the amount needed into the appropriate measuring spoon. Never measure over the mixing bowl or pan in case of spillage. Hold over sink or small cup.