OSPI Child Nutrition Services
Is proud to present...

Nutrition and Culinary Skills Workshop
2014
WELCOME!
The Office of Superintendent of Public Instruction-Child Nutrition Services is proud to present Cooking for a Healthy Future! A nutrition and culinary skills workshop for participants in the Child and Adult Care Food Program.

Child Nutrition Services would like to THANK the following individuals and organizations for their assistance in making this workshop a success!

Adele Roberts, OSPI-CACFP
Judy Larsen, OSPI-CACFP
Molly Gleason, OSPI-CACFP
Rhoda Litvin-Keller, OSPI-CACFP

Celia Kennedy, OSPI-CACFP
Marie Tucker, OSPI-CACFP
Nicki Christoferson, OSPI-CACFP

Bellingham Public Schools, Bellingham
Big Bend Community College, Moses Lake
City of Tukwila Community Center, Tukwila
Elwha Klallam Heritage Center, Port Angeles
Greenwood Masonic Lodge, Seattle
Kittitas Valley Event Center, Ellensburg
Lacey Community Center, Lacey
Marshall Community Center, Vancouver
Mercer Island Community and Event Center, Mercer Island
Pierce County Environmental Services Building, University Place
Portland Avenue Park and Community Center, Tacoma
Sno-Isle Tech Center, Everett
South Sound Manor, Olympia
St. Anne’s Children and Family Center, Spokane
St. Thomas More Catholic Church, Spokane
The Cathedral of St. John The Evangelist-Jewett House, Spokane
Tri-Tech Skills Center, Kennewick
Victory Memorial Masonic Temple, Bremerton
WSU Mt. Vernon Northwestern Washington Research and Extension Center, Mt. Vernon
YV Tech Center, Yakima

And an EXTRA SPECIAL THANKs to...
Chef LJ Klink and LuckJunky Consulting
Lisa Daniels, OSPI-CACFP
Terri Adolfson, OSPI-CACFP

This workshop is made possible with federal funds from the U.S. Department of Agriculture and Team Nutrition.

For questions or information regarding the workshop please contact:
Juli Morgenstern, Project Director-Team Nutrition Grant
360-725-6057    juli.morgenstern@k12.wa.us
Introduction

Chef Klink’s expectation is for participants to have a post-secondary education experience in an interactive work environment. This requires a high level of participation from students. Questions should be addressed as needed. This will create an interactive dialogue between workshop attendees and Chef Klink.

Chef Klink’s goal for students is to add a high level of skills to their own established repertoires. There will be a balance of reviewing cooking techniques and an introduction to new skill sets.

Chef Klink will be introducing and reviewing the use of colorful fruits and vegetables along with how to successfully introduce whole grains and legumes into a child care menu.

Upon successful completion of this course the student should be able to:

- Understand the basic developments that has created the modern professional kitchen
- Understand the attributes of a Food Service Professional
- Recognize basic professional kitchen tools and equipment
- Convert recipe yield amounts and understand the purpose of standardized recipes
- Understand and recognize the differences in fruits and vegetables
- Demonstrate proper knife skills, safety, and handling techniques
- Understand cross utilization of products and stealth health
- Understand the fundamental building blocks of basic food production.
- Demonstrate stock production
- Demonstrate knowledge of flavor profiles utilizing fresh herbs and seasonings
- Demonstrate proper fundamentals in the preparation of grains and legumes
**Chef Klink**

Chef “LJ Klink” is the original Rock Star Chef. He captured the title of extreme in 2011 by winning “Ice House” episode of Extreme Chef on Food Network. He is currently using his culinary expertise in school kitchens. Prior to working with school food programs, Klink was the Director of Richland Community College’s Culinary Arts Institute and full-time tenured professor where he designed curriculum to meet the needs of traditional and non-traditional students alike. Klink has experience in designing and establishing capital budgets and small wares needs for all level of industry needs.

As an educator and culinary leader, Klink learned that his passion of food was best served in a variety of arenas. “I wake up daily excited to share my love of all things food”, Klink states. Formally educated with a culinary arts degree, Bachelor Degree concentrated in communications and government, Master Degree in Organizational Leadership, and is ABD in his Educational Doctorate program. Klink is an ACF Certified Executive Chef and Certified Culinary Administrator. He also adds a MCFE (Master Certified Food Executive) and CFSE (Certified Food Service Educator) to his credentials.

Klink brings a vast amount of industry experience from the trenches of the restaurant industry. He states, "I live to push the proverbial envelope of food. Not from a how many different flavors can I put in one dish (a carrot should taste like a carrot!), but from why and what people really eat.” Klink says that when he explains a food concept that unveils the wizard behind the curtain, he is energized that his concept just changed the way someone looks at food…even if it is just one meal at a time”.

You can find Chef LJ Klink on Facebook at Chef LJ Klink, follow him on twitter @theljsays or email him at thelj@luckjunky.com
**Professionalism**

This section will focus on kitchen professionalism. The level of professional that happens in a kitchen on a daily basis dictates the safety and happiness of the children being served. Kitchen professionalism adds to the successful completion of required daily duties.

**Basic Sanitation**

Food preparers are one of the largest ways food borne illness is passed. By controlling the exposure of illnesses from the food handlers an entity can protect the exposure of illness to the end user. The following are ways that food workers can expose food and the consumers to illness.

- They have been diagnosed with a food borne illness
- Show symptoms of gastrointestinal illness
- Have infected lesions
- Live with or are exposed to a person who is ill
- Touch anything that may contaminate their hands

If a food handler is showing signs of any of the above it should be addressed immediately to avoid the spread of potential illness.

The following personal activities should never take place in a kitchen. If a food prepare happens to do any of the below activities the proper sanitation should happen immediately.

- Nose picking
- Rubbing an ear
- Scratching the scalp
- Touching a pimple or an open sore
- Running fingers through the hair
- Coughing and sneezing into hand
- Spitting in the establishment

Each kitchen professional should take pride in their position. The following items will showcase the pride a professional has in their work, job duties, and organization.

- Hygienic hand practices
- Maintaining personal cleanliness
- Wearing clean and appropriate uniforms
- Avoiding unsanitary habits and actions
- Maintaining good health
- Reporting illnesses
**Handwashing**
The first line of defense of the prevention of food borne illness is through the washing of hands. The below are examples of when a worker should be washing their hands.

- After using the restroom
- Before and after handling raw foods
- After touching the hair, face, or body
- After sneezing, coughing, or using a handkerchief
- After smoking, eating, drinking, or chewing gum or tobacco
- After using any cleaning, polishing, or sanitizing chemical
- After taking out the garbage or trash
- After clearing tables or busing
- After touching clothing or aprons

In addition to the washing of hands, there is a level of proper care of a worker’s hands. It is common for food and harmful substances to stick under the fingernails. To avoid this from happening fingernails should be kept short and clean. Nail polish, fake fingernails and/or acrylic nails should not be used.

Hands of a kitchen professional have the ability to have open cuts and sores. If a food handler has sores or cuts they should be covered with a clean bandage. Gloves or finger cots should be worn over any bandage. If there is any doubt on the ability to keep a sore or cut clean and away from food move that professional to another job until the area is healed.

**Uniforms**
Dress attire is important for the overall safety of a kitchen professional.

Shoes should be closed toed and have a non-slip bottom. Closed toes are necessary to protect feet from items that are dropped. Examples would be a sharp knife or hot liquid. The non-slip bottom will help protect from falling down when a floor is wet or slick.

Legs and arms should always be covered. Ideally pants should be made of a flame resistant fabric and wick liquid away from the skin. Short sleeves can be worn but arm pits should always be covered. A kitchen professional should not wear a tank top or sleeves shirt on any occasion. Sweaters should also not be worn.

If a kitchen professional wears jewelry it should be kept to a bar minimum. Earrings should be small as not to get caught on anything. Necklaces should be able to be tucked into a shirt. Rings should be flat and/or small as not to get hung up on anything or get food in it.
Hair should always be clean. Short hair should be neatly styled. Long hair should be pulled back in a secure way. Pony tails are not secure. Hair may be secured in a hair net.

**Policies**
Every entity should have policies in place to address the hygiene and attire of an entities kitchen staff. Additional policies should address issues like when and what kitchen professionals eat and what constitutes an illness and how to report it.
**Equipment**

Kitchen equipment can be overwhelming even for a seasoned professional. Sometimes the question is even where do you start. Some equipment can be over kill for the space. Some tools can be a waste of time for the type of meals being produced.

This section is to give the student an idea as to what is available on the market and how to use it. It is not meant to be an end all to be all list. Amazing food can still be made without some of the wish list items, but they can make one’s life a little easier.

**Hand Tools**

This group of tools should be easily accessible to you in your kitchen. They are called hand tools because the operator powers them, not electricity or a motor. You will most likely use these tools with the highest frequency.

- Rotary or swivel-bladed peeler

- Parisienne scoop (melon baller)

- Kitchen fork

- Palette knife (metal spatula)
• Whip/whisk

• Offset spatula

• Rolling pin

**Measuring Equipment**
It is important to be able to precisely measure out ingredients. The following is a list of basic measuring and weighing tools that every kitchen should consider having.

• Measuring pitcher (cups, quarts, and gallons)
• Spring scale (ounces and pounds)
• Balance beam scale (baking scale)
• Electronic scale (digital)
• Thermometer/Bio-therm
• Measuring spoon
• Calculator
**Sieves and Strainers**
These tools are an easy and safe way to strain food. There are various styles to choose from. Below are examples.

- Food mill is used for mashing or sieving soft foods.

- Drum sieve is shaped like a cake pan with a mesh bottom that can be used as a sieve or strainer.

- Conical sieve is primarily used for stocks and sauces.
• Colander is bowl shaped and used to drain pasta or beans

![Colander Image]

• Ricer is used like a masher to make rice sized pieces

![Ricer Image]

• Cheesecloth is a loose woven cotton like cloth.

**Pots and Pans**
Using the right sized pot or pan makes the difference in having successful outcomes.

• Stockpot (marmite)

![Stockpot Image]

• Saucepan

![Saucepan Image]
• Sauce pot

• Rondeau

• Sauteuse

• Sautoir
• Omelet/crêpe pan

• Bain-marie (double boiler)

• Griddle

• Steamer
**Oven Cooking**
The oven can be used for either dry or wet cooking methods. Your method will determine which piece of equipment should be used.

- Roasting pan

- Sheet pan

- Hotel pan

- Pyrex pan
• Loose-bottomed tart pan

• Pie pan

• Loaf pan

• Muffin tin
Grinding, Slicing, Mixing, and Pureeing Equipment

Many of the food preparation tasks can be done by hand. There are many tools that can assist you in automating the process to save time and wastage.

- Food chopper (buffalo chopper)

- Food/meat slicer

- Mandolin
• Standing mixer

• Meat grinder

• Blender

• Food processor
• Immersion blender

• Vertical chopping machine (VCM)
The Parts of Your Knife

**Blade:** The entire metal piece of the knife

**Handle:** Wooden, plastic, or metal. The shape will determine users comfort.

**Tang:** The extension of the blade into the handle.

**Heel:** Thick edge of blade on the edge side closest to the handle.

**Cutting Edge:** The shapeable edge of the blade.

**Bolster:** also known as the shank or collar, where the blade and handle meet.

**Spine:** Opposite side of the cutting edge, which gives the blade its structure.

**Tip:** Thinnest part of the blade used for finer cuts and accuracy.

**Rivets:** Used to attach blade to handle can be internal or external.

Types of Knifes

- Cleaver
- Bread
- Boning
- Chef
- Carving
- Paring
**Fundamental Knife Skills**

As a professional cook you will have one tool that you will not be able to do without, your 10 inch Chef Knife. The knife will become an extension of your arm. Your dexterity and ability will only grow with continual practice of the fundamental.

**Safety**

The most dangerous knife is a dull knife. A dull knife will labor to cut through common products causing the operator to put unneeded and off balanced pressure resulting in the poor handling of the knife. This is how accidents happen. Keeping a sharp knife is your most important step in knife safety. Storing your knife correctly will protect you and the ones around you from accidental cuts and punctures. For example: Never place a dirty knife into a soapy basin. Even if it is for a moment, another worker or yourself could be cut reaching into the water. Always wash your knives through the appropriate wash cycles ending with sanitizing. Air dry on an approved rack or at your workstation with blade guard or blade turned into the cutting board. While transporting your knife carry point down towards the floor with sharp edge point behind you. When passing a co-worker let them be aware you have a knife. Responsibility of your knife will limit accidents in the kitchen.

**Holding your knife**

Most of us at some point in our life have handled a knife. For many of us the feeling can be awkward and cumbersome. With the correct grip and motion these insecure feelings will disappear. After you are able to complete the basic competences of the 10 inch Chef Knife other knives will be introduced. Your 10 inch Chef Knife will be your most utilized tool, but different knife styles will assist in certain tasks. For example: A boning knife will allow accurate butchery and a long handled slice will give the user thin and even cuts to roasted items.

To properly hold a knife, grasp the chef knife with your thumb and two fingers along either side of the blade. The handle should rest in the center of your palm. This allows the user to control the blade for accurate cuts and stability.

The opposite hand not holding the knife is called the “guide hand”. The guide hand will hold the object being cut with fingertips pressed against the product with the knuckle slight curled back and the thumb behind. The knife blade will rest against your knuckle working as a guide protecting you from cuts and giving you the ability to create accurate cuts. This technique is commonly called the claw.
**Sharpening and honing your knife**

A sharp knife is a safer knife than a dull knife. First we must determine if the knife needs to be sharpened or honed. Sharpening a knife will create an edge or reestablish a knife’s edge to the original state of the blade. Honing will remove the small burrs that develop on the cutting edge with normal use.

Every style of knife has a different angle of the cutting edge to be used in different applications. A boning knife will have a steeper angle for cutting meat and a pairing knife will have a small angle for a longer, thinner cuts necessary for finer cuts. A 20 degree angle is the angle you will sharpen and hone your 10 inch Chef Knife to.

After deciding, what is the best angle for your knife you must either sharpen the blade with a “stone” to create a new edge or removed the small burrs and nicks with a “steel”. If you decide to use a stone you will still need to hone your knife before uses. The severity of dullness will help you decide what is best for your knife.

**Sharpening with a stone**

1. Place the stone on a towel to prevent slipping. Hold the knife at a 20-degree angle and push over the stone’s surface. Use guide hand to keep even pressure applied to blade.

2. Continue to push the knife over the surface ensuring the entire blade is sharp.

3. Turn the knife over and repeat the process on the flip side.
**Honing with a steel**

Hold the steel away from the body in one hand and hold the knife in the other. Start with the knife nearly vertical, with the blade resting on the inner side of the steel at a 20 degree angle.

Pass the blade along the entire length of the steel, rotating the wrist as the blade moves. Keep the pressure even and light.

Keep the blade in contact with the steel for the last few inches, so as to be properly honed.

Return the blade to a nearly vertical position, this time on the outer side of the steel, to hone the second side of the knife.

Use the thumb to maintain even, light pressure.

Finish the second pass, making sure the entire length of the blade, including the tip, is properly honed.
Basic Vegetable Cuts and Techniques

Whenever you cut something, your aim should be to cut the food into uniform shapes and sizes. Unevenly cut pieces will give the eater the impression of carelessness and could spoil the dish’s look. Most importantly food cut into different shapes and sizes will cook differently. Each basic cut will create different surface area allowing the cooking process to affect the flavor of the food being cooked. This is why it is imperative to understand the basic cuts and techniques.

Basic cuts include:

Coarse chopping: This is reserved for mirepoix or dishes that the product will not be seen by the guest.

Oblique or Roll Cut: Used most often with carrots. Roll the vegetable 180 degrees for each cut.

Diagonal Bias: Angling the product about 25 degrees. Great cut for Asian-style dishes.

Tourneing: Meaning “turned” this is a seven sided football shaped cut.

Basic shapes and sizes include:
Legumes and Grains

Legumes

The Dry Bean Verses Canned Bean
Dried beans must be soaked and rinsed (cleaned...look for stones). Dry beans normally have no preservatives, whereas canned beans are prepared by adding a color preservative, called 'calcium disodium EDTA'. Speaking about dried beans to canned beans conversion, you can replace dried beans with any other form of beans in a recipe; what actually differs is the cooking time for preparation of the beans.

The culinary importance of dried beans or canned beans depends upon the cook. Dried bean recipes serve the best option for preparing bulk cooking, without going to the grocery store; while canned beans are used for fast cooking. The most noticeable difference between dried beans is that the former type is available in loose form and in simple plastic packets; whereas the latter is available in jars and containers. The following is a summary of the comparison between dried beans and canned beans.

Preparation
Dried beans are harvested from matured pods. When the beans inside harden and turn brown. The pods are then broke open for the removal of dried beans. After sorting the beans, they are stored in plastic bags or containers. Canned beans are cooked lightly and stored in airtight containers.

Storing the Beans
For storage of dried beans, you do not need special preparation. They can be retained and stored in superior quality plastic bags or containers with tight lids. If you want to preserve already opened canned beans, you can toss them with a splash of vinegar and store them in the refrigerator. Canned beans must be used when opened.

Shelf Life of Beans
Food experts are of the opinion that dried beans, if stored properly, can be kept without losing their nutritional value for about 30 years. While canned beans, kept in a cool and dry condition, stay good for about 5 years. For both dried and canned beans, the shelf life depends entirely on the storage conditions.

Way of Cooking
Both dried and canned beans can be cooked directly after rinsing and washing them. However, soaking dried beans beforehand for at least 4-6 hours reduces the cooking time. In the case of canned beans, there is no need to soak the beans prior to cooking, but they must be rinsed before cooked and served.
**Soaking Beans**

**BEST CHOICE** - OVERNIGHT METHOD:  
Add 24 oz. cold water to every 1 # of dry beans. Cover and refrigerate overnight.  
Discard the water. Proceed with recipe.

**QUICK-SOAK METHOD:**  
Boil 1 3/4 quart of water for each 1 # of dry beans. Add beans and boil for 2 minutes.  
Remove from heat and allow to soak for 1 hour. Discard the water. Proceed with recipe.

**Cooking Beans**  
Once the beans have been soaked, add 46 oz. of water for every # of dry beans. Boil gently with lid tilted until tender, about 2 hours.

Use hot beans immediately.

**Legume as Meat Alternate:** 3 ounces equivalent meat alternate, OR  
**Legume as Vegetable:**  
3/4 cup legume vegetable, 1/4 cup red/orange vegetable, and 1/4 cup other vegetable.

*Legume vegetable can be counted as either a meat alternate or as a legume vegetable but not as both simultaneously.*

**Grains**

**Quinoa**  
Quinoa is a grain crop grown for its edible seeds. It is high in protein, is gluten free and can be grown in dry soil. Quinoa seeds contain essential amino acids like lysine and traceable amounts of calcium, phosphorus and iron.

After being harvested seeds must have the outside removed due to the bitter coating. Due to the bitterness of the coating, it is important to rinse the quinoa thoroughly. Once the quinoa is rinsed, it can be prepared much the same way as rice and can be utilized in a variety of recipes.


**Fruity Toast**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>6 Servings</th>
<th>12 Servings</th>
<th>24 Servings</th>
<th>48 Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole grain bread</td>
<td>3 slices</td>
<td>6 slices</td>
<td>12 slices</td>
<td>24 slices</td>
</tr>
<tr>
<td>Cottage cheese</td>
<td>1/4 cup</td>
<td>1/2 cup</td>
<td>1 cup</td>
<td>2 cups</td>
</tr>
<tr>
<td>Peas, sliced</td>
<td>6 caps</td>
<td>12 caps</td>
<td>24 caps</td>
<td></td>
</tr>
<tr>
<td>Cinnamon, ground</td>
<td>1 Tbsp</td>
<td>2 Tbsp</td>
<td>4 Tbsp</td>
<td></td>
</tr>
<tr>
<td>Margarine, soft,</td>
<td>1/2 tsp</td>
<td>1 tsp</td>
<td>2 tsp</td>
<td>4 tsp</td>
</tr>
<tr>
<td>cheese, lowfat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Directions:**
1. Preheat oven to 375°F.
2. Spread one side of bread with margarine. Put in baking pan with margarine side face down.
3. Spoon cottage cheese on bread. Sprinkle cinnamon on top.
4. Bake at 375°F until bread turns brown on bottom (about 30 minutes).
5. Cut toast in half and top each half with 1/2 cup peaches.

**Food For Thought** Add any type of fruit in season to make this a healthy, fun breakfast all year around. Cinnamon is a nice way to add flavor without adding sugar.

**CACFP Crediting** For 3-5 year olds;
Breakfast. Must serve all of the following:
- Grain/Bread
- Fruit/Vegetable
- Milk

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**Macaroni Mess**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>6 Servings</th>
<th>12 Servings</th>
<th>24 Servings</th>
<th>48 Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetable oil</td>
<td>1/2 Tbsp</td>
<td>1 Tbsp</td>
<td>2 Tbsp</td>
<td>4 Tbsp</td>
</tr>
<tr>
<td>Onion, chopped</td>
<td>1/2 cup</td>
<td>1 cup</td>
<td>2 cups</td>
<td>4 cups</td>
</tr>
<tr>
<td>Garlic</td>
<td>1/2 clove</td>
<td>1 clove</td>
<td>2 cloves</td>
<td>4 cloves</td>
</tr>
<tr>
<td>Turkey, cooked, cubed</td>
<td>2 cups + 2 Tbsp</td>
<td>4-1/4 cups</td>
<td>8-1/2 cups</td>
<td>16 cups</td>
</tr>
<tr>
<td>Water</td>
<td>1-1/2 cups</td>
<td>3 cups</td>
<td>6 cups</td>
<td>12 cups</td>
</tr>
<tr>
<td>1% (low-fat) milk</td>
<td>3/4 cup</td>
<td>1-1/2 cups</td>
<td>3 cups</td>
<td>6 cups</td>
</tr>
<tr>
<td>Cheese of mushroom soup</td>
<td>1/2 - 10-3/4 oz can</td>
<td>1 - 10-3/4 oz can</td>
<td>2 - 10-3/4 oz can</td>
<td>4- 10-3/4 oz can</td>
</tr>
<tr>
<td>Peas, frozen</td>
<td>5 oz</td>
<td>1 - 10 oz</td>
<td>packages</td>
<td>4 - 10 oz</td>
</tr>
<tr>
<td>Carrots, grated</td>
<td>3/4 cup</td>
<td>1-1/2 cups</td>
<td>3 cups</td>
<td>6 cups</td>
</tr>
<tr>
<td>Elbow macaroni, dry</td>
<td>1 cup</td>
<td>2 cups</td>
<td>4 cups</td>
<td>8 cups</td>
</tr>
<tr>
<td>Black pepper</td>
<td>1/4 tsp</td>
<td>1/2 tsp</td>
<td>1 tsp</td>
<td>2 tsp</td>
</tr>
<tr>
<td>Corn flakes</td>
<td>3/4 cup</td>
<td>1-1/2 cups</td>
<td>3 cups</td>
<td>6 cups</td>
</tr>
<tr>
<td>Garlic powder</td>
<td>1/8 tsp</td>
<td>1/4 tsp</td>
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**Directions:**
1. Heat oil in large skillet over medium-high heat and sauté onions until transparent.
2. Add garlic and cook briefly, about 30 seconds.
3. Add turkey, water, milk, soup, carrots and peas. Bring to a boil.
4. Add macaroni and pepper. Stir to combine.
5. Cover pan, reduce heat to low, and cook for 10 to 15 minutes, until pasta is tender, stirring occasionally.
6. While mixture is cooking, crush corn flakes in small bowl, mix in garlic powder.
7. Place 3/4 cup serving on plate and top with corn flakes.

**Food For Thought** This dish has protein-rich turkey as well as vegetables for good nutrition. To make it even healthier, use whole grain macaroni.

**CACFP Crediting** For 3-5 year olds;
Lunch/Supper. Must serve all of the following:
- Grain/Bread
- Fruit/Vegetable
- Meat/Meat Alternate
- Milk

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**Nutrition Facts**

**Macaroni Mess**

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<tr>
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<tr>
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<tr>
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<td>Sodium 312mg</td>
<td>15%</td>
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<tr>
<td>Total Carbohydrate 17g</td>
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<tr>
<td>Dietary Fiber 1g</td>
<td>8%</td>
</tr>
<tr>
<td>Sugars 3g</td>
<td>15g</td>
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<td>Protein 15g</td>
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<td>Calcium 6%</td>
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<td>Iron 8%</td>
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Recipe adapted from Healthy Recipes, Oregon State University Extension Services. May 21, 1999.

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**Macaroni Mess**

<table>
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<td>Total Carbohydrate 15g</td>
<td>6%</td>
</tr>
<tr>
<td>Dietary Fiber 1g</td>
<td>15%</td>
</tr>
<tr>
<td>Sugars 1g</td>
<td></td>
</tr>
<tr>
<td>Protein 3g</td>
<td></td>
</tr>
<tr>
<td>Vitamin A 3%</td>
<td></td>
</tr>
<tr>
<td>Vitamin C 6%</td>
<td></td>
</tr>
<tr>
<td>Calcium 14%</td>
<td></td>
</tr>
<tr>
<td>Iron 4%</td>
<td></td>
</tr>
</tbody>
</table>

Recipe adapted from Healthy Recipes, Oregon State University Extension Services. May 21, 2008.

---

**Macaroni Mess**

<table>
<thead>
<tr>
<th>Serving size: 3/4 cup (199g)</th>
<th>Servings Per Recipe: 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Per Serving</td>
<td></td>
</tr>
<tr>
<td>Calories 167</td>
<td>Cal. from Fat 37</td>
</tr>
<tr>
<td>% Daily Value</td>
<td></td>
</tr>
<tr>
<td>Total Fat 4g</td>
<td>0%</td>
</tr>
<tr>
<td>Saturated Fat 1g</td>
<td>4%</td>
</tr>
<tr>
<td>Cholesterol 28mg</td>
<td>8%</td>
</tr>
<tr>
<td>Sodium 312mg</td>
<td>15%</td>
</tr>
<tr>
<td>Total Carbohydrate 17g</td>
<td>4%</td>
</tr>
<tr>
<td>Dietary Fiber 1g</td>
<td>8%</td>
</tr>
<tr>
<td>Sugars 3g</td>
<td>15g</td>
</tr>
<tr>
<td>Protein 15g</td>
<td></td>
</tr>
<tr>
<td>Vitamin A 45%</td>
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</tr>
<tr>
<td>Vitamin C 8%</td>
<td></td>
</tr>
<tr>
<td>Calcium 6%</td>
<td></td>
</tr>
<tr>
<td>Iron 8%</td>
<td></td>
</tr>
</tbody>
</table>

Recipe adapted from Healthy Recipes, Oregon State University Extension Services. May 21, 2008.
Resources – Soup Cheats

Cream Soups
1. Sweat vegetables in a fat
2. Add the flour and cook out the roux
3. Add the liquid and main ingredients
4. Bring to a boil Establish simmer
5. Skim
6. Cook until the main ingredient is tender and the proper flavor is reached
7. Strain and Puree the solids
8. Reincorporate the liquid to proper consistency
9. Cool and store, or finish with cream and garnish for service

Note: Starch must be in a cream soup or it will break.

Puree Soups
1. Sweat vegetables in a fat
2. Add the Liquid
3. Bring to a boil Establish simmer
4. Add the main ingredient
5. Add Sachet d' epics or bouquet garni. Remove after desired flavor is reached.
6. Strain
7. Puree Solids
8. Reincorporate the liquid to proper consistency
9. Cool and store, or finish and garnish for service

Note: Thick soups should be the consistency of heavy cream

Clear Vegetable
1. Sweat vegetables
2. Add stock or liquid
3. Bring to a boil
4. Skim
5. Add Sachet d’ epics or bouquet gami Remove after desired flavor is reached.
6. Establish simmer
7. Add remaining Ingredients at proper intervals
8. Cool and store, or finish and garnish for service

Note: vegetables must be cut uniformly
Broth
1. Combine meat and stock
2. Add the mirepoix and bouquet garni
3. Simmer
4. Skim
5. Strain and season
6. Cool and store, or finish and garnish for service

Consomme
1. Combine the ground meat, mirepoix, seasonings, tomato product, onion brûlé, and egg whites
2. Incorporate the stock
3. Stir Frequently
4. Simmer (1.5 hrs)
5. Do not stir the raft after it forms
6. Break hole in the raft
7. Simmer until consommé has developed flavor, body, and color
8. Strain (cheese cloth)
9. Cool and store, or finish and garnish for service

Bisques
1. Sear the crustacean shells in fat (caramelize)
2. Add mirepoix and caramelize
3. Add tomato paste and Pinçage
4. Add paprika and Pinçage
5. Deglaze with brandy reduces to au sec
6. Add liquid cold. Add sachet d’epices
7. Bring to simmer and add roux
8. Simmer and skim 45 min-1 hour
9. Remove bouquet garni and sachet.
10. Puree and strain
11. Finish with cream and sherry
12. Season with salt and white pepper
13. Cool and store or garnish for service
# Child and Adult Care Food Program

## FOOD CHART

**Meal Pattern Requirements for Children Ages 1 Through 12 Years**

### BREAKFAST

<table>
<thead>
<tr>
<th></th>
<th>Children 1 and 2 years</th>
<th>Children 3 through 5 years</th>
<th>Children 6 through 12 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid milk</td>
<td>1/2 cup</td>
<td>3/4 cup</td>
<td>1 cup</td>
</tr>
<tr>
<td>Juice or fruit or vegetable</td>
<td>1/4 cup</td>
<td>1/2 cup</td>
<td>1/2 slice (or 1 serving)</td>
</tr>
<tr>
<td>Grains/breads or cold dry cereal or cooked cereal</td>
<td>1/2 slice (or 1/2 serving)</td>
<td>1/2 slice (or 1/2 serving)</td>
<td>1 slice (or 1 ounce)</td>
</tr>
<tr>
<td></td>
<td>1/4 cup (or 1/3 ounce)</td>
<td>1/3 cup (or 1/2 ounce)</td>
<td>3/4 cup (or 1 ounce)</td>
</tr>
<tr>
<td></td>
<td>1/4 cup</td>
<td>1/4 cup</td>
<td>1/2 cup</td>
</tr>
</tbody>
</table>

### SNACK

Select two different items from the following four components.

Juice may not be served when milk is served as the only other component.

<table>
<thead>
<tr>
<th></th>
<th>Children 1 and 2 years</th>
<th>Children 3 through 5 years</th>
<th>Children 6 through 12 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid milk</td>
<td>1/2 cup</td>
<td>1/2 cup</td>
<td>1 cup</td>
</tr>
<tr>
<td>Juice or fruit or vegetable</td>
<td>1/2 cup</td>
<td>1/2 cup</td>
<td>3/4 cup</td>
</tr>
<tr>
<td>Meat or meat alternate or yogurt</td>
<td>1/2 ounce</td>
<td>1/2 ounce</td>
<td>1 ounce</td>
</tr>
<tr>
<td></td>
<td>2 ounces (or 1/4 cup)</td>
<td>2 ounces (or 1/4 cup)</td>
<td>4 ounces (or 1/2 cup)</td>
</tr>
<tr>
<td>Grains/breads</td>
<td>1/2 slice (or 1/2 serving)</td>
<td>1/2 slice (or 1/2 serving)</td>
<td>1 slice (or 1 serving)</td>
</tr>
</tbody>
</table>

### LUNCH/SUPPER

Select two different items from the following four components.

<table>
<thead>
<tr>
<th></th>
<th>Children 1 and 2 years</th>
<th>Children 3 through 5 years</th>
<th>Children 6 through 12 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid milk</td>
<td>1/2 cup</td>
<td>3/4 cup</td>
<td>1 cup</td>
</tr>
<tr>
<td>Meat or poultry or fish or cheese</td>
<td>1 ounce</td>
<td>1-1/2 ounces</td>
<td>2 ounces</td>
</tr>
<tr>
<td>or cottage cheese, cheese food or cheese spread or egg</td>
<td>1 ounce</td>
<td>1-1/2 ounces</td>
<td>2 ounces</td>
</tr>
<tr>
<td>or peanut butter, soynut butter, or nut or seed butters or peanuts, soynuts, tree nuts, or seeds or yogurt</td>
<td>2 ounces (1/4 cup)</td>
<td>3 ounces (3/8 cup)</td>
<td>4 ounces (1/2 cup)</td>
</tr>
<tr>
<td>or an equivalent quantity of any combination of the above meat/meat alternates</td>
<td>1 egg</td>
<td>1 egg</td>
<td>1 egg</td>
</tr>
<tr>
<td></td>
<td>1/4 cup</td>
<td>3/8 cup</td>
<td>1/2 cup</td>
</tr>
<tr>
<td></td>
<td>2 tablespoons</td>
<td>3 tablespoons</td>
<td>4 tablespoons</td>
</tr>
<tr>
<td></td>
<td>4 ounces (1/2 cup)</td>
<td>6 ounces (3/4 cup)</td>
<td>8 ounces (1 cup)</td>
</tr>
<tr>
<td>Vegetables and/or fruit (2 or more)</td>
<td>1/4 cup (total)</td>
<td>1/2 cup (total)</td>
<td>3/4 cup (total)</td>
</tr>
<tr>
<td>Grains/breads</td>
<td>1/2 slice (or 1/2 serving)</td>
<td>1/2 slice (or 1/2 serving)</td>
<td>1 slice (or 1 serving)</td>
</tr>
</tbody>
</table>

1. 1/4 cup (volume) or 1/3 ounce (weight), whichever is less.
2. 1/3 cup (volume) or 1/2 ounce (weight), whichever is less.
3. 3/4 cup (volume) or 1 ounce (weight), whichever is less.
4. This portion can meet only one-half of the total serving of the meat/meat alternate requirement for lunch or supper. Nuts or seeds must be combined with another meat/meat alternate to fulfill the requirement. For determining combinations, 1 ounce of nuts or seeds is equal to 1 ounce of cooked lean meat, poultry, or fish.

**NOTE:** For family day care home providers in Department of Early Learning licensed homes, the age limit for the meal pattern is through 11 years of age instead of 12.

**Creditable Foods Guide March 2007**
Cooking for a Healthy Future

Resources

OSPI Website:
OSPI Cooking for a Healthy Future Workshop
http://www.k12.wa.us/ChildNutrition/Programs/CACFP/CookingWorkshop/default.aspx
OSPI Planting the Seeds for a Healthy Future Workshop
http://www.k12.wa.us/ChildNutrition/Programs/CACFP/GardenWorkshopMaterials/default.aspx
OSPI Child Nutrition Services-CACFP Main Page
http://www.k12.wa.us/ChildNutrition/Programs/CACFP/default.aspx

Websites:
2010 Dietary Guidelines
Team Nutrition-Child Nutrition Programs
MyPlate
http://www.choosemyplate.gov/index.html
  • Ten Tip Series
  http://www.choosemyplate.gov/healthy-eating-tips/ten-tips.html
  • MyPlate for Kids
  http://www.choosemyplate.gov/kids/
Let’s Move
http://www.letsmove.gov/
NFSMI
http://www.nfsmi.org/
  • Mealtime Memo for Child Care
  • Resource Center
  http://www.nfsmi.org/Templates/TemplateDivision.aspx?qs=cEI=0EPTI=
Farm to Preschool
http://farmitopreschool.org
Chefs Move To School
http://www.chefsmovetoschools.org
Fruits and Veggies More Matters
http://www.fruitsandveggiesmorematters.org/
Wheat Foods Network
http://www.wheatfoods.org/
Whole Grains Council
http://wholegrainscouncil.org/
Washington State Dairy Council
http://www.eatsmart.org/
ChopChop Magazine
http://www.chopchopmag.org/

RECIPES
USDA Recipes for Healthy Kids Cookbook for Child Care Centers
USDA Recipes for Healthy Kids Cookbook for homes
CACFP Menu Planning Guide

Chef LJ Klink
Below is the contact information for Chef LJ Klink. Should you like additional assistance, he is available to work with you and your facility on a one-to-one basis.
Chef LJ’s website:
http://www.luckjunky.com/
For direct questions:
thelj@luckjunky.com
To schedule an on-site visit:
info@luckjunky.com

OSPI Child Nutrition Services-CACFP
Juli Morgenstern, Project Director juli.morgenstern@k12.wa.us 360-725-6057
Lisa Daniels, CACFP Administrative Assistant lisa.daniels@k12.wa.us 360-725-6206
Adele Roberts, CACFP Program Supervisor adele.roberts@k12.wa.us 360-725-6200
GREAT NEWS......

The Washington State Dairy Council has graciously extended one $20.00 free materials allotment per child care center director.

In addition, food service directors or managers are also eligible for one $20.00 free materials allotment.

The Washington State Dairy Council is a team of nutrition professionals devoted to the promotion of lifelong health and enjoyment of food through leadership in nutrition education. They encourage food selection patterns, which include dairy foods, in accordance with the U.S. Department of Health and Human Services and the U.S. Department of Agriculture Dietary Guidelines and other currently accepted scientific recommendations. The Washington State Dairy Council has been providing quality and scientifically sound nutrition education materials for over 77 years.

Team members work closely with School Nutrition and Physical Education Specialists to increase access to healthy foods through the Fuel Up to Play 60 program. Health and Wellness team members work with dietitians, physicians, nurses, nutritionists, school nurses, WSU cooperative extension, and other health professionals to include dairy products in a healthful, enjoyable diet. The Fuel Up to Play 60 program, Healthy Worksite Summit, Child Profile, Think Your Drink, Action for Healthy Kids and Fuel Up First with Breakfast challenge are a few of their quality initiatives and focus areas.

The allotment order information is located on page 1 in the catalog. The order forms are on page 2-3 in the catalog.

Orders may be mailed or faxed to:
Washington State Dairy Council
4201 198th St SW
Lynnwood, WA 98036
Fax: 425-670-1222, Toll free Fax: 1-800-470-1222
www.EatSmart.org

Check us out on Facebook!

Any questions regarding the $20.00 free materials allotment must be directed to the Washington State Dairy Council.

Please make sure to THANK the Washington State Dairy Council for their generous allotment and continued support of Washington State children and educators!
CHOPCHOP MAGAZINE
http://www.chopchopmag.org/

CHOPCHOPKIDS is an innovative non-profit organization whose mission is to inspire and teach kids to cook real food with their families. Cooking and eating together as a family is a vital step in resolving the obesity and hunger epidemics.

CHOPCHOP Food Philosophy

- We believe in the simple values of cooking together as family and sharing healthy, delicious meals.
- We don’t do calorie counts or post nutrition content, but everything in our publication is reviewed and approved by our medical and nutrition advisors.
- We don’t demonize any individual foods.

ChopChop is a quarterly magazine published in both Spanish and English. ChopChop is filled with nutritious, great-tasting, ethnically diverse, and inexpensive recipes. It also has fun food facts, games and puzzles, and interviews with healthy heroes ranging from kid chefs to professional athletes to the White House Chefs.

Fifty percent of all U.S. practicing pediatricians request ChopChop and “prescribe” it during well-child visits. ChopChop is distributed through children’s hospitals, health centers, public schools, afterschool programs, Indian reservations, and community organizations. ChopChop is also available at newsstands and by subscription.

The CHOPCHOP website is a great resource! You can read past issues of the magazine, browse through kid-friendly recipes, and learn more about the ChopChop organization and their partners.

The website blog is a fantastic place to find information as well. Recent topics include Introducing kids to Caesar Salad, Vegetable Tasting Extravaganza, Dr. David Ludwig’s Chocolate Meditation, and MyPlate Scavenger Hunt.

Another fascinating project that ChopChop has been working on is the Picky Eater Project as chronicled in the New York Times. ChopChop advisor Dr. David Ludwig and Sally Sampson, ChopChop founder and author, are working together to change the eating habits of one family, and their twin 4-year-old boys.

ChopChop is published by ChopChopKids, Inc., a nonprofit corporation. Subscription information can be found on the ChopChop website. http://www.chopchopmag.org/
**Glossary**

**Bitter** is a strong flavor that is opposite of sweet. One of the five taste profiles need for a balanced flavor.

**Broth** is a liquid derived from slowly simmering poultry, meat, fish, or vegetables in water, along with herbs. It is used as a primary cooking liquid or to moisten or flavor foods as they cook.

**Brown Stock** is an amber liquid produced by simmering browned bones and meat with vegetables and aromatics.

**Caramelize** is when the sugars in a food starts to show from the application of heat.

**Clarified Butter** is butter from which all milk solids has been removed. The result is a clear yellow fat that can be heated to a higher temperature than butter before burning.

**Concassé** is a raw or cooked food prepared by peeling, seeding and coarsely chopping, dicing or grinding the item making it ready to be served or combined with other ingredients.

**Demi-Glace** A rich reduction of beef bones, vegetables, red wine and tomato paste.

**Dice** is a small cube cut, ¼ inch for small, 1/3 inch for medium and ¾ inch for large.

**Emulsify** is the process by which an oil or fat is gradually whisked into a base.

**Greek Yogurt** is yogurt that has been strained to remove the whey.

**Hone** to keep a knife sharp by the use of a whetstone.

**Infuse** is the process of steeping an aromatic or other item into a liquid.

**Light Stock** is a stock of veal bones, vegetables, herbs, and seasonings: used as the basis for sauces and soups.

**Mince** is to chop into very small pieces.

**Mirepoix** is a mixture of rough chopped vegetables comprised of 50% onions, 25% celery, and 25% carrots.

**Mother Sauce** is one of the five most basic sauces that every other sauce is based upon.

**Reduction** is cooking a liquid until its quantity decreased through evaporation. To reduce by one-half means that one-half of the original amount remains. To reduce by three-fourths means that one-fourth of the original amount remains.
Roux is a mixture of wheat flour and fat.

Sachet d Epices is a small cheesecloth sack containing herbs and spices used to add flavor to stocks. Translates literally to "bag of spices" in French.

Salty is one of the five taste profiles needed for a balanced flavor profile.

Sauté is a cooking method in which items are cooked quickly in a small amount of fat.

Shallot is a member of the onion family, with papery brown skin, purple-tinged white flesh, and a flavor resembling a cross between sweet onion and garlic.

Sharpen is to make your knife sharp to ensure cuts are precise and clean.

Slice to cut a thin piece from a larger piece.

Sour is one of the five taste profiles needed in a balanced flavor profile.

Stock is the fluid that results from simmering bones, aromatic vegetables and herbs for a protracted period of time. Bones, as opposed to meat, are employed because they are rich in the protein collagen.

Sweat is to cook an item in a small amount of fat until it softens and releases moisture.

Sweet is another of the five taste profiles needed to have a balanced flavor profile.

Tourné shaping vegetables into a football shape that has 7 sides.

Umami is the last flavor profile needed for a balance, it is the flavor known as earthy.
Getting Started with MyPlate
ChooseMyPlate.gov

MyPlate Icon

- MyPlate is part of a larger communications initiative based on 2010 Dietary Guidelines for Americans to help consumers make better food choices.
- MyPlate is designed to remind Americans to eat healthfully; it is not intended to change consumer behavior alone.
- MyPlate illustrates the five food groups using a familiar mealtime visual, a place setting.

ChooseMyPlate.gov

- The website features practical information and tips to help Americans build healthier diets.
- It features selected messages to help consumers focus on key behaviors. Selected messages include:
  - **Balancing Calories**
    - Enjoy your food, but eat less.
    - Avoid oversized portions.
  - **Foods to Increase**
    - Make half your plate fruits and vegetables.
    - Make at least half your grains whole grains.
    - Switch to fat-free or low-fat (1%) milk.
  - **Foods to Reduce**
    - Compare sodium in foods like soup, bread, and frozen meals—and choose foods with lower numbers.
    - Drink water instead of sugary drinks.

- ChooseMyPlate.gov includes much of the consumer and professional information formerly found on MyPyramid.gov.
Consumer Resources

*Let’s Eat for the Health of It*
*The 2010 Dietary Guidelines Brochure*

This brochure contains practical strategies to make healthy food choices. The Brochure highlights themes from the Guidelines such as *Balancing Calories, Foods to Reduce, and Foods to Increase.* This resource is available online as a PDF.

**10 Tips Nutrition Education Series**

The 10 Tips Nutrition Education Series provides consumers and professionals with easy-to-follow tips in a convenient, printable format. Educators can use them to support existing lessons, and consumers can choose one or more of these tip sheets to start making small changes toward healthier eating. These and many other printable items are also available in Spanish.

**Also on the Web**

- Sample Menus for a Week
- Food Group Based Recipes
- Historical Development of Food Guidance
- Nutrition Communicators Network for Partners – Application Forms
- All print-ready content

**MyPlate Style Guide**

USDA encourages the use of the MyPlate icon in a variety of applications, including textbooks and other educational materials. Any educator or consumer interested in using the image should refer to this Guide for all appropriate information.
Get your child on the path to healthy eating.

Focus on the meal and each other. Your child learns by watching you. Children are likely to copy your table manners, your likes and dislikes, and your willingness to try new foods.

Offer a variety of healthy foods. Let your child choose how much to eat. Children are more likely to enjoy a food when eating it is their own choice.

Be patient with your child. Sometimes new foods take time. Give children a taste at first and be patient with them. Offer new foods many times.

Let your children serve themselves. Teach your children to take small amounts at first. Let them know they can get more if they are still hungry.

Cook together. Eat together. Talk together. Make meal time family time.

ChooseMyPlate.gov
### Daily Food Plan

#### Use this Plan as a general guide.
- These food plans are based on average needs. Do not be concerned if your child does not eat the exact amounts suggested. Your child may need more or less than average. For example, food needs increase during growth spurts.
- Children's appetites vary from day to day. Some days they may eat less than these amounts; other days they may want more. Offer these amounts and let your child decide how much to eat.

#### What counts as:
- **½ cup of fruit?**
  - ½ cup mashed, sliced, or chopped fruit
  - ½ cup 100% fruit juice
  - ½ medium banana
  - 4-5 large strawberries
- **½ cup of veggies?**
  - ½ cup mashed, sliced, or chopped vegetables
  - ½ cup raw leafy greens
  - ½ cup vegetable juice
  - 1 small ear of corn
- **1 ounce of grains?**
  - 1 slice bread
  - 1 cup ready-to-eat cereal flakes
  - ½ cup cooked rice or pasta
  - 1 tortilla (6" across)
- **1 ounce of protein foods?**
  - 1 ounce cooked meat, poultry, or seafood
  - 1 egg
  - 1 Tablespoon peanut butter
  - ¼ cup cooked beans or peas (kidney, pinto, lentils)
- **½ cup of dairy?**
  - ½ cup milk
  - 4 ounces yogurt
  - ¼ ounce cheese
  - 1 string cheese

<table>
<thead>
<tr>
<th>Food group</th>
<th>2 year olds</th>
<th>3 year olds</th>
<th>4 and 5 year olds</th>
<th>What counts as:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fruits</strong></td>
<td>1 cup</td>
<td>1 - 1½ cups</td>
<td>1 - 1½ cups</td>
<td>½ cup of fruit?</td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td>1 cup</td>
<td>1½ cups</td>
<td>1½ - 2 cups</td>
<td>½ cup of veggies?</td>
</tr>
<tr>
<td><strong>Grains</strong></td>
<td>3 ounces</td>
<td>4 - 5 ounces</td>
<td>4 - 5 ounces</td>
<td>1 ounce of grains?</td>
</tr>
<tr>
<td>Make half your grains whole</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Protein Foods</strong></td>
<td>2 ounces</td>
<td>3 - 4 ounces</td>
<td>3 - 5 ounces</td>
<td>1 ounce of protein foods?</td>
</tr>
<tr>
<td><strong>Dairy</strong></td>
<td>2 cups</td>
<td>2 cups</td>
<td>2½ cups</td>
<td>½ cup of dairy?</td>
</tr>
</tbody>
</table>

Some foods are easy for your child to choke on while eating. Skip hard, small, whole foods, such as popcorn, nuts, seeds, and hard candy. Cut up foods such as hot dogs, grapes, and raw carrots into pieces smaller than the size of your child’s throat—about the size of a nickel.

There are many ways to divide the Daily Food Plan into meals and snacks. View the “Meal and Snack Patterns and Ideas” to see how these amounts might look on your preschooler’s plate at www.choosemyplate.gov/preschoolers.html.
What Foods Are in the Vegetable Group?

Any vegetable or 100% vegetable juice counts as a member of the Vegetable Group. Vegetables may be raw or cooked; fresh, frozen, canned, or dried/dehydrated; and may be whole, cut-up, or mashed.

Vegetables are organized into 5 subgroups, based on their nutrient content.

**Key Consumer Message**  *Make half your plate fruits and vegetables.*

**Commonly eaten vegetables in each subgroup**

<table>
<thead>
<tr>
<th>Dark Green Vegetables</th>
<th>Red &amp; orange vegetables</th>
<th>Other vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>bok choy</td>
<td>acorn squash</td>
<td>artichokes</td>
</tr>
<tr>
<td>broccoli</td>
<td>butternut squash</td>
<td>asparagus</td>
</tr>
<tr>
<td>collard greens</td>
<td>carrots</td>
<td>avocado</td>
</tr>
<tr>
<td>dark green leafy lettuce</td>
<td>Hubbard squash</td>
<td>bean sprouts</td>
</tr>
<tr>
<td>kale</td>
<td>pumpkin</td>
<td>beets</td>
</tr>
<tr>
<td>mesclun</td>
<td>red peppers</td>
<td>Brussels sprouts</td>
</tr>
<tr>
<td>mustard greens</td>
<td>sweet potatoes</td>
<td>cabbage</td>
</tr>
<tr>
<td>romaine lettuce</td>
<td>tomatoes</td>
<td>cauliflower</td>
</tr>
<tr>
<td>spinach</td>
<td>tomato juice</td>
<td>celery</td>
</tr>
<tr>
<td>turnip greens</td>
<td></td>
<td>cucumbers</td>
</tr>
<tr>
<td>watercress</td>
<td></td>
<td>eggplant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Starchy vegetables</th>
<th>Beans and peas*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>cassava</td>
<td>black beans</td>
<td>green beans</td>
</tr>
<tr>
<td>corn</td>
<td>black-eyed peas (mature, dry)</td>
<td>green peppers</td>
</tr>
<tr>
<td>fresh cowpeas, field peas, or black-eyed peas (not dry)</td>
<td>garbanzo beans (chickpeas)</td>
<td>iceber (head) lettuce</td>
</tr>
<tr>
<td>green bananas</td>
<td>kidney beans</td>
<td>mushrooms</td>
</tr>
<tr>
<td>green peas</td>
<td>lentils</td>
<td>okra</td>
</tr>
<tr>
<td>green lima beans</td>
<td>navy beans</td>
<td>onions</td>
</tr>
<tr>
<td>plantains</td>
<td>pinto beans</td>
<td>turnips</td>
</tr>
<tr>
<td>potatoes</td>
<td>soy beans</td>
<td>wax beans</td>
</tr>
<tr>
<td>taro</td>
<td>split peas</td>
<td>zucchini</td>
</tr>
<tr>
<td>water chestnuts</td>
<td>white beans</td>
<td></td>
</tr>
</tbody>
</table>

http://www.choosemyplate.gov/food-groups/vegetables.html
How Many Vegetables Are Needed Daily or Weekly?

The amount of vegetables you need to eat depends on your age, sex, and level of physical activity. Recommended total daily amounts are shown in the first chart. Recommended weekly amounts from each vegetable subgroup are shown in the second chart.

<table>
<thead>
<tr>
<th>Daily recommendation*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children</strong></td>
<td></td>
</tr>
<tr>
<td>2-3 years old</td>
<td>1 cup**</td>
</tr>
<tr>
<td>4-8 years old</td>
<td>1½ cups**</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
</tr>
<tr>
<td>9-13 years old</td>
<td>2 cups**</td>
</tr>
<tr>
<td>14-18 years old</td>
<td>2½ cups**</td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td></td>
</tr>
<tr>
<td>9-13 years old</td>
<td>2½ cups**</td>
</tr>
<tr>
<td>14-18 years old</td>
<td>3 cups**</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
</tr>
<tr>
<td>19-30 years old</td>
<td>2½ cups**</td>
</tr>
<tr>
<td>31-50 years old</td>
<td>2½ cups**</td>
</tr>
<tr>
<td>51+ years old</td>
<td>2 cups**</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
</tr>
<tr>
<td>19-30 years old</td>
<td>3 cups**</td>
</tr>
<tr>
<td>31-50 years old</td>
<td>3 cups**</td>
</tr>
<tr>
<td>51+ years old</td>
<td>2½ cups**</td>
</tr>
</tbody>
</table>

*These amounts are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

Vegetable subgroup recommendations are given as amounts to eat WEEKLY. It is not necessary to eat vegetables from each subgroup daily. However, over a week, try to consume the amounts listed from each subgroup as a way to reach your daily intake recommendation.

http://www.choosemyplate.gov/food-groups/vegetables-amount.html
### AMOUNT PER WEEK**

<table>
<thead>
<tr>
<th></th>
<th>Dark green vegetables</th>
<th>Red and orange vegetables</th>
<th>Beans and peas</th>
<th>Starchy vegetables</th>
<th>Other vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2–3 yrs old</td>
<td>½ cup</td>
<td>2½ cups</td>
<td>½ cup</td>
<td>2 cups</td>
<td>1½ cups</td>
</tr>
<tr>
<td>4–8 yrs old</td>
<td>1 cup</td>
<td>3 cups</td>
<td>½ cup</td>
<td>3½ cups</td>
<td>2½ cups</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9–13 yrs old</td>
<td>1½ cups</td>
<td>4 cups</td>
<td>1 cup</td>
<td>4 cups</td>
<td>3½ cups</td>
</tr>
<tr>
<td>14–18 yrs old</td>
<td>1½ cups</td>
<td>5½ cups</td>
<td>1½ cups</td>
<td>5 cups</td>
<td>4 cups</td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9–13 yrs old</td>
<td>1½ cups</td>
<td>5½ cups</td>
<td>1½ cups</td>
<td>5 cups</td>
<td>4 cups</td>
</tr>
<tr>
<td>14–18 yrs old</td>
<td>2 cups</td>
<td>6 cups</td>
<td>2 cups</td>
<td>6 cups</td>
<td>5 cups</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19–30 yrs old</td>
<td>1½ cups</td>
<td>5½ cups</td>
<td>1½ cups</td>
<td>5 cups</td>
<td>4 cups</td>
</tr>
<tr>
<td>31–50 yrs old</td>
<td>1½ cups</td>
<td>5½ cups</td>
<td>1½ cups</td>
<td>5 cups</td>
<td>4 cups</td>
</tr>
<tr>
<td>51+ yrs old</td>
<td>1½ cups</td>
<td>4 cups</td>
<td>1 cup</td>
<td>4 cups</td>
<td>3½ cups</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19–30 yrs old</td>
<td>2 cups</td>
<td>6 cups</td>
<td>2 cups</td>
<td>6 cups</td>
<td>5 cups</td>
</tr>
<tr>
<td>31–50 yrs old</td>
<td>2 cups</td>
<td>6 cups</td>
<td>2 cups</td>
<td>6 cups</td>
<td>5 cups</td>
</tr>
<tr>
<td>51+ yrs old</td>
<td>1½ cups</td>
<td>5½ cups</td>
<td>1½ cups</td>
<td>5 cups</td>
<td>4 cups</td>
</tr>
</tbody>
</table>

### Key Consumer Message

Make half your plate fruits and vegetables.

[http://www.choosemyplate.gov/food-groups/vegetables-amount.html](http://www.choosemyplate.gov/food-groups/vegetables-amount.html)
What Counts as a Cup of Vegetables?

In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the Vegetable Group.

The chart lists specific amounts that count as 1 cup of vegetables (in some cases equivalents for ½ cup are also shown) towards your recommended intake.

<table>
<thead>
<tr>
<th>Dark Green Vegetables</th>
<th>Amount that counts as 1 cup of vegetables</th>
<th>Amount that counts as ½ cup of vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broccoli</td>
<td>1 cup chopped or florets</td>
<td></td>
</tr>
<tr>
<td>Greens (collards, mustard greens,</td>
<td>3 spears 5” long raw or cooked</td>
<td></td>
</tr>
<tr>
<td>turnip greens, kale)</td>
<td>1 cup cooked</td>
<td></td>
</tr>
<tr>
<td>Spinach</td>
<td>1 cup, cooked</td>
<td></td>
</tr>
<tr>
<td>Raw leafy greens: Spinach, romaine,</td>
<td>2 cups raw is equivalent to 1 cup of</td>
<td>1 cup raw is equivalent to ½ cup of</td>
</tr>
<tr>
<td>watercress, dark green leafy lettuce,</td>
<td>vegetables</td>
<td>vegetables</td>
</tr>
<tr>
<td>endive, escarole</td>
<td>2 cups raw is equivalent to 1 cup of</td>
<td></td>
</tr>
<tr>
<td>vegetables</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Red and Orange Vegetables</th>
<th>Amount that counts as 1 cup of vegetables</th>
<th>Amount that counts as ½ cup of vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrots</td>
<td>1 cup, strips, slices, or chopped, raw</td>
<td>1 medium carrot</td>
</tr>
<tr>
<td></td>
<td>or cooked 2 medium</td>
<td>About 6 baby carrots</td>
</tr>
<tr>
<td></td>
<td>1 cup baby carrots (about 12)</td>
<td></td>
</tr>
<tr>
<td>Pumpkin</td>
<td>1 cup mashed, cooked</td>
<td>1 small pepper</td>
</tr>
<tr>
<td>Red peppers</td>
<td>1 cup chopped, raw, or cooked 1 large</td>
<td></td>
</tr>
<tr>
<td></td>
<td>pepper (3” diameter, 3¾” long)</td>
<td></td>
</tr>
<tr>
<td>Tomatoes</td>
<td>1 cup large raw whole (3”)</td>
<td>1 small raw whole (2¼” diameter)</td>
</tr>
<tr>
<td></td>
<td>1 cup chopped or sliced, raw, canned,</td>
<td>1 medium canned</td>
</tr>
<tr>
<td></td>
<td>or cooked 1 cup</td>
<td>½ cup</td>
</tr>
<tr>
<td>Tomato juice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweet potato</td>
<td>1 large baked (2¾” or more diameter)</td>
<td>½ acorn squash, baked = ¾ cup</td>
</tr>
<tr>
<td>Winter squash (acorn, butternut,</td>
<td>1 cup cubed, cooked</td>
<td></td>
</tr>
<tr>
<td>hubbard)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beans and Peas</td>
<td>1 cup whole or mashed, cooked</td>
<td></td>
</tr>
</tbody>
</table>

http://www.choosemyplate.gov/food-groups/vegetables-counts.html
### Starchy Vegetables

<table>
<thead>
<tr>
<th>Item</th>
<th>1 cup</th>
<th>1 large ear (8” to 9” long)</th>
<th>1 small ear (about 6” long)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn, yellow or white</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green peas</td>
<td>1 cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White potatoes</td>
<td>1 cup diced, mashed</td>
<td>1 medium boiled or baked potato (2½” to 3” diameter)</td>
<td>French fried: 20 medium to long strips (2½” to 4” long) (Contains added calories from solid fats.)</td>
</tr>
</tbody>
</table>

### Other Vegetables

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount that counts as 1 cup of vegetables</th>
<th>Amount that counts as ½ cup of vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bean sprouts</td>
<td>1 cup cooked</td>
<td></td>
</tr>
<tr>
<td>Cabbage, green</td>
<td>1 cup, chopped or shredded raw or cooked</td>
<td></td>
</tr>
<tr>
<td>Cauliflower</td>
<td>1 cup pieces or florets raw or cooked</td>
<td></td>
</tr>
<tr>
<td>Celery</td>
<td>1 cup, diced or sliced, raw or cooked</td>
<td></td>
</tr>
<tr>
<td>Cucumbers</td>
<td>1 cup raw, sliced or chopped</td>
<td></td>
</tr>
<tr>
<td>Green or wax beans</td>
<td>1 cup cooked</td>
<td></td>
</tr>
<tr>
<td>Green peppers</td>
<td>1 cup, chopped, raw or cooked</td>
<td>1 large pepper (3” diameter, 3¾” long)</td>
</tr>
<tr>
<td>Lettuce, iceberg or head</td>
<td>2 cups raw, shredded or chopped = equivalent to 1 cup of vegetables</td>
<td>1 cup raw, shredded or chopped = equivalent to ½ cup of vegetables</td>
</tr>
<tr>
<td>Mushrooms</td>
<td>1 cup raw or cooked</td>
<td></td>
</tr>
<tr>
<td>Onions</td>
<td>1 cup chopped, raw or cooked</td>
<td></td>
</tr>
<tr>
<td>Summer squash or zucchini</td>
<td>1 cup cooked, sliced or diced</td>
<td></td>
</tr>
</tbody>
</table>

**Key Consumer Message**  
*Make half your plate fruits and vegetables.*
Beans and Peas Are Unique Foods

Beans and peas are the mature forms of legumes. They include kidney beans, pinto beans, black beans, lima beans, black-eyed peas, garbanzo beans (chickpeas), split peas and lentils. They are available in dry, canned, and frozen forms. These foods are excellent sources of plant protein, and also provide other nutrients such as iron and zinc. They are similar to meats, poultry, and fish in their contribution of these nutrients. Therefore, they are considered part of the Protein Foods Group. Many people consider beans and peas as vegetarian alternatives for meat. However, they are also considered part of the Vegetable Group because they are excellent sources of dietary fiber and nutrients such as folate and potassium. These nutrients, which are often low in the diet of many Americans, are also found in other vegetables.

Because of their high nutrient content, consuming beans and peas is recommended for everyone, including people who also eat meat, poultry, and fish regularly. The USDA Food Patterns classify beans and peas as a subgroup of the Vegetable Group. The USDA Food Patterns also indicate that beans and peas may be counted as part of the Protein Foods Group. Individuals can count beans and peas as either a vegetable or a protein food.

Green peas, green lima beans, and green (string) beans are not considered to be part of the beans and peas subgroup. Green peas and green lima beans are similar to other starchy vegetables and are grouped with them. Green beans are grouped with other vegetables such as onions, lettuce, celery, and cabbage because their nutrient content is similar to those foods.

How to Count Beans and Peas in the USDA Food Patterns:

Generally, individuals who regularly eat meat, poultry, and fish would count beans and peas in the Vegetable Group. Vegetarians, vegans, and individuals who seldom eat meat, poultry, or fish would count some of the beans and peas they eat in the Protein Foods Group. Here’s an example for both ways:

Count the number of ounce-equivalents of all meat, poultry, fish, eggs, nuts, and seeds eaten.

1. If the total is equal to or more than the suggested intake from the Protein Foods Group (which ranges from 2 ounce-equivalents at 1000 calories to 7 ounce-equivalents at 2800 calories and above) then count any beans or peas eaten as part of the beans and peas subgroup in the Vegetable Group. OR
2. If the total is less than the suggested intake from the Protein Foods Group, then count any beans and peas eaten toward the suggested intake level until it is reached. (One-fourth cup of cooked beans or peas counts as 1 ounce equivalent in the Protein Foods Group.) After the suggested intake level in the Protein Foods Group is reached, count any additional beans or peas eaten as part of the beans and peas subgroup in the Vegetable Group.

**Examples**

1. **Example 1: (For the 2000 Calorie Food Pattern)**
   Foods eaten (Protein Foods Group only – not a complete daily list)
   - 3½ ounces chicken
   - 2 ounces tuna fish
   - ½ cup refried beans
   
   The 3½ ounces of chicken and 2 ounces of tuna fish equal 5½ ounce-equivalents in the Protein Foods Group, which meets the recommendation at this calorie level. Therefore, the ½ cup of refried beans counts as ½ cup of vegetables towards meeting the 1½ cups per week recommendation for beans and peas in the 2000 calorie pattern.

2. **Example 2: (For the 2000 Calorie Food Pattern)**
   Foods eaten (Protein Foods Group only – not a complete daily list)
   - 2 eggs
   - 1½ Tbsp. peanut butter
   - ½ cup chickpeas
   
   The 2 eggs and 1½ Tbsp. peanut butter equal 3½ ounce-equivalents in the Protein Foods Group. Two more ounces are needed to meet the 5½ ounce recommendation for this group. Since the daily recommendation for the Protein Foods Group has not been met, these remaining 2 ounce-equivalents are provided by the ½ cup of chickpeas. This ½ cup of chickpeas would not count toward meeting the 1½ cups per week recommendation for the beans and peas vegetable subgroup in the 2000 calorie pattern. Instead, it would count as part of the Protein Foods Group.

**Key Consumer Message**  
*Make half your plate fruits and vegetables.*
Why Is it Important to Eat Vegetables?

Eating vegetables provides health benefits — people who eat more vegetables and fruits as part of an overall healthy diet are likely to have a reduced risk of some chronic diseases. Vegetables provide nutrients vital for health and maintenance of your body.

**Health Benefits**

- Eating a diet rich in vegetables and fruits as part of an overall healthy diet may reduce risk for heart disease, including heart attack and stroke.
- Eating a diet rich in some vegetables and fruits as part of an overall healthy diet may protect against certain types of cancers.
- Diets rich in foods containing fiber, such as some vegetables and fruits, may reduce the risk of heart disease, obesity, and type 2 diabetes.
- Eating vegetables and fruits rich in potassium as part of an overall healthy diet may lower blood pressure, and may also reduce the risk of developing kidney stones and help to decrease bone loss.
- Eating foods such as vegetables that are lower in calories per cup instead of some other higher-calorie food may be useful in helping to lower calorie intake.

**Nutrients**

- Most vegetables are naturally low in fat and calories. None have cholesterol. (Sauces or seasonings may add fat, calories, or cholesterol.)
- Vegetables are important sources of many nutrients, including potassium, dietary fiber, folate (folic acid), vitamin A, and vitamin C.
- Diets rich in potassium may help to maintain healthy blood pressure. Vegetable sources of potassium include sweet potatoes, white potatoes, white beans, tomato products (paste, sauce, and juice), beet greens, soybeans, lima beans, spinach, lentils, and kidney beans.

http://www.choosemyplate.gov/food-groups/vegetables-why.html
Dietary fiber from vegetables, as part of an overall healthy diet, helps reduce blood cholesterol levels and may lower risk of heart disease. Fiber is important for proper bowel function. It helps reduce constipation and diverticulosis. Fiber-containing foods such as vegetables help provide a feeling of fullness with fewer calories.

Folate (folic acid) helps the body form red blood cells. Women of childbearing age who may become pregnant should consume adequate folate from foods, and in addition 400 mcg of synthetic folic acid from fortified foods or supplements. This reduces the risk of neural tube defects, spina bifida, and anencephaly during fetal development.

Vitamin A keeps eyes and skin healthy and helps to protect against infections.

Vitamin C helps heal cuts and wounds and keeps teeth and gums healthy. Vitamin C aids in iron absorption.

**Key Consumer Message**  *Make half your plate fruits and vegetables.*
Tips to Help You Eat Vegetables

In General:

- Buy fresh vegetables in season. They cost less and are likely to be at their peak flavor.
- Stock up on frozen vegetables for quick and easy cooking in the microwave.
- Buy vegetables that are easy to prepare. Pick up pre-washed bags of salad greens and add baby carrots or grape tomatoes for a salad in minutes. Buy packages of veggies such as baby carrots or celery sticks for quick snacks.
- Use a microwave to quickly “zap” vegetables. White or sweet potatoes can be baked quickly this way.
- Vary your veggie choices to keep meals interesting.
- Try crunchy vegetables, raw or lightly steamed.

For the Best Nutritional Value:

- Select vegetables with more potassium often, such as sweet potatoes, white potatoes, white beans, tomato products (paste, sauce, and juice), beet greens, soybeans, lima beans, spinach, lentils, and kidney beans.
- Sauces or seasonings can add calories, saturated fat, and sodium to vegetables. Use the Nutrition Facts label to compare the calories and % Daily Value for saturated fat and sodium in plain and seasoned vegetables.
- Prepare more foods from fresh ingredients to lower sodium intake. Most sodium in the food supply comes from packaged or processed foods.
- Buy canned vegetables labeled "reduced sodium," "low sodium," or "no salt added." If you want to add a little salt it will likely be less than the amount in the regular canned product.
**At Meals:**

- Plan some meals around a vegetable main dish, such as a vegetable stir-fry or soup. Then add other foods to complement it.
- Try a main dish salad for lunch. Go light on the salad dressing.
- Include a green salad with your dinner every night.
- Shred carrots or zucchini into meatloaf, casseroles, quick breads, and muffins.
- Include chopped vegetables in pasta sauce or lasagna.
- Order a veggie pizza with toppings like mushrooms, green peppers, and onions, and ask for extra veggies.
- Use pureed, cooked vegetables such as potatoes to thicken stews, soups and gravies. These add flavor, nutrients, and texture.
- Grill vegetable kabobs as part of a barbecue meal. Try tomatoes, mushrooms, green peppers, and onions.

**Make Vegetables More Appealing:**

- Many vegetables taste great with a dip or dressing. Try a low-fat salad dressing with raw broccoli, red and green peppers, celery sticks or cauliflower.
- Add color to salads by adding baby carrots, shredded red cabbage, or spinach leaves. Include in-season vegetables for variety through the year.
- Include beans or peas in flavorful mixed dishes, such as chili or minestrone soup.
- Decorate plates or serving dishes with vegetable slices.
- Keep a bowl of cut-up vegetables in a see-through container in the refrigerator. Carrot and celery sticks are traditional, but consider red or green pepper strips, broccoli florets, or cucumber slices.
**Vegetable Tips for Children:**

- Set a good example for children by eating vegetables with meals and as snacks.
- Let children decide on the dinner vegetables or what goes into salads.
- Depending on their age, children can help shop for, clean, peel, or cut up vegetables.
- Allow children to pick a new vegetable to try while shopping.
- Use cut-up vegetables as part of afternoon snacks.
- Children often prefer foods served separately. So, rather than mixed vegetables try serving two vegetables separately.

**Keep It Safe:**

- Rinse vegetables before preparing or eating them. Under clean, running water, rub vegetables briskly with your hands to remove dirt and surface microorganisms. Dry with a clean cloth towel or paper towel after rinsing.
- Keep vegetables separate from raw meat, poultry and seafood while shopping, preparing, or storing.

**Key Consumer Message**  *Make half your plate fruits and vegetables.*
FRUITS
What Foods Are in the Fruit Group?

Any fruit or 100% fruit juice counts as part of the Fruit Group. Fruits may be fresh, canned, frozen, or dried, and may be whole, cut-up, or pureed.

**Key Consumer Message**  
Make half your plate fruits and vegetables.

<table>
<thead>
<tr>
<th>Commonly eaten fruits</th>
<th>Berries</th>
<th>Melons</th>
<th>Mixed fruits</th>
<th>100% Fruit juice</th>
</tr>
</thead>
<tbody>
<tr>
<td>o  Apples</td>
<td>o  strawberries</td>
<td>o  cantaloupe</td>
<td>o  fruit cocktail</td>
<td>o  orange</td>
</tr>
<tr>
<td>o  Apricots</td>
<td>o  blueberries</td>
<td>o  honeydew</td>
<td></td>
<td>o  apple</td>
</tr>
<tr>
<td>o  Bananas</td>
<td>o  raspberries</td>
<td>o  watermelon</td>
<td></td>
<td>o  grape</td>
</tr>
<tr>
<td>o  Cherries</td>
<td></td>
<td></td>
<td></td>
<td>o  grapefruit</td>
</tr>
<tr>
<td>o  Grapefruit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Grapes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Kiwi fruit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Lemons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Limes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Mangoes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Nectarines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Oranges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Peaches</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Pears</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Papaya</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Pineapple</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Plums</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Prunes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Raisins</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o  Tangerines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

http://www.choosemyplate.gov/food-groups/ fruits.html
How Much Fruit Is Needed Daily?

The amount of fruit you need to eat depends on age, sex, and level of physical activity. Recommended daily amounts are shown in the chart.

<table>
<thead>
<tr>
<th>Daily recommendation*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children</strong></td>
<td></td>
</tr>
<tr>
<td>2-3 years old</td>
<td>1 cup**</td>
</tr>
<tr>
<td>4-8 years old</td>
<td>1 to 1 ½ cups**</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
</tr>
<tr>
<td>9-13 years old</td>
<td>1 ½ cups**</td>
</tr>
<tr>
<td>14-18 years old</td>
<td>1 ½ cups**</td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td></td>
</tr>
<tr>
<td>9-13 years old</td>
<td>1 ½ cups**</td>
</tr>
<tr>
<td>14-18 years old</td>
<td>2 cups**</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
</tr>
<tr>
<td>19-30 years old</td>
<td>2 cups**</td>
</tr>
<tr>
<td>31-50 years old</td>
<td>1 ½ cups**</td>
</tr>
<tr>
<td>51+ years old</td>
<td>1 ½ cups**</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
</tr>
<tr>
<td>19-30 years old</td>
<td>2 cups**</td>
</tr>
<tr>
<td>31-50 years old</td>
<td>2 cups**</td>
</tr>
<tr>
<td>51+ years old</td>
<td>2 cups**</td>
</tr>
</tbody>
</table>

*These amounts are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

**Key Consumer Message**  *Make half your plate fruits and vegetables.*
What Counts as a Cup of Fruit?

In general, 1 cup of fruit or 100% fruit juice, or ½ cup of dried fruit can be considered as 1 cup from the Fruit Group. The following specific amounts count as 1 cup of fruit (in some cases, other equivalent amounts are also shown) towards your daily recommended intake:

<table>
<thead>
<tr>
<th>Amount that counts as 1 cup of fruit</th>
<th>Other amounts (count as ½ cup of fruit unless noted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>½ large (3.25&quot; diameter)</td>
</tr>
<tr>
<td></td>
<td>1 small (2.5&quot; diameter)</td>
</tr>
<tr>
<td></td>
<td>1 cup sliced or chopped, raw or cooked</td>
</tr>
<tr>
<td></td>
<td>½ cup sliced or chopped, raw or cooked</td>
</tr>
<tr>
<td>Applesauce</td>
<td>1 cup</td>
</tr>
<tr>
<td></td>
<td>1 snack container (4 oz)</td>
</tr>
<tr>
<td>Banana</td>
<td>1 cup sliced</td>
</tr>
<tr>
<td></td>
<td>1 small (less than 6” long)</td>
</tr>
<tr>
<td></td>
<td>1 large (8&quot; to 9&quot; long)</td>
</tr>
<tr>
<td>Cantaloupe</td>
<td>1 cup diced or melon balls</td>
</tr>
<tr>
<td></td>
<td>1 medium wedge (1/8 of a med. melon)</td>
</tr>
<tr>
<td>Grapes</td>
<td>1 cup whole or cut-up</td>
</tr>
<tr>
<td></td>
<td>32 seedless grapes</td>
</tr>
<tr>
<td></td>
<td>16 seedless grapes</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>1 medium (4&quot; diameter)</td>
</tr>
<tr>
<td></td>
<td>½ medium (4&quot; diameter)</td>
</tr>
<tr>
<td></td>
<td>1 cup sections</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed fruit (fruit cocktail)</td>
<td>1 cup diced or sliced, raw or canned, drained</td>
</tr>
<tr>
<td></td>
<td>1 snack container (4 oz) drained = 3/8 cup</td>
</tr>
<tr>
<td>Orange</td>
<td>1 large (3-1/16&quot; diameter)</td>
</tr>
<tr>
<td></td>
<td>1 cup sections</td>
</tr>
<tr>
<td></td>
<td>1 small (2-3/8&quot; diameter)</td>
</tr>
<tr>
<td>Orange, mandarin</td>
<td>1 cup canned, drained</td>
</tr>
<tr>
<td>Peach</td>
<td>1 large (2 ¾&quot; diameter)</td>
</tr>
<tr>
<td></td>
<td>1 cup sliced or diced, raw, cooked, or canned,</td>
</tr>
<tr>
<td></td>
<td>1 small (2&quot; diameter)</td>
</tr>
<tr>
<td></td>
<td>1 snack container (4 oz) drained = 3/8 cup</td>
</tr>
<tr>
<td></td>
<td>2 halves, canned</td>
</tr>
</tbody>
</table>

http://www.choosemyplate.gov/food-groups/fruits-counts.html
<table>
<thead>
<tr>
<th>Fruit</th>
<th>Serving Size Description</th>
<th>Equivalent Cup Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pear</td>
<td>1 medium pear (2.5 per lb), 1 cup sliced or diced, raw, cooked, or canned, drained</td>
<td>1 snack container (4 oz) drained = 3/8 cup</td>
</tr>
<tr>
<td>Pineapple</td>
<td>1 cup chunks, sliced or crushed, raw, cooked or canned, drained</td>
<td>1 snack container (4 oz) drained = 3/8 cup</td>
</tr>
<tr>
<td>Plum</td>
<td>1 cup sliced raw or cooked, 3 medium or 2 large plums</td>
<td>1 large plum</td>
</tr>
<tr>
<td>Strawberries</td>
<td>About 8 large berries, 1 cup whole, halved, or sliced, fresh or frozen</td>
<td>½ cup whole, halved, or sliced</td>
</tr>
<tr>
<td>Watermelon</td>
<td>1 small wedge (1” thick), 1 cup diced or balls</td>
<td>6 melon balls</td>
</tr>
<tr>
<td>Dried fruit (raisins, prunes, apricots, etc.)</td>
<td>½ cup dried fruit is equivalent to 1 cup fruit: ½ cup raisins, ½ cup prunes, ½ cup dried apricots</td>
<td>¼ cup dried fruit is equivalent to ½ cup fruit 1 small box raisins (1.5 oz)</td>
</tr>
<tr>
<td>100% fruit juice (orange, apple, grape, grapefruit, etc.)</td>
<td>1 cup</td>
<td>½ cup</td>
</tr>
</tbody>
</table>

**Key Consumer Message**  *Make half your plate fruits and vegetables.*
Why is it Important to Eat Fruit?

Eating fruit provides health benefits — people who eat more fruits and vegetables as part of an overall healthy diet are likely to have a reduced risk of some chronic diseases. Fruits provide nutrients vital for health and maintenance of your body.

Health Benefits

- Eating a diet rich in vegetables and fruits as part of an overall healthy diet may reduce risk for heart disease, including heart attack and stroke.
- Eating a diet rich in some vegetables and fruits as part of an overall healthy diet may protect against certain types of cancers.
- Diets rich in foods containing fiber, such as some vegetables and fruits, may reduce the risk of heart disease, obesity, and type 2 diabetes.
- Eating vegetables and fruits rich in potassium as part of an overall healthy diet may lower blood pressure, and may also reduce the risk of developing kidney stones and help to decrease bone loss.
- Eating foods such as fruits that are lower in calories per cup instead of some other higher-calorie food may be useful in helping to lower calorie intake.

Nutrients

- Most fruits are naturally low in fat, sodium, and calories. None have cholesterol.
- Fruits are sources of many essential nutrients that are under consumed, including potassium, dietary fiber, vitamin C, and folate (folic acid).
- Diets rich in potassium may help to maintain healthy blood pressure. Fruit sources of potassium include bananas, prunes and prune juice, dried peaches and apricots, cantaloupe, honeydew melon, and orange juice.
- Dietary fiber from fruits, as part of an overall healthy diet, helps reduce blood cholesterol levels and may lower risk of heart disease. Fiber is important for proper bowel function. It helps reduce constipation and diverticulosis. Fiber-containing foods such as fruits help provide a feeling of fullness with fewer calories. Whole or cut-up fruits are sources of dietary fiber; fruit juices contain little or no fiber.
- Vitamin C is important for growth and repair of all body tissues, helps heal cuts and wounds, and keeps teeth and gums healthy.
Folate (folic acid) helps the body form red blood cells. Women of childbearing age who may become pregnant should consume adequate folate from foods, and in addition 400 mcg of synthetic folic acid from fortified foods or supplements. This reduces the risk of neural tube defects, spina bifida, and anencephaly during fetal development.

**Key Consumer Message**  *Make half your plate fruits and vegetables.*
Tips to Help You Eat Fruits

In General:
- Keep a bowl of whole fruit on the table, counter, or in the refrigerator.
- Refrigerate cut-up fruit to store for later.
- Buy fresh fruits in season when they may be less expensive and at their peak flavor.
- Buy fruits that are dried, frozen, and canned (in water or 100% juice) as well as fresh, so that you always have a supply on hand.
- Consider convenience when shopping. Try pre-cut packages of fruit (such as melon or pineapple chunks) for a healthy snack in seconds. Choose packaged fruits that do not have added sugars.

For the Best Nutritional Value:
- Make most of your choices whole or cut-up fruit rather than juice, for the benefits dietary fiber provides.
- Select fruits with more potassium often, such as bananas, prunes and prune juice, dried peaches and apricots, and orange juice.
- When choosing canned fruits, select fruit canned in 100% fruit juice or water rather than syrup.
- Vary your fruit choices. Fruits differ in nutrient content.

At Meals:
- At breakfast, top your cereal with bananas or peaches; add blueberries to pancakes; drink 100% orange or grapefruit juice. Or, mix fresh fruit with plain fat-free or low-fat yogurt.
- At lunch, pack a tangerine, banana, or grapes to eat, or choose fruits from a salad bar. Individual containers of fruits like peaches or applesauce are easy and convenient.
- At dinner, add crushed pineapple to coleslaw, or include orange sections or grapes in a tossed salad.
- Make a Waldorf salad, with apples, celery, walnuts, and a low-calorie salad dressing.

http://www.choosemyplate.gov/food-groups/fruits-tips.html
Try meat dishes that incorporate fruit, such as chicken with apricots or mangoes.

Add fruit like pineapple or peaches to kabobs as part of a barbecue meal.

For dessert, have baked apples, pears, or a fruit salad.

As Snacks:

- Cut-up fruit makes a great snack. Either cut them yourself, or buy pre-cut packages of fruit pieces like pineapples or melons. Or, try whole fresh berries or grapes.

- Dried fruits also make a great snack. They are easy to carry and store well. Because they are dried, ¼ cup is equivalent to ½ cup of other fruits.

- Keep a package of dried fruit in your desk or bag. Some fruits that are available dried include apricots, apples, pineapple, bananas, cherries, figs, dates, cranberries, blueberries, prunes (dried plums), and raisins (dried grapes).

- As a snack, spread peanut butter on apple slices or top plain fat-free or low-fat yogurt with berries or slices of kiwi fruit.

- Frozen juice bars (100% juice) make healthy alternatives to high-fat snacks.

Make Fruit More Appealing:

- Many fruits taste great with a dip or dressing. Try fat-free or low-fat yogurt as a dip for fruits like strawberries or melons.

- Make a fruit smoothie by blending fat-free or low-fat milk or yogurt with fresh or frozen fruit. Try bananas, peaches, strawberries, or other berries.

- Try unsweetened applesauce as a lower calorie substitute for some of the oil when baking cakes.

- Try different textures of fruits. For example, apples are crunchy, bananas are smooth and creamy, and oranges are juicy.

- For fresh fruit salads, mix apples, bananas, or pears with acidic fruits like oranges, pineapple, or lemon juice to keep them from turning brown.
Fruit Tips for Children:
- Set a good example for children by eating fruit every day with meals or as snacks.
- Offer children a choice of fruits for lunch.
- Depending on their age, children can help shop for, clean, peel, or cut up fruits.
- While shopping, allow children to pick out a new fruit to try later at home.
- Decorate plates or serving dishes with fruit slices.
- Top off a bowl of cereal with some berries. Or, make a smiley face with sliced bananas for eyes, raisins for a nose, and an orange slice for a mouth.
- Offer raisins or other dried fruits instead of candy.
- Make fruit kabobs using pineapple chunks, bananas, grapes, and berries.
- Pack a juice box (100% juice) in children’s lunches instead of soda or other sugar-sweetened beverages.
- Look for and choose fruit options, such as sliced apples, mixed fruit cup, or 100% fruit juice in fast food restaurants.
- Offer fruit pieces and 100% fruit juice to children. There is often little fruit in “fruit-flavored” beverages or chewy fruit snacks.

Keep It Safe:
- Rinse fruits before preparing or eating them. Under clean, running water, rub fruits briskly with your hands to remove dirt and surface microorganisms. Dry with a clean cloth towel or paper towel after rinsing.
- Keep fruits separate from raw meat, poultry and seafood while shopping, preparing, or storing.

Key Consumer Message  Make half your plate fruits and vegetables.
Grains
What Foods Are in the Grains Group?

Any food made from wheat, rice, oats, cornmeal, barley or another cereal grain is a grain product. Bread, pasta, oatmeal, breakfast cereals, tortillas, and grits are examples of grain products.

Grains are divided into 2 subgroups, **Whole Grains** and **Refined Grains**.

**Whole Grains** contain the entire grain kernel — the bran, germ, and endosperm. Examples include:
- whole-wheat flour
- bulgur (cracked wheat)
- oatmeal
- whole cornmeal
- brown rice

**Refined Grains** have been milled, a process that removes the bran and germ. This is done to give grains a finer texture and improve their shelf life, but it also removes dietary fiber, iron, and many B vitamins. Some examples of refined grain products are:
- white flour
- de-germed cornmeal
- white bread
- white rice

Most refined grains are *enriched*. This means certain B vitamins (thiamin, riboflavin, niacin, folic acid) and iron are added back after processing. Fiber is not added back to enriched grains. Check the ingredient list on refined grain products to make sure that the word "enriched" is included in the grain name. Some food products are made from mixtures of whole grains and refined grains.

**Key Consumer Message** *Make at least half of your grains whole grains.*
Commonly eaten grain products

**Whole Grains**
- amaranth
- brown rice
- buckwheat
- bulgur (cracked wheat)
- millet
- oatmeal
- popcorn
- rolled oats
- quinoa
- sorghum
- triticale
- whole grain barley
- whole grain cornmeal
- whole rye
- whole wheat bread
- whole wheat crackers
- whole wheat pasta

- whole wheat sandwich buns and rolls
- whole wheat tortillas
- wild rice

**Ready-to-eat breakfast cereals**
- whole wheat cereal flakes
- Muesli

**Refined Grains**
- cornbread*
- corn tortillas*
- couscous*
- crackers*
- flour tortillas*
- grits
- noodles*
- pitas*
- pretzels
- white bread
- white sandwich buns and rolls
- white rice

**Pastas**
- spaghetti
- macaroni

**Ready-to-eat breakfast cereals**
- corn flakes

* Most of these products are made from refined grains. Some are made from whole grains. Check the ingredient list for the words "whole grain" or "whole wheat" to decide if they are made from a whole grain. Some foods are made from a mixture of whole and refined grains.

Some grain products contain significant amounts of bran. Bran provides fiber, which is important for health. However, products with added bran or bran alone (e.g., oat bran) are not necessarily whole grain products.
How Many Grain Foods Are Needed Daily?

The amount of grains you need to eat depends on your age, sex, and level of physical activity. Recommended daily amounts are listed in the chart. Most Americans consume enough grains, but few are whole grains. **At least half of all the grains eaten should be whole grains.**

<table>
<thead>
<tr>
<th></th>
<th>Daily recommendation*</th>
<th>Daily minimum amount of whole grains</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3 years old</td>
<td>3 ounce equivalents**</td>
<td>1 ½ ounce equivalents**</td>
</tr>
<tr>
<td>4-8 years old</td>
<td>5 ounce equivalents**</td>
<td>2 ½ ounce equivalents**</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-13 years old</td>
<td>5 ounce equivalents**</td>
<td>3 ounce equivalents**</td>
</tr>
<tr>
<td>14-18 years old</td>
<td>6 ounce equivalents**</td>
<td>3 ounce equivalents**</td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-13 years old</td>
<td>6 ounce equivalents**</td>
<td>3 ounce equivalents**</td>
</tr>
<tr>
<td>14-18 years old</td>
<td>8 ounce equivalents**</td>
<td>4 ounce equivalents**</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-30 years old</td>
<td>6 ounce equivalents**</td>
<td>3 ounce equivalents**</td>
</tr>
<tr>
<td>31-50 years old</td>
<td>6 ounce equivalents**</td>
<td>3 ounce equivalents**</td>
</tr>
<tr>
<td>51+ years old</td>
<td>5 ounce equivalents**</td>
<td>3 ounce equivalents**</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-30 years old</td>
<td>8 ounce equivalents**</td>
<td>4 ounce equivalents**</td>
</tr>
<tr>
<td>31-50 years old</td>
<td>7 ounce equivalents**</td>
<td>3 ½ ounce equivalents**</td>
</tr>
<tr>
<td>51+ years old</td>
<td>6 ounce equivalents**</td>
<td>3 ounce equivalents**</td>
</tr>
</tbody>
</table>

*These amounts are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

**Key Consumer Message**  *Make at least half of your grains whole grains.*
What Counts as an Ounce Equivalent of Grains?

In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or ½ cup of cooked rice, cooked pasta, or cooked cereal can be considered as 1 ounce equivalent from the Grains Group.

The chart lists specific amounts that count as 1 ounce equivalent of grains towards your daily recommended intake. In some cases the number of ounce-equivalents for common portions are also shown.

<table>
<thead>
<tr>
<th>Grains</th>
<th>Amount that counts as 1 ounce equivalent of grains</th>
<th>Common portions and ounce equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bagels</td>
<td>1 &quot;mini&quot; bagel</td>
<td>1 large bagel = 4 ounce equivalents</td>
</tr>
<tr>
<td>Biscuits</td>
<td>1 small (2&quot; diameter)</td>
<td>1 large (3&quot; diameter) = 2 ounce equivalents</td>
</tr>
<tr>
<td>Breads</td>
<td>1 regular slice</td>
<td>2 regular slices = 2 ounce equivalents</td>
</tr>
<tr>
<td>Bulgur</td>
<td>½ cup cooked</td>
<td></td>
</tr>
<tr>
<td>Cornbread</td>
<td>1 small piece (2 ⅛&quot; x 1 ¼&quot; x 1 ⅛&quot;)</td>
<td>1 medium piece (2 ⅛&quot; x 2 ⅝&quot; x 1 ¼&quot;) = 2 ounce equivalents</td>
</tr>
<tr>
<td>Crackers</td>
<td>5 whole wheat crackers</td>
<td></td>
</tr>
<tr>
<td>English muffins</td>
<td>7 square or round crackers</td>
<td></td>
</tr>
<tr>
<td>Muffins</td>
<td>1 ½ muffin</td>
<td>1 muffin = 2 ounce equivalents</td>
</tr>
<tr>
<td>Oatmeal</td>
<td>½ cup cooked</td>
<td></td>
</tr>
<tr>
<td>Pancakes</td>
<td>1 pancake (4 ⅛&quot; diameter)</td>
<td>3 pancakes (4 ⅛&quot; diameter) = 3 ounce equivalents</td>
</tr>
<tr>
<td>Popcorn</td>
<td>3 cups, popped</td>
<td>1 mini microwave bag or 100-calorie bag, popped = 2 ounce equivalents</td>
</tr>
<tr>
<td>Ready-to-eat breakfast cereal</td>
<td>1 cup flakes or rounds</td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td>½ cup cooked</td>
<td>1 cup cooked = 2 ounce equivalents</td>
</tr>
<tr>
<td>Pasta--spaghetti, macaroni, noodles</td>
<td>½ cup cooked</td>
<td>1 cup cooked = 2 ounce equivalents</td>
</tr>
<tr>
<td>Tortillas</td>
<td>1 small flour tortilla (6&quot; diameter)</td>
<td>1 large tortilla (12&quot; diameter) = 4 ounce equivalents</td>
</tr>
</tbody>
</table>
*WG = whole grains, RG = refined grains. This is shown when products are available both in whole grain and refined grain forms.

**Key Consumer Message**  *Make at least half of your grains whole grains.*
Iron is used to carry oxygen in the blood. Many teenage girls and women in their childbearing years have iron-deficiency anemia. They should eat foods high in heme-iron (meats) or eat other iron containing foods along with foods rich in vitamin C, which can improve absorption of non-heme iron. Whole and enriched refined grain products are major sources of non-heme iron in American diets.

Whole grains are sources of magnesium and selenium. Magnesium is a mineral used in building bones and releasing energy from muscles. Selenium protects cells from oxidation. It is also important for a healthy immune system.

**Key Consumer Message**  
*Make at least half of your grains whole grains.*
Tips to Help You Eat Whole Grains

At Meals:

- To eat more whole grains, substitute a whole-grain product for a refined product – such as eating whole-wheat bread instead of white bread or brown rice instead of white rice. It’s important to substitute the whole-grain product for the refined one, rather than adding the whole-grain product.

- For a change, try brown rice or whole-wheat pasta. Try brown rice stuffing in baked green peppers or tomatoes and whole-wheat macaroni in macaroni and cheese.

- Use whole grains in mixed dishes, such as barley in vegetable soup or stews and bulgur wheat in casserole or stir-fries.

- Create a whole grain pilaf with a mixture of barley, wild rice, brown rice, broth and spices. For a special touch, stir in toasted nuts or chopped dried fruit.

- Experiment by substituting whole wheat or oat flour for up to half of the flour in pancake, waffle, muffin or other flour-based recipes. They may need a bit more leavening.

- Use whole-grain bread or cracker crumbs in meatloaf.

- Try rolled oats or a crushed, unsweetened whole grain cereal as breading for baked chicken, fish, veal cutlets, or eggplant parmesan.

- Try an unsweetened, whole grain ready-to-eat cereal as croutons in salad or in place of crackers with soup.

- Freeze leftover cooked brown rice, bulgur, or barley. Heat and serve it later as a quick side dish.

As Snacks:

- Snack on ready-to-eat, whole grain cereals such as toasted oat cereal.

- Add whole-grain flour or oatmeal when making cookies or other baked treats.

- Try 100% whole-grain snack crackers.

- Popcorn, a whole grain, can be a healthy snack if made with little or no added salt and butter.

http://www.choosemyplate.gov/food-groups/grains-tips.html
What to Look for on the Food Label:

- Choose foods that name one of the following whole-grain ingredients first on the label’s ingredient list:

**Whole Grain Ingredients**

- brown rice
- buckwheat
- bulgur
- millet
- oatmeal
- quinoa
- rolled oats
- whole-grain barley
- whole-grain corn
- whole-grain sorghum
- whole-grain triticale
- whole oats
- whole rye
- whole wheat
- wild rice

- Foods labeled with the words "multi-grain," "stone-ground," "100% wheat," "cracked wheat," "seven-grain," or "bran" are usually not whole-grain products.

- Color is not an indication of a whole grain. Bread can be brown because of molasses or other added ingredients. Read the ingredient list to see if it is a whole grain.

- Use the Nutrition Facts label and choose whole grain products with a higher % Daily Value (% DV) for fiber. Many, but not all, whole grain products are good or excellent sources of fiber.

- Read the food label’s ingredient list. Look for terms that indicate added sugars (such as sucrose, high-fructose corn syrup, honey, malt syrup, maple syrup, molasses, or raw sugar) that add extra calories. Choose foods with fewer added sugars.

- Most sodium in the food supply comes from packaged foods. Similar packaged foods can vary widely in sodium content, including breads. Use the Nutrition Facts label to choose foods with a lower % DV for sodium. Foods with less than 140 mg sodium per serving can be labeled as low sodium foods. Claims such as “low in sodium” or “very low in sodium” on the front of the food label can help you identify foods that contain less salt (or sodium).
Whole Grain Tips for Children

- Set a good example for children by eating whole grains with meals or as snacks.
- Let children select and help prepare a whole grain side dish.
- Teach older children to read the ingredient list on cereals or snack food packages and choose those with whole grains at the top of the list.

Key Consumer Message  Make at least half of your grains whole grains.
What Foods Are in the Protein Foods Group?

All foods made from meat, poultry, seafood, beans and peas, eggs, processed soy products, nuts, and seeds are considered part of the Protein Foods Group. Beans and peas are also part of the Vegetable Group.

Select a variety of protein foods to improve nutrient intake and health benefits, including at least 8 ounces of cooked seafood per week. Young children need less, depending on their age and calorie needs. The advice to consume seafood does not apply to vegetarians. Vegetarian options in the Protein Foods Group include beans and peas, processed soy products, and nuts and seeds. Meat and poultry choices should be lean or low-fat.

### Commonly eaten protein foods

#### Meats*
- **Lean cuts of:**
  - beef
  - ham
  - lamb
  - pork
  - veal
- **Game Meats**
  - bison
  - rabbit
  - venison
- **Lean Ground Meats**
  - beef
  - pork
  - lamb
- **Lean luncheon or deli meats**
- **Organ Meats**
  - liver
  - giblets

#### Poultry*
- chicken
- duck
- goose
- turkey
- ground chicken and turkey

#### Eggs*
- chicken eggs
- duck eggs

#### Beans and Peas
- bean burgers
- black beans
- black-eyed peas
- chickpeas (garbanzo beans)
- falafel
- kidney beans
- lentils
- lima beans (mature)
- navy beans
- pinto beans
- soy beans
- split peas
- white beans

#### Processed Soy Products
- tofu (bean curd made from soybeans)
- veggie burgers
- tempeh
- texturized vegetable protein (TVP)

#### Nuts and Seeds*
- almonds
- cashews
- hazelnuts (filberts)
- mixed nuts
- peanuts
- peanut butter
- pecans
- pistachios
- pumpkin seeds
- sesame seeds
- sunflower seeds
- walnuts

http://www.choosemyplate.gov/food-groups/protein-foods.html
**Seafood**

**Finfish such as:**
- catfish
- cod
- flounder
- haddock
- halibut
- herring
- mackerel
- pollock
- porgy
- salmon
- sea bass
- snapper
- swordfish
- trout
- tuna

**Shellfish such as:**
- clams
- crab
- crayfish
- lobster
- mussels
- octopus
- oysters
- scallops
- squid (calamari)
- shrimp

**Canned fish such as:**
- anchovies
- clams
- tuna
- sardines

*Selection Tips*

- Choose lean or low-fat meat and poultry. If higher fat choices are made, such as regular ground beef (75 to 80% lean) or chicken with skin, the fat counts against your maximum limit for empty calories (calories from solid fats or added sugars).
- If solid fat is added in cooking, such as frying chicken in shortening or frying eggs in butter or stick margarine, this also counts against your maximum limit for empty calories (calories from solid fats and added sugars).
- Select some seafood that is rich in omega-3 fatty acids, such as salmon, trout, sardines, anchovies, herring, Pacific oysters, and Atlantic and Pacific mackerel.
- Processed meats such as ham, sausage, frankfurters, and luncheon or deli meats have added sodium. Check the Nutrition Facts label to help limit sodium intake. Fresh chicken, turkey, and pork that have been enhanced with a salt-containing solution also have added sodium. Check the product label for statements such as “self-basting” or “contains up to __% of __”, which mean that a sodium-containing solution has been added to the product.
- Choose unsalted nuts and seeds to keep sodium intake low.
How Much Food from the Protein Foods Group is Needed Daily?

The amount of food from the Protein Foods Group you need to eat depends on age, sex, and level of physical activity. Most Americans eat enough food from this group, but need to make leaner and more varied selections of these foods.

Recommended daily amounts are shown in the chart.

<table>
<thead>
<tr>
<th>Daily recommendation*</th>
<th>Children</th>
<th>2-3 years old</th>
<th>2 ounce equivalents**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4-8 years old</td>
<td>4 ounce equivalents**</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>9-13 years old</td>
<td>5 ounce equivalents**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14-18 years old</td>
<td>5 ounce equivalents**</td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>9-13 years old</td>
<td>5 ounce equivalents**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14-18 years old</td>
<td>6 ½ ounce equivalents**</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>19-30 years old</td>
<td>5 ½ ounce equivalents**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31-50 years old</td>
<td>5 ounce equivalents**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>51+ years old</td>
<td>5 ounce equivalents**</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>19-30 years old</td>
<td>6 ½ ounce equivalents**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31-50 years old</td>
<td>6 ounce equivalents**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>51+ years old</td>
<td>5 ½ ounce equivalents**</td>
<td></td>
</tr>
</tbody>
</table>

*These amounts are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

http://www.choosemyplate.gov/food-groups/protein-foods-amount.html
What Counts as an Ounce Equivalent in the Protein Foods Group?

In general, 1 ounce of meat, poultry or fish, ¼ cup cooked beans, 1 egg, 1 tablespoon of peanut butter, or ½ ounce of nuts or seeds can be considered as 1 ounce equivalent from the Protein Foods Group.

The chart lists specific amounts that count as 1 ounce equivalent in the Protein Foods Group towards your daily recommended intake:

<table>
<thead>
<tr>
<th>Amount that counts as 1 ounce equivalent in the Protein Foods Group</th>
<th>Common portions and ounce equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meats</strong></td>
<td></td>
</tr>
<tr>
<td>1 ounce cooked lean beef</td>
<td>1 small steak (eye of round, filet) = 3½ to 4 ounce equivalents</td>
</tr>
<tr>
<td>1 ounce cooked lean pork or ham</td>
<td>1 small lean hamburger = 2 to 3 ounce equivalents</td>
</tr>
<tr>
<td><strong>Poultry</strong></td>
<td></td>
</tr>
<tr>
<td>1 ounce cooked chicken or turkey, without skin</td>
<td>1 small chicken breast half = 3 ounce equivalents</td>
</tr>
<tr>
<td>1 sandwich slice of turkey (4 ½ x 2 ½ x 1/8&quot;)</td>
<td>½ Cornish game hen = 4 ounce equivalents</td>
</tr>
<tr>
<td><strong>Seafood</strong></td>
<td></td>
</tr>
<tr>
<td>1 ounce cooked fish or shell fish</td>
<td>1 can of tuna, drained = 3 to 4 ounce equivalents</td>
</tr>
<tr>
<td></td>
<td>1 salmon steak = 4 to 6 ounce equivalents</td>
</tr>
<tr>
<td></td>
<td>1 small trout = 3 ounce equivalents</td>
</tr>
<tr>
<td><strong>Eggs</strong></td>
<td>3 egg whites = 2 ounce equivalents</td>
</tr>
<tr>
<td></td>
<td>3 egg yolks = 1 ounce equivalent</td>
</tr>
<tr>
<td><strong>Nuts and seeds</strong></td>
<td>1 ounce of nuts or seeds = 2 ounce equivalents</td>
</tr>
<tr>
<td>½ ounce of nuts (12 almonds, 24 pistachios, 7 walnut halves)</td>
<td></td>
</tr>
<tr>
<td>½ ounce of seeds (pumpkin, sunflower or squash seeds, hulled, roasted)</td>
<td></td>
</tr>
<tr>
<td>1 Tablespoon of peanut butter or almond butter</td>
<td></td>
</tr>
<tr>
<td><strong>Beans and peas</strong></td>
<td>1 cup split pea soup = 2 ounce equivalents</td>
</tr>
<tr>
<td>¼ cup of cooked beans (such as black, kidney, pinto, or white beans)</td>
<td>1 cup lentil soup = 2 ounce equivalents</td>
</tr>
<tr>
<td>¼ cup of cooked peas (such as chickpeas, cowpeas, lentils, or split peas)</td>
<td>1 cup bean soup = 2 ounce equivalents</td>
</tr>
<tr>
<td>¼ cup of baked beans, refried beans</td>
<td></td>
</tr>
<tr>
<td>¼ cup (about 2 ounces) of tofu</td>
<td>1 soy or bean burger patty = 2 ounce equivalents</td>
</tr>
<tr>
<td>1 oz. tempeh, cooked</td>
<td></td>
</tr>
<tr>
<td>¼ cup roasted soybeans 1 falafel patty (2 ¼”, 4 oz)</td>
<td></td>
</tr>
<tr>
<td>2 Tablespoons hummus</td>
<td></td>
</tr>
</tbody>
</table>

http://www.choosemyplate.gov/food-groups/protein-foods-counts.html
Why Is It Important to Make Lean or Low-Fat Choices from the Protein Foods Group?

Foods in the meat, poultry, fish, eggs, nuts, and seed group provide nutrients that are vital for health and maintenance of your body. However, choosing foods from this group that are high in saturated fat and cholesterol may have health implications.

<table>
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<tr>
<th>Amount that counts as 1 ounce equivalent in the Protein Foods Group</th>
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<tr>
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<td></td>
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</tr>
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In general, 1 ounce of meat, poultry or fish, ¼ cup cooked beans, 1 egg, 1 tablespoon of peanut butter, or ½ ounce of nuts or seeds can be considered as 1 ounce equivalent from the Protein Foods Group.

The chart lists specific amounts that count as 1 ounce equivalent in the Protein Foods Group towards your daily recommended intake.

**Health Benefits**

- Meat, poultry, fish, dry beans and peas, eggs, nuts, and seeds supply many nutrients. These include protein, B vitamins (niacin, thiamin, riboflavin, and B6), vitamin E, iron, zinc, and magnesium.

- Proteins function as building blocks for bones, muscles, cartilage, skin, and blood. They are also building blocks for enzymes, hormones, and vitamins. Proteins are one of three nutrients that provide calories (the others are fat and carbohydrates).

- B vitamins found in this food group serve a variety of functions in the body. They help the body release energy, play a vital role in the function of the nervous system, aid in the formation of red blood cells, and help build tissues.

- Iron is used to carry oxygen in the blood. Many teenage girls and women in their child-bearing years have iron-deficiency anemia. They should eat foods high in heme-iron (meats) or eat other non-heme iron containing foods along with a food rich in vitamin C, which can improve absorption of non-heme iron.

- Magnesium is used in building bones and in releasing energy from muscles.

- Zinc is necessary for biochemical reactions and helps the immune system function properly.

- EPA and DHA are omega-3 fatty acids found in varying amounts in seafood. Eating 8 ounces per week of seafood may help reduce the risk for heart disease.

**Nutrients**

- Diets that are high in saturated fats raise “bad” cholesterol levels in the blood. The “bad” cholesterol is called LDL (low-density lipoprotein) cholesterol. High LDL cholesterol, in turn, increases the risk for coronary heart disease. Some food choices in this group are high in saturated fat. These include fatty cuts of beef, pork, and lamb; regular (75% to 85% lean) ground beef; regular sausages, hot dogs, and bacon; some luncheon meats such as regular bologna and salami; and some poultry such as duck. To help keep blood cholesterol levels healthy, limit the amount of these foods you eat.
Diets that are high in cholesterol can raise LDL cholesterol levels in the blood. Cholesterol is only found in foods from animal sources. Some foods from this group are high in cholesterol. These include egg yolks (egg whites are cholesterol-free) and organ meats such as liver and giblets. To help keep blood cholesterol levels healthy, limit the amount of these foods you eat.

A high intake of fats makes it difficult to avoid consuming more calories than are needed.

**Why Is It Important to Eat 8 Ounces of Seafood per Week?**

- Seafood contains a range of nutrients, notably the omega-3 fatty acids, EPA and DHA. Eating about 8 ounces per week of a variety of seafood contributes to the prevention of heart disease. Smaller amounts of seafood are recommended for young children.

- Seafood varieties that are commonly consumed in the United States that are higher in EPA and DHA and lower in mercury include salmon, anchovies, herring, sardines, Pacific oysters, trout, and Atlantic and Pacific mackerel (not king mackerel, which is high in mercury). The health benefits from consuming seafood outweigh the health risk associated with mercury, a heavy metal found in seafood in varying levels.

**What Are the Benefits of Eating Nuts and Seeds?**

- Eating peanuts and certain tree nuts (i.e., walnuts, almonds, and pistachios) may reduce the risk of heart disease when consumed as part of a diet that is nutritionally adequate and within calorie needs. Because nuts and seeds are high in calories, eat them in small portions and use them to replace other protein foods, like some meat or poultry, rather than adding them to what you already eat. In addition, choose unsalted nuts and seeds to help reduce sodium intakes.
Tips to Help You Make Wise Choices from the Protein Foods Group

Go Lean with Protein:

- Start with a lean choice:
  - The leanest beef cuts include round steaks and roasts (eye of round, top round, bottom round, round tip), top loin, top sirloin, and chuck shoulder and arm roasts.
  - The leanest pork choices include pork loin, tenderloin, center loin, and ham.
  - Choose extra lean ground beef. The label should say at least “90% lean.” You may be able to find ground beef that is 93% or 95% lean.
  - Buy skinless chicken parts, or take off the skin before cooking.
  - Boneless skinless chicken breasts and turkey cutlets are the leanest poultry choices.
  - Choose lean turkey, roast beef, ham, or low-fat luncheon meats for sandwiches instead of luncheon/deli meats with more fat, such as regular bologna or salami.

- Keep it lean:
  - Trim away all of the visible fat from meats and poultry before cooking.
  - Broil, grill, roast, poach, or boil meat, poultry, or fish instead of frying.
  - Drain off any fat that appears during cooking.
  - Skip or limit the breading on meat, poultry, or fish. Breading adds calories. It will also cause the food to soak up more fat during frying.
  - Prepare beans and peas without added fats.
  - Choose and prepare foods without high fat sauces or gravies.

http://www.choosemyplate.gov/food-groups/protein-foods-tips.html
Vary Your Protein Choices:

- Choose seafood at least twice a week as the main protein food. Look for seafood rich in omega-3 fatty acids, such as salmon, trout, and herring. Some ideas are:
  - Salmon steak or filet
  - Salmon loaf
  - Grilled or baked trout

- Choose beans, peas, or soy products as a main dish or part of a meal often. Some choices are:
  - Chili with kidney or pinto beans
  - Stir-fried tofu
  - Split pea, lentil, minestrone, or white bean soups
  - Baked beans
  - Black bean enchiladas
  - Garbanzo or kidney beans on a chef’s salad
  - Rice and beans
  - Veggie burgers
  - Hummus (chickpeas) spread on pita bread

- Choose unsalted nuts as a snack, on salads, or in main dishes. Use nuts to replace meat or poultry, not in addition to these items:
  - Use pine nuts in pesto sauce for pasta.
  - Add slivered almonds to steamed vegetables.
  - Add toasted peanuts or cashews to a vegetable stir fry instead of meat.
  - Sprinkle a few nuts on top of low-fat ice cream or frozen yogurt.
  - Add walnuts or pecans to a green salad instead of cheese or meat.
What to Look for on the Food Label:

- Check the Nutrition Facts label for the saturated fat, trans fat, cholesterol, and sodium content of packaged foods.

  - Processed meats such as hams, sausages, frankfurters, and luncheon or deli meats have added sodium. Check the ingredient and Nutrition Facts label to help limit sodium intake.
  
  - Fresh chicken, turkey, and pork that have been enhanced with a salt-containing solution also have added sodium. Check the product label for statements such as “self-basting” or “contains up to __% of __.”
  
  - Lower fat versions of many processed meats are available. Look on the Nutrition Facts label to choose products with less fat and saturated fat.

Keep It Safe to Eat:

- Separate raw, cooked and ready-to-eat foods.
- Do not wash or rinse meat or poultry.
- Wash cutting boards, knives, utensils and counter tops in hot soapy water after preparing each food item and before going on to the next one.
- Store raw meat, poultry and seafood on the bottom shelf of the refrigerator so juices don’t drip onto other foods.
- Cook foods to a safe temperature to kill microorganisms. Use a meat thermometer, which measures the internal temperature of cooked meat and poultry, to make sure that the meat is cooked all the way through.
- Chill (refrigerate) perishable food promptly and defrost foods properly. Refrigerate or freeze perishables, prepared food and leftovers within two hours.
- Plan ahead to defrost foods. Never defrost food on the kitchen counter at room temperature. Thaw food by placing it in the refrigerator, submerging air-tight packaged food in cold tap water (change water every 30 minutes), or defrosting on a plate in the microwave.
- Avoid raw or partially cooked eggs or foods containing raw eggs and raw or undercooked meat and poultry.
- Women who may become pregnant, pregnant women, nursing mothers, and young children should avoid some types of fish and eat types lower in mercury. Call 1-888-SAFEFOOD for more information.

http://www.choosemyplate.gov/food-groups/protein-foods-tips.html
What Foods Are Included in the Dairy Group?

All fluid milk products and many foods made from milk are considered part of this food group. Most Dairy Group choices should be fat-free or low-fat. Foods made from milk that retain their calcium content are part of the group. Foods made from milk that have little to no calcium, such as cream cheese, cream, and butter, are not. Calcium-fortified soymilk (soy beverage) is also part of the Dairy Group.

Key Consumer Message  
**Switch to fat-free or low-fat (1%) milk.**

Commonly eaten dairy products

- **Milk***
  - all fluid milk:
    - fat-free (skim)
    - low fat (1%)
    - reduced fat (2%)
    - whole milk
  - **flavored milks:**
    - chocolate
    - strawberry
    - lactose-reduced milks
    - lactose-free milks

- **Milk-based desserts***
  - puddings
  - ice milk
  - frozen yogurt
  - ice cream

- **Calcium-fortified soymilk**
  (soy beverage)

- **Cheese***
  - **hard natural cheeses:**
    - cheddar
    - mozzarella
    - Swiss
    - Parmesan
  - **soft cheeses:**
    - ricotta
    - cottage cheese
  - **processed cheeses:**
    - American

- **Yogurt***
  - all yogurt:
    - fat-free
    - low fat
    - reduced fat
    - whole milk yogurt

*Selection Tips

- Choose fat-free or low-fat milk, yogurt, and cheese. If you choose milk or yogurt that is not fat-free, or cheese that is not low-fat, the fat in the product counts against your maximum limit for "empty calories" (calories from solid fats and added sugars).

http://www.choosemyplate.gov/food-groups/dairy.html
• If sweetened milk products are chosen (flavored milk, yogurt, drinkable yogurt, desserts), the added sugars also count against your maximum limit for "empty calories" (calories from solid fats and added sugars).

• For those who are lactose intolerant, smaller portions (such as 4 fluid ounces of milk) may be well tolerated. Lactose-free and lower-lactose products are available. These include lactose-reduced or lactose-free milk, yogurt, and cheese, and calcium-fortified soymilk (soy beverage). Also, enzyme preparations can be added to milk to lower the lactose content. Calcium-fortified foods and beverages such as cereals, orange juice, or rice or almond beverages may provide calcium, but may not provide the other nutrients found in dairy products.
How Much Food from the Dairy Group Is Needed Daily?
The amount of food from the Dairy Group you need to eat depends on age. Recommended daily amounts are shown in the chart below.

<table>
<thead>
<tr>
<th>Daily recommendation</th>
<th>Children</th>
<th>Girls</th>
<th>Boys</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-3 years old</td>
<td>9-13 years old</td>
<td>9-13 years old</td>
<td>19-30 years old</td>
<td>19-30 years old</td>
</tr>
<tr>
<td></td>
<td>2 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
</tr>
<tr>
<td></td>
<td>4-8 years old</td>
<td>14-18 years old</td>
<td>14-18 years old</td>
<td>31-50 years old</td>
<td>31-50 years old</td>
</tr>
<tr>
<td></td>
<td>2 ½ cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
<td>3 cups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>51+ years old</td>
<td>51+ years old</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 cups</td>
<td>3 cups</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key Consumer Message**  
*Switch to fat-free or low-fat (1%) milk.*
What Counts as a Cup in the Dairy Group?

In general, 1 cup of milk, yogurt, or soymilk (soy beverage), 1 ½ ounces of natural cheese, or 2 ounces of processed cheese can be considered as 1 cup from the Dairy Group.

The chart lists specific amounts that count as 1 cup in the Dairy Group towards your daily recommended intake:

<table>
<thead>
<tr>
<th>Amount That Counts as a Cup in the Dairy Group</th>
<th>Common Portions and Cup Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Milk</strong> (choose fat-free or low-fat milk)</td>
<td></td>
</tr>
<tr>
<td>1 cup milk</td>
<td></td>
</tr>
<tr>
<td>1 half-pint container milk</td>
<td></td>
</tr>
<tr>
<td>½ cup evaporated milk</td>
<td></td>
</tr>
<tr>
<td><strong>Yogurt</strong> (choose fat-free or low-fat yogurt)</td>
<td></td>
</tr>
<tr>
<td>1 regular container (8 fluid ounces)</td>
<td>1 small container (6 ounces) = ⅔ cup</td>
</tr>
<tr>
<td>1 cup yogurt</td>
<td>1 snack size container (4 ounces) = ½ cup</td>
</tr>
<tr>
<td><strong>Cheese</strong> (choose reduced-fat or low-fat cheeses)</td>
<td></td>
</tr>
<tr>
<td>1 ½ ounces hard cheese (cheddar, mozzarella, Swiss, Parmesan)</td>
<td>1 slice of hard cheese is equivalent to ½ cup milk</td>
</tr>
<tr>
<td>½ cup shredded cheese</td>
<td></td>
</tr>
<tr>
<td>2 ounces processed cheese (American)</td>
<td>1 slice of processed cheese is equivalent to ½ cup milk</td>
</tr>
<tr>
<td>½ cup ricotta cheese</td>
<td></td>
</tr>
<tr>
<td>2 cups cottage cheese</td>
<td>½ cup cottage cheese is equivalent to ¼ cup milk</td>
</tr>
<tr>
<td><strong>Milk-based desserts</strong> (choose fat-free or low-fat types)</td>
<td></td>
</tr>
<tr>
<td>1 cup pudding made with milk</td>
<td></td>
</tr>
<tr>
<td>1 cup frozen yogurt</td>
<td></td>
</tr>
<tr>
<td>1 ½ cups ice cream</td>
<td>1 scoop ice cream is equivalent to ½ cup milk</td>
</tr>
<tr>
<td><strong>Soymilk</strong> (soy beverage)</td>
<td></td>
</tr>
<tr>
<td>1 cup calcium-fortified soymilk</td>
<td></td>
</tr>
<tr>
<td>1 half-pint container calcium-fortified soymilk</td>
<td></td>
</tr>
</tbody>
</table>

**Key Consumer Message**  *Switch to fat-free or low-fat (1%) milk.*

http://www.choosemyplate.gov/food-groups/dairy-counts.html
Health Benefits and Nutrients

Consuming dairy products provides health benefits — especially improved bone health. Foods in the Dairy Group provide nutrients that are vital for health and maintenance of your body. These nutrients include calcium, potassium, vitamin D, and protein.

**Health Benefits**

- Intake of dairy products is linked to improved bone health, and may reduce the risk of osteoporosis.
- The intake of dairy products is especially important to bone health during childhood and adolescence, when bone mass is being built.
- Intake of dairy products is also associated with a reduced risk of cardiovascular disease and type 2 diabetes, and with lower blood pressure in adults.

**Nutrients**

- Calcium is used for building bones and teeth and in maintaining bone mass. Dairy products are the primary source of calcium in American diets. Diets that provide 3 cups or the equivalent of dairy products per day can improve bone mass.
- Diets rich in potassium may help to maintain healthy blood pressure. Dairy products, especially yogurt, fluid milk, and soymilk (soy beverage), provide potassium.
- Vitamin D functions in the body to maintain proper levels of calcium and phosphorous, thereby helping to build and maintain bones. Milk and soymilk (soy beverage) that are fortified with vitamin D are good sources of this nutrient. Other sources include vitamin D-fortified yogurt and vitamin D-fortified ready-to-eat breakfast cereals.
- Milk products that are consumed in their low-fat or fat-free forms provide little or no solid fat.
Why is it important to make fat-free or low-fat choices from the Dairy Group?

Choosing foods from the Dairy Group that are high in saturated fats and cholesterol can have health implications. Diets high in saturated fats raise "bad" cholesterol levels in the blood. The "bad" cholesterol is called LDL (low-density lipoprotein) cholesterol. High LDL cholesterol, in turn, increases the risk for coronary heart disease. Many cheeses, whole milk, and products made from them are high in saturated fat. To help keep blood cholesterol levels healthy, limit the amount of these foods you eat. In addition, a high intake of fats makes it difficult to avoid consuming more calories than are needed.

Key Consumer Message  

*Switch to fat-free or low-fat (1%) milk.*
Tips for Making Wise Choices in the Dairy Group

- Include milk or calcium-fortified soymilk (soy beverage) as a beverage at meals. Choose fat-free or low-fat milk.
- If you usually drink whole milk, switch gradually to fat-free milk, to lower saturated fat and calories. Try reduced fat (2%), then low-fat (1%), and finally fat-free (skim).
- If you drink cappuccinos or lattes — ask for them with fat-free (skim) milk.
- Add fat-free or low-fat milk instead of water to oatmeal and hot cereals.
- Use fat-free or low-fat milk when making condensed cream soups (such as cream of tomato).
- Have fat-free or low-fat yogurt as a snack.
- Make a dip for fruits or vegetables from yogurt.
- Make fruit-yogurt smoothies in the blender.
- For dessert, make chocolate or butterscotch pudding with fat-free or low-fat milk.
- Top cut-up fruit with flavored yogurt for a quick dessert.
- Top casseroles, soups, stews, or vegetables with shredded reduced-fat or low-fat cheese.
- Top a baked potato with fat-free or low-fat yogurt.

Keep It Safe

- Avoid raw (unpasteurized) milk or any products made from unpasteurized milk.
- Chill (refrigerate) perishable food promptly and defrost foods properly. Refrigerate or freeze perishables, prepared food and leftovers as soon as possible. If food has been left at temperatures between 40° and 140° F for more than two hours, discard it, even though it may look and smell good.
- Separate raw, cooked and ready-to-eat foods.

http://www.choosemyplate.gov/food-groups/dairy-tips.html
For Those Who Choose Not to Consume Milk Products

- If you avoid milk because of lactose intolerance, the most reliable way to get the health benefits of dairy products is to choose lactose-free alternatives within the Dairy Group, such as cheese, yogurt, lactose-free milk, or calcium-fortified soymilk (soy beverage) or to consume the enzyme lactase before consuming milk.

- Calcium choices for those who do not consume dairy products include:
  - Calcium fortified juices, cereals, breads, rice milk, or almond milk.
  - Canned fish (sardines, salmon with bones) soybeans and other soy products (tofu made with calcium sulfate, soy yogurt, tempeh), some other beans, and some leafy greens (collard and turnip greens, kale, bok choy). The amount of calcium that can be absorbed from these foods varies.

Key Consumer Message  Switch to fat-free or low-fat (1%) milk.
Executive Summary

Eating and physical activity patterns that are focused on consuming fewer calories, making informed food choices, and being physically active can help people attain and maintain a healthy weight, reduce their risk of chronic disease, and promote overall health. The Dietary Guidelines for Americans, 2010 exemplifies these strategies through recommendations that accommodate the food preferences, cultural traditions, and customs of the many and diverse groups who live in the United States.


Dietary Guidelines recommendations traditionally have been intended for healthy Americans ages 2 years and older. However, Dietary Guidelines for Americans, 2010 is being released at a time of rising concern about the health of the American population. Poor diet and physical inactivity are the most important factors contributing to an epidemic of overweight and obesity affecting men, women, and children in all segments of our society. Even in the absence of overweight, poor diet and physical inactivity are associated with major causes of morbidity and mortality in the United States. Therefore, the Dietary Guidelines for Americans, 2010 is intended for Americans ages 2 years and older, including those at increased risk of chronic disease.

Dietary Guidelines for Americans, 2010 also recognizes that in recent years nearly 15 percent of American households have been unable to acquire adequate food to meet their needs.1 This dietary guidance can help them maximize the nutritional content of

their meals. Many other Americans consume less than optimal intake of certain nutrients even though they have adequate resources for a healthy diet. This dietary guidance and nutrition information can help them choose a healthy, nutritionally adequate diet.

The intent of the Dietary Guidelines is to summarize and synthesize knowledge about individual nutrients and food components into an interrelated set of recommendations for healthy eating that can be adopted by the public. Taken together, the Dietary Guidelines recommendations encompass two overarching concepts:

- **Maintain calorie balance over time to achieve and sustain a healthy weight.** People who are most successful at achieving and maintaining a healthy weight do so through continued attention to consuming only enough calories from foods and beverages to meet their needs and by being physically active. To curb the obesity epidemic and improve their health, many Americans must decrease the calories they consume and increase the calories they expend through physical activity.

- **Focus on consuming nutrient-dense foods and beverages.** Americans currently consume too much sodium and too many calories from solid fats, added sugars, and refined grains. These replace nutrient-dense foods and beverages and make it difficult for people to achieve recommended nutrient intake while controlling calorie and sodium intake. A healthy eating pattern limits intake of sodium, solid fats, added sugars, and refined grains and emphasizes nutrient-dense foods and beverages—vegetables, fruits, whole grains, fat-free or low-fat milk and milk products, seafood, lean meats and poultry, eggs, beans and peas, and nuts and seeds.

A basic premise of the Dietary Guidelines is that nutrient needs should be met primarily through consuming foods. In certain cases, fortified foods and dietary supplements may be useful in providing one or more nutrients that otherwise might be consumed in less than recommended amounts. Two eating patterns that embody the Dietary Guidelines are the USDA Food Patterns and their vegetarian adaptations and the DASH (Dietary Approaches to Stop Hypertension) Eating Plan.

A healthy eating pattern needs not only to promote health and help to decrease the risk of chronic diseases, but it also should prevent foodborne illness. Four basic food safety principles (Clean, Separate, Cook, and Chill) work together to reduce the risk of foodborne illnesses. In addition, some foods (such as milks, cheeses, and juices that have not been pasteurized, and undercooked animal foods) pose high risk for foodborne illness and should be avoided.

The information in the Dietary Guidelines for Americans is used in developing educational materials and aiding policymakers in designing and carrying out nutrition-related programs, including Federal food, nutrition education, and information programs. In addition, the Dietary Guidelines for Americans has the potential to offer authoritative statements as provided for in the Food and Drug Administration Modernization Act (FDAMA).

The following are the Dietary Guidelines for Americans, 2010 Key Recommendations, listed by the chapter in which they are discussed in detail. These Key Recommendations are the most important in terms of their implications for improving public health. To get the full benefit, individuals should carry out the Dietary Guidelines recommendations in their entirety as part of an overall healthy eating pattern.

2. Added sugars: Caloric sweeteners that are added to foods during processing, preparation, or consumed separately. Solid fats: Fats with a high content of saturated and/or trans fatty acids, which are usually solid at room temperature. Refined grains: Grains and grain products missing the bran, germ, and/or endosperm; any grain product that is not a whole grain.

3. Milk and milk products also can be referred to as dairy products.

4. Information on the type and strength of evidence supporting the Dietary Guidelines recommendations can be found at http://www.nutritionevidencelibrary.gov.
**Key Recommendations**

**BALANCING CALORIES TO MANAGE WEIGHT**

- Prevent and/or reduce overweight and obesity through improved eating and physical activity behaviors.

- Control total calorie intake to manage body weight. For people who are overweight or obese, this will mean consuming fewer calories from foods and beverages.

- Increase physical activity and reduce time spent in sedentary behaviors.

- Maintain appropriate calorie balance during each stage of life—childhood, adolescence, adulthood, pregnancy and breastfeeding, and older age.

**FOODS AND FOOD COMPONENTS TO REDUCE**

- Reduce daily sodium intake to less than 2,300 milligrams (mg) and further reduce intake to 1,500 mg among persons who are 51 and older and those of any age who are African American or have hypertension, diabetes, or chronic kidney disease. The 1,500 mg recommendation applies to about half of the U.S. population, including children, and the majority of adults.

- Consume less than 10 percent of calories from saturated fatty acids by replacing them with monounsaturated and polyunsaturated fatty acids.

- Consume less than 300 mg per day of dietary cholesterol.

- Keep trans fatty acid consumption as low as possible by limiting foods that contain synthetic sources of trans fats, such as partially hydrogenated oils, and by limiting other solid fats.

- Reduce the intake of calories from solid fats and added sugars.

- Limit the consumption of foods that contain refined grains, especially refined grain foods that contain solid fats, added sugars, and sodium.

- If alcohol is consumed, it should be consumed in moderation—up to one drink per day for women and two drinks per day for men—and only by adults of legal drinking age.5

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5. See Chapter 3, Foods and Food Components to Reduce, for additional recommendations on alcohol consumption and specific population groups. There are many circumstances when people should not drink alcohol.
FOODS AND NUTRIENTS TO INCREASE

Individuals should meet the following recommendations as part of a healthy eating pattern while staying within their calorie needs.

- Increase vegetable and fruit intake.
- Eat a variety of vegetables, especially dark-green and red and orange vegetables and beans and peas.
- Consume at least half of all grains as whole grains. Increase whole-grain intake by replacing refined grains with whole grains.
- Increase intake of fat-free or low-fat milk and milk products, such as milk, yogurt, cheese, or fortified soy beverages.6
- Choose a variety of protein foods, which include seafood, lean meat and poultry, eggs, beans and peas, soy products, and unsalted nuts and seeds.
- Increase the amount and variety of seafood consumed by choosing seafood in place of some meat and poultry.
- Replace protein foods that are higher in solid fats with choices that are lower in solid fats and calories and/or are sources of oils.
- Use oils to replace solid fats where possible.
- Choose foods that provide more potassium, dietary fiber, calcium, and vitamin D, which are nutrients of concern in American diets. These foods include vegetables, fruits, whole grains, and milk and milk products.

Recommendations for specific population groups

Women capable of becoming pregnant7

- Choose foods that supply heme iron, which is more readily absorbed by the body, additional iron sources, and enhancers of iron absorption such as vitamin C-rich foods.
- Consume 400 micrograms (mcg) per day of synthetic folic acid (from fortified foods and/or supplements) in addition to food forms of folate from a varied diet.8

Women who are pregnant or breastfeeding7

- Consume 8 to 12 ounces of seafood per week from a variety of seafood types.
- Due to their high methyl mercury content, limit white (albacore) tuna to 6 ounces per week and do not eat the following four types of fish: tilefish, shark, swordfish, and king mackerel.
- If pregnant, take an iron supplement, as recommended by an obstetrician or other health care provider.

Individuals ages 50 years and older

- Consume foods fortified with vitamin B12, such as fortified cereals, or dietary supplements.

BUILDING HEALTHY EATING PATTERNS

- Select an eating pattern that meets nutrient needs over time at an appropriate calorie level.
- Account for all foods and beverages consumed and assess how they fit within a total healthy eating pattern.
- Follow food safety recommendations when preparing and eating foods to reduce the risk of foodborne illnesses.

6. Fortified soy beverages have been marketed as “soy milk,” a product name consumers could see in supermarkets and consumer materials. However, FDA’s regulations do not contain provisions for the use of the term soymilk. Therefore, in this document, the term “fortified soy beverage” includes products that may be marketed as soymilk.

7. Includes adolescent girls.

8. “Folic acid” is the synthetic form of the nutrient; whereas, “folate” is the form found naturally in foods.
Recipes For Healthy Kids with USDA Recipe information and CACFP crediting (Aug 2013)
The recipes in the *Recipes for Healthy Kids* cookbooks include crediting information that meets the National School Lunch and Breakfast Program meal patterns. When using the recipes for the Child and Adult Care Food Program, refer to the following guide for the proper crediting information.

<table>
<thead>
<tr>
<th>Recipe Name</th>
<th>Recipe Component</th>
<th>Recipe Category</th>
<th>USDA Recipe Number</th>
<th>CACFP Crediting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Whole Grains</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Aztec Grain Salad</em></td>
<td>Fruit-Vegetable-Grains/Bread</td>
<td>Grains/Breads</td>
<td>B-24r</td>
<td>1 cup provides 1/8 cup vegetable, 3/8 cup fruit, and 1 serving grains/bread.</td>
</tr>
<tr>
<td><em>Chic’ Penne</em></td>
<td>Meat/Meat Alternate-Vegetable-Grains/Bread</td>
<td>Main Dishes</td>
<td>D-53r</td>
<td>1-1/2 cups provides 1 oz meat/meat alternate, 1/8 cup vegetable, and 1-3/4 servings grains/bread.</td>
</tr>
<tr>
<td><em>Chicken Alfredo with a Twist</em></td>
<td>Meat/Meat Alternate-Grains/Bread</td>
<td>Main Dishes</td>
<td>D-54r</td>
<td>1 cup provides 2-1/4 oz meat/meat alternate and 1-1/4 servings grains/bread.</td>
</tr>
<tr>
<td><em>Chicken Curry Casserole</em></td>
<td>Meat/Meat Alternate-Vegetable-Grains/Bread</td>
<td>Main Dishes</td>
<td>D-55r</td>
<td>3/4 cup provides 1-1/4 oz meat/meat alternate, 1/4 cup vegetable, and 3/4 serving grains/bread.</td>
</tr>
<tr>
<td><em>Mediterranean Quinoa Salad</em></td>
<td>Vegetable-Grains/Bread</td>
<td>Grains/Breads</td>
<td>B-25r</td>
<td>3/4 cup provides 1/8 cup vegetable and 1 serving grains/bread.</td>
</tr>
<tr>
<td><em>Oodles of Noodles</em></td>
<td>Vegetable-Grains/Bread</td>
<td>Grains/Breads</td>
<td>B-26r</td>
<td>1 cup provides 1/4 cup vegetable and 2 servings grains/bread.</td>
</tr>
<tr>
<td><em>Peppy Quinoa</em></td>
<td>Vegetable-Grains/Bread</td>
<td>Grains/Breads</td>
<td>B-27r</td>
<td>1/2 cup provides 1/8 cup vegetable and 1-1/4 servings grains/bread.</td>
</tr>
<tr>
<td>Recipe Name</td>
<td>Recipe Component</td>
<td>Recipe Category</td>
<td>USDA Recipe Number</td>
<td>CACFP Crediting</td>
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<tr>
<td><strong>Whole Grains</strong></td>
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<td></td>
</tr>
<tr>
<td>Porcupine Sliders</td>
<td>Meat/Meat Alternate-Grains/Bread</td>
<td>Sandwiches</td>
<td>F-10r</td>
<td>1 slider provides 2 oz meat/meat alternate and 1 serving grains/bread.</td>
</tr>
<tr>
<td>Rainbow Rice</td>
<td>Meat/Meat Alternate-Vegetable-Grains/Bread</td>
<td>Main Dishes</td>
<td>D-56r</td>
<td>1 cup provides 2 oz meat/meat alternate, 1/4 cup vegetable, and 1 serving grains/bread.</td>
</tr>
<tr>
<td>Stir Fried Green Rice, Eggs, and Ham (Turkey Ham)</td>
<td>Meat/Meat Alternate-Vegetable-Grains/Bread</td>
<td>Main Dishes</td>
<td>D-57r</td>
<td>1 cup provides 1/2 oz meat/meat alternate, 1/8 cup vegetable, and 1-1/2 servings grains/bread.</td>
</tr>
<tr>
<td><strong>Dark Green and Orange Vegetables</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Bok Choy Wrappers</td>
<td>Meat/Meat Alternate-Fruit-Vegetable-Grains/Bread</td>
<td>Sandwiches</td>
<td>F-11r</td>
<td>Two wraps provide 1 oz meat/meat alternate, 3/4 cup vegetable, 1/8 cup fruit, and 1-1/2 servings grains/bread. One wrap provides 1/2 oz meat/meat alternate, 3/8 cup vegetable, and 3/4 serving grains/bread.</td>
</tr>
<tr>
<td>Central Valley Harvest Bake</td>
<td>Vegetable-Grains/Bread</td>
<td>Vegetables</td>
<td>I-20r</td>
<td>1/2 cup provides 1/2 cup vegetable and 1/4 serving grains/bread.</td>
</tr>
<tr>
<td>Crunchy Hawaiian Chicken Wrap</td>
<td>Meat/Meat Alternate-Vegetable-Grains/Bread</td>
<td>Sandwiches</td>
<td>F-12r</td>
<td>1 wrap (two halves) provides 2 oz meat/meat alternate, 1/2 cup vegetable, and 1-3/4 servings grains/bread. 1/2 wrap (one half) provides 1 oz meat/meat alternate, 1/4 cup vegetable, and 3/4 serving grains/bread.</td>
</tr>
<tr>
<td>Harvest Delight</td>
<td>Fruit-Vegetable</td>
<td>Vegetables</td>
<td>I-21r</td>
<td>1/2 cup provides 1/2 cup vegetable and 1/8 cup fruit.</td>
</tr>
<tr>
<td>Recipe Name</td>
<td>Recipe Component</td>
<td>Recipe Category</td>
<td>USDA Recipe Number</td>
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<tr>
<td><strong>Dark Green and Orange Vegetables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roasted Fish Crispy Slaw Wrap</td>
<td>Meat/Meat Alternate-Vegetable-Grains/Bread</td>
<td>Sandwiches</td>
<td>F-13r</td>
<td>1 wrap (two halves) provides 2-3/4 oz meat/meat alternate, 1-3/8 cup vegetable, and 1-1/2 serving grains/bread. 1/2 wrap (one half) provides 1-1/4 oz meat/meat alternate, 5/8 cup vegetable, and 3/4 serving grains/bread.</td>
</tr>
<tr>
<td>Smokin' Powerhouse Chili</td>
<td>Meat/Meat Alternate-Vegetable-Grains/Bread</td>
<td>Main Dishes</td>
<td>D-58r</td>
<td>1 cup chili and 1/4 cup quinoa provides 1/2 oz meat/meat alternate, 3/4 cup vegetable, and 1/2 serving grains/bread.</td>
</tr>
<tr>
<td>Squish Squash Lasagna</td>
<td>Meat/Meat Alternate-Vegetable-Grains/Bread</td>
<td>Main Dishes</td>
<td>D-59r</td>
<td>1 piece provides 1/2 meat/meat alternate, 3/4 cup vegetable, and 3/4 serving grains/bread.</td>
</tr>
<tr>
<td>Stir-Fry Fajita Chicken, Squash, and Corn</td>
<td>Meat/Meat Alternate-Vegetable-Grains/Bread</td>
<td>Main Dishes</td>
<td>D-60r</td>
<td>3/4 cup stir-fry mixture over 1/2 cup brown rice provides 1-1/4 oz meat/meat alternate, 3/4 cup vegetable, and 1 serving grains/bread.</td>
</tr>
<tr>
<td>Sweet Potato and Black Bean Stew</td>
<td>Meat/Meat Alternate-Vegetable</td>
<td>Soups</td>
<td>H-08r</td>
<td>1 cup provides 3 oz meat/meat alternate and 1/2 cup vegetable.</td>
</tr>
<tr>
<td>Tasty Tots</td>
<td>Vegetable</td>
<td>Vegetables</td>
<td>I-23r</td>
<td>6 tots provide 3/4 cup vegetable.</td>
</tr>
<tr>
<td><strong>Dry Beans/Legumes</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Confetti Soup</td>
<td>Meat/Meat Alternate-Vegetable</td>
<td>Soups</td>
<td>H-09r</td>
<td>1 cup provides 1-1/2 oz meat/meat alternate and 1/4 cup vegetable.</td>
</tr>
<tr>
<td>Eagle Pizza</td>
<td>Meat/Meat Alternate-Vegetable-Grains/Bread</td>
<td>Main Dishes</td>
<td>D-61r</td>
<td>1 tostada pizza provides 1-1/4 oz meat/meat alternate, 3/4 cup vegetable, and 1/2 serving grains/bread.</td>
</tr>
<tr>
<td>Recipe Name</td>
<td>Recipe Component</td>
<td>Recipe Category</td>
<td>USDA Recipe Number</td>
<td>CACFP Crediting</td>
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</tr>
<tr>
<td><strong>Dry Beans/Legumes</strong></td>
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</tr>
<tr>
<td><em>Fiesta Mexican Lasagna</em></td>
<td>Meat/Meat Alternate-Vegetable</td>
<td>Main Dishes</td>
<td>D-62r</td>
<td>1 piece provides 1 oz meat/meat alternate, 3/4 cup vegetable and 3/4 serving grains/bread.</td>
</tr>
<tr>
<td><em>Fiesta Wrap</em></td>
<td>Meat/Meat Alternate-Grains/Bread</td>
<td>Sandwiches</td>
<td>F-14r</td>
<td>1 wrap provides 1 oz meat/meat alternate and 1 serving grains/bread.</td>
</tr>
<tr>
<td><em>Harvest Stew</em></td>
<td>Meat/Meat Alternate-Vegetable</td>
<td>Soups</td>
<td>H-10r</td>
<td>3/4 cup provides 1-1/2 oz meat/meat alternate and 3/8 cup vegetable.</td>
</tr>
<tr>
<td><em>Lentils of the Southwest</em></td>
<td>Meat/Meat Alternate-Vegetable</td>
<td>Vegetables</td>
<td>I-24r</td>
<td>1/4 cup provides 1 oz meat/meat alternate OR 1/4 cup vegetable.</td>
</tr>
<tr>
<td><em>Purple Power Bean Wrap</em></td>
<td>Meat/Meat Alternate-Vegetable</td>
<td>Sandwiches</td>
<td>F-15r</td>
<td>1 wrap provides 1/2 oz meat/meat alternate, 5/8 cup vegetable, and 1-3/4 serving grains/bread. 1/2 wrap (one half) provides 3/8 cup vegetable, and 3/4 serving grains/bread.</td>
</tr>
<tr>
<td><em>Spanish Chickpea Stew</em></td>
<td>Meat/Meat Alternate-Fruit-Vegetable</td>
<td>Soups</td>
<td>H-11r</td>
<td>1 cup provides 1-1/2 oz meat/meat alternate, 3/8 cup vegetable, and 1/4 cup fruit.</td>
</tr>
<tr>
<td><em>Tuscan Smoked Turkey and Bean Soup</em></td>
<td>Meat/Meat Alternate-Vegetable</td>
<td>Soups</td>
<td>H-12r</td>
<td>1 cup provides 1-1/2 oz meat/meat alternate and 1/4 cup vegetable.</td>
</tr>
</tbody>
</table>
# Vegetables

## Dark Green
- Bok Choy
- Broccoli
- Chard
- Collard Greens
- Dark Green Leaf Lettuce
- Kale
- Mesclun
- Mustard Greens
- Romaine Lettuce
- Spinach
- Turnip Greens
- Watercress

## Red / Orange
- Acorn Squash
- Butternut Squash
- Carrots
- Hubbard Squash
- Pumpkin
- Red Peppers
- Sweet Potatoes
- Tomatoes
- Tomato Juice

## Legumes
- Black Beans
- Black-eyed Peas (mature)
- Edamame
- Garbanzo Beans (chickpeas)
- Kidney Beans
- Lentils
- Navy Beans
- Pinto Beans
- Soy Beans
- Split Peas
- White Beans

## Starchy
- Cassava
- Corn
- Black-eyed peas (not dry)
- Green Bananas
- Green Peas
- Green Lima Beans
- Jicama
- Plantains
- Potatoes
- Taro
- Water Chestnuts

## Other
- Artichokes
- Asparagus
- Avocado
- Bean Sprouts
- Beets
- Brussels Sprouts
- Cabbage
- Cauliflower
- Celery
- Cucumbers
- Eggplant
- Green Beans
- Green Bell Peppers
- Iceberg (Head) Lettuce
- Mushrooms
- Okra
- Onions
- Parsnips
- Peas (edible pods)
- Radish
- Turnips
- Wax Beans
- Zucchini

---

[OSPI Child Nutrition Services]

A Partner in Education
<table>
<thead>
<tr>
<th>Vegetables &amp;</th>
<th>Suggested Accompanying Herbs and Spices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus</td>
<td>Chervil, Dill, Tarragon, Curry, Mustard, White Pepper</td>
</tr>
<tr>
<td>Beets</td>
<td>Basil, Caraway, Fennel Seeds, Horseradish, Tarragon, Allspice, Coriander, Ginger</td>
</tr>
<tr>
<td>Broccoli</td>
<td>Caraway, Dill, Mint, Oregano, Curry, Ginger</td>
</tr>
<tr>
<td>Brussels Sprouts</td>
<td>Basil, Borage, Caraway, Dill, Parsley, Mustard, Nutmeg, Paprika</td>
</tr>
<tr>
<td>Cabbage*</td>
<td>Caraway, Dill, Fennel Seeds, Mint, Savory, Thyme, Coriander, Curry, Ginger</td>
</tr>
<tr>
<td>Carrots</td>
<td>Basil, Chervil, Fennel Green, Parsley, Thyme, Coriander, Ginger, Mace</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>Basil, Caraway, Dill, Fennel Seeds, Thyme, Curry, Nutmeg, Paprika</td>
</tr>
<tr>
<td>Celeriac</td>
<td>Basil, Dill, Fennel Seeds, Marjoram, Thyme, Allspice, Coriander, Nutmeg, Paprika</td>
</tr>
<tr>
<td>Celery</td>
<td>Basil, Chervil, Dill, Lovage, Parsley, Curry, Paprika</td>
</tr>
<tr>
<td>Chicories*</td>
<td>Basil, Dill, Fennel Green, Marjoram, Thyme, Parsley, Ginger, Nutmeg</td>
</tr>
<tr>
<td>Cucumber</td>
<td>Basil, Borage, Dill, Mint, Parsley, Tarragon, Allspice, Coriander, Mustard</td>
</tr>
<tr>
<td>Green Beans</td>
<td>Basil, Chives, Dill, Lovage, Oregano, Rosemary, Savory</td>
</tr>
<tr>
<td>Eggplant</td>
<td>Basil, Oregano, Parsley, Rosemary, Savory, Thyme, Curry, Pepper</td>
</tr>
<tr>
<td>Fennel Bulb</td>
<td>Basil, Lovage, Parsley, Coriander, Nutmeg, Paprika</td>
</tr>
<tr>
<td>Kale**</td>
<td>Caraway, Dill, Marjoram, Tarragon, Thyme, Allspice, Coriander, Nutmeg</td>
</tr>
<tr>
<td>Kohlrabi</td>
<td>Basil, Chervil, Chives, Dill, Fennel Seeds, Lovage, Parsley, Allspice, Coriander, Mace</td>
</tr>
<tr>
<td>Leeks</td>
<td>Caraway, Dill, Lovage, Sage, Thyme, Mustard, Nutmeg, Paprika</td>
</tr>
<tr>
<td>Onions</td>
<td>Anise Seed, Basil, Bay Leaf, Parsley, Thyme, Clove, Curry, Paprika</td>
</tr>
<tr>
<td>Parsnips</td>
<td>Chives, Fennel Seeds, Parsley, Thyme, Coriander</td>
</tr>
<tr>
<td>Peas</td>
<td>Chervil, Chives, Dill, Mint, Parsley, Rosemary, Thyme, Curry, Nutmeg</td>
</tr>
<tr>
<td>Peppers</td>
<td>Basil, Lovage, Oregano, Parsley, Rosemary, Thyme, Curry, Ginger, Mustard</td>
</tr>
<tr>
<td>Potatoes</td>
<td>Chervil, Marjoram, Parsley, Rosemary, Sage, Thyme, Mace, Paprika, Pepper</td>
</tr>
<tr>
<td>Pumpkin</td>
<td>Celery Leaves, Chives, Onions, Sage, Thyme, Curry, Ginger</td>
</tr>
<tr>
<td>Radishes</td>
<td>Basil, Borage, Chives, Dill, Lovage, Mint, Parsley</td>
</tr>
<tr>
<td>Red Cabbage</td>
<td>Basil, Bay Leaf, Caraway, Onions, Thyme, Clove, Ginger, Nutmeg</td>
</tr>
<tr>
<td>Rutabaga</td>
<td>Basil, Borage, Caraway, Dill, Marjoram, Parsley, Rosemary, Allspice, Mustard, Pepper</td>
</tr>
<tr>
<td>Spinach</td>
<td>Basil, Chives, Dill, Lovage, Thyme, Allspice, Nutmeg</td>
</tr>
<tr>
<td>Squash, summer**</td>
<td>Basil, Chives, Dill, Marjoram, Onions, Oregano, Coriander, Pepper</td>
</tr>
<tr>
<td>Squash, winter</td>
<td>Celery Leaves, Marjoram, Onions, Parsley, Sage, Thyme, Allspice, Curry, Ginger</td>
</tr>
<tr>
<td>Sunchoke</td>
<td>Anise, Chervil, Chives, Dill, Fennel Seeds, Parsley, Sage, Coriander, Mace</td>
</tr>
<tr>
<td>Sweet Corn</td>
<td>Basil, Cilantro, Oregano, Parsley, Rosemary, Thyme, Chili, Mustard</td>
</tr>
<tr>
<td>Sweet Potatoes</td>
<td>Leek, Sage, Thyme, Allspice, Chili, Ginger</td>
</tr>
<tr>
<td>Swiss Chard</td>
<td>Lovage, Marjoram, Parsley, Savory, Allspice, Nutmeg, Paprika</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Basil, Cilantro, Dill, Oregano, Parsley, Rosemary, Curry, Paprika, Pepper</td>
</tr>
<tr>
<td>Turnips</td>
<td>Basil, Borage, Caraway, Dill, Marjoram, Parsley, Rosemary, Allspice, Mustard, Pepper</td>
</tr>
</tbody>
</table>

* Chicories include Endive, Escarole, and Radicchio. Also for Choi, Napa/Chinese Cabbage, and Salad Greens use Chicories. **Summer Squash includes Zucchini; for Colards use Kale.
Tip for using Herbs and Spices

Purchasing and storing

**Fresh herbs**
- Can be purchased with the other fresh produce items
- Refrigeration and loosely wrapping the bouquet of herbs in film wrap can extend the shelf life

**Dried herb**
- Store dried herbs and spices in a cool, dry place in an airtight container
- Dried herbs and spices retain their flavor for 6 months to 1 year

**Purchasing practices for healthy school meals**

*Check for the amount of sodium in purchased items*
- Purchase garlic, onion, and celery powders instead of garlic, onion or celery salts which have more sodium
- Purchase seasoning mixes that do not contain monosodium glutamate (MSG) or where salt is not the primary ingredient

**Culinary Principles**

**Spices**
Include allspice, cardamom, cinnamon, cloves, garlic, mace, mustard, nutmeg, paprika, peppercorns, and red pepper

**Herbs**
Include anise seed, basil, bay leaves, caraway seed, celery seed, chives, cilantro, coriander, cumin, dill, fennel seed, marjoram, mint, oregano, parsley, poppy seed, rosemary, sage, savory, sesame seed, tarragon, thyme, and turmeric.

**Seasoning foods**
Include bell peppers—green, red, yellow, hot chili pepper such as jalapeno pepper, and many other varieties of pepper; carrots, celery, garlic, lean smoked meat, leek, onion, and shallot are examples of seasonings.

**Additional seasonings**
Include juices: apple, lemon, lime, orange, pineapple; orange and lemon zest; meat bases; vegetable stock; olive oil; hot sauce; soy sauce; Worcestershire sauce; smoke flavor concentrate; and sesame seed oil.

- Use 1 to 3 herbs or spices in a recipe to enhance, not overpower, the flavor of the vegetable.
- Coriander or Curry may be added before cooking, all other herbs and spices should be added after cooking.
- Herbs and spices may be used as a salt substitute—with a little lemon to enhance, and with oil or unsalted butter.
- Use Cilantro—the green, pungent herb of the Coriander plant—fresh in salads or sauces. Cook only with Coriander.
- Replace Pepper with Allspice for warmth in cold weather.
- Because lettuce is “water filler” and neutral, it can be mixed with any herb or spice.
- Garlic dominates flavors—use little with vegetables. Let it grace meat or fish dishes.
# Storing Fresh Fruits and Vegetables for Best Flavor

## Store in the refrigerator

<table>
<thead>
<tr>
<th>FRUIT</th>
<th>VEGETABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apples</strong></td>
<td><strong>Belgian Endive</strong></td>
</tr>
<tr>
<td>(more than 7 days)</td>
<td><strong>Cauliflower</strong></td>
</tr>
<tr>
<td><strong>Apricots</strong></td>
<td><strong>Cabbage</strong></td>
</tr>
<tr>
<td><strong>Asian pears</strong></td>
<td><strong>Carrots</strong></td>
</tr>
<tr>
<td><strong>Berries</strong></td>
<td><strong>Cherries</strong></td>
</tr>
<tr>
<td><strong>Cherries</strong></td>
<td><strong>Cut Vegetables</strong></td>
</tr>
<tr>
<td><strong>Cut Fruits</strong></td>
<td><strong>Green Beans</strong></td>
</tr>
<tr>
<td><strong>Figs</strong></td>
<td><strong>Green Onions</strong></td>
</tr>
<tr>
<td><strong>Grapes</strong></td>
<td><strong>Herbs (not basil)</strong></td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td><strong>Leafy Vegetables</strong></td>
</tr>
<tr>
<td><strong>Artichokes</strong></td>
<td><strong>Leeks</strong></td>
</tr>
<tr>
<td><strong>Asparagus</strong></td>
<td><strong>Lettuce</strong></td>
</tr>
<tr>
<td><strong>Broccoli</strong></td>
<td><strong>Mushrooms</strong></td>
</tr>
<tr>
<td><strong>Brussel Sprouts</strong></td>
<td><strong>Peas</strong></td>
</tr>
<tr>
<td><strong>Cabbage</strong></td>
<td><strong>Radishes</strong></td>
</tr>
<tr>
<td><strong>Carrots</strong></td>
<td><strong>Spinach</strong></td>
</tr>
<tr>
<td><strong>Cut Vegetables</strong></td>
<td><strong>Sprouts</strong></td>
</tr>
<tr>
<td><strong>Green Onions</strong></td>
<td><strong>Summer Squashes</strong></td>
</tr>
<tr>
<td><strong>Herbs (not basil)</strong></td>
<td><strong>Sweet Corn</strong></td>
</tr>
</tbody>
</table>

1. Place fruits and vegetables in separate, perforated plastic bags.
2. Use within 1-3 days for maximum flavor and freshness.
3. Store each group in different produce drawers in the refrigerator to minimize the detrimental effects of ethylene produced by the fruits on the vegetables.

## Ripen on the counter first, then refrigerate

<table>
<thead>
<tr>
<th>FRUIT</th>
<th>VEGETABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Avocados</strong></td>
<td><strong>Garlic</strong>*</td>
</tr>
<tr>
<td><strong>Kiwi</strong></td>
<td><strong>Ginger</strong></td>
</tr>
<tr>
<td><strong>Nectarines</strong></td>
<td><strong>Peppers†</strong></td>
</tr>
<tr>
<td><strong>Peaches</strong></td>
<td><strong>Potatoes</strong>*</td>
</tr>
<tr>
<td><strong>Pears</strong></td>
<td><strong>Pumpkins</strong></td>
</tr>
<tr>
<td><strong>Plums</strong></td>
<td><strong>Sweet Potatoes</strong>*</td>
</tr>
<tr>
<td><strong>Plumcots</strong></td>
<td><strong>Tomatoes</strong></td>
</tr>
</tbody>
</table>

1. To prevent moisture loss, store fruits and vegetables separately in a paper bag, perforated plastic bag, or ripening bowl on the counter away from sunlight. Ripening fruit in a bowl or paper bag can be enhanced by placing an apple with the fruit to be ripened.
2. After ripening, store in refrigerator and use within 1-3 days.

## Store only at room temperature

<table>
<thead>
<tr>
<th>FRUIT</th>
<th>VEGETABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apples</strong></td>
<td><strong>Basil (in water)</strong></td>
</tr>
<tr>
<td>(fewer than 7 days)</td>
<td><strong>Garlic</strong>*</td>
</tr>
<tr>
<td><strong>Bananas</strong></td>
<td><strong>Ginger</strong></td>
</tr>
<tr>
<td><strong>Citrus fruits</strong></td>
<td><strong>Jicama</strong></td>
</tr>
<tr>
<td><strong>Mangoes</strong></td>
<td><strong>Onions</strong>*</td>
</tr>
<tr>
<td><strong>Melons</strong></td>
<td><strong>Pumpkins</strong></td>
</tr>
<tr>
<td><strong>Papayas</strong></td>
<td><strong>Sweet Potatoes</strong>*</td>
</tr>
<tr>
<td><strong>Persimmons</strong></td>
<td><strong>Tomatoes</strong></td>
</tr>
<tr>
<td><strong>Pineapple</strong></td>
<td><strong>Winter Squashes</strong></td>
</tr>
<tr>
<td><strong>Plantain</strong></td>
<td><strong>Vegetables</strong></td>
</tr>
<tr>
<td><strong>Pomegranates</strong></td>
<td><strong>Garlic</strong>*</td>
</tr>
<tr>
<td><strong>Eggplant†</strong></td>
<td><strong>Ginger</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Peppers†</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Potatoes</strong>*</td>
</tr>
<tr>
<td></td>
<td><strong>Pumpkins</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Sweet Potatoes</strong>*</td>
</tr>
</tbody>
</table>

1. Many fruits and vegetables should only be stored at room temperature. Refrigeration can cause cold damage or prevent them from ripening to good flavor and texture. For example, pink tomatoes ripen to a better taste and red color if they are left at room temperature. In the refrigerator, they do not turn red, and even red tomatoes kept in the refrigerator lose their flavor.
2. Keep away from direct sunlight.

*Store garlic, onions, potatoes, and sweet potatoes in a well-ventilated area in the pantry.
†Cucumbers, eggplant, and peppers can be refrigerated for 1-3 days if they are used soon after removing from the refrigerator.

## Cleaning Your Produce

Always keep produce separate from raw meat, poultry, and seafood. Never use detergent or bleach to wash produce. Instead, rinse produce under running tap water immediately prior to use, including those with skins and rinds that are not eaten. Washing too far in advance removes some of nature's natural preservatives. However, head lettuce or leafy greens remain crisper when washed right away and then refrigerated. Packaged fruits and vegetables labeled “ready-to-eat,” “washed,” or “triple washed” need not be washed. Refrigerate all cut, peeled, or cooked fruits and vegetables within 2 hours.

For information on how to store other fruits and vegetables go to [FruitsAndVeggiesMoreMatters.org](http://FruitsAndVeggiesMoreMatters.org)

Source: UC Davis Postharvest Technology

© 2012 Produce for Better Health Foundation.
The Kernel of Wheat...sometimes called the wheat berry, the kernel is the seed from which the wheat plant grows. Each tiny seed contains three distinct parts that are separated during the milling process to produce flour.

Endosperm...about 83 percent of the kernel weight and the source of white flour.

Bran...about 14 1/2 percent of the kernel weight. Bran is included in whole wheat flour and can also be bought separately.

Germ...about 2 1/2 percent of the kernel weight. The germ is the embryo or sprouting section of the seed, often separated from flour in milling because the fat content limits flour's shelf-life.

Whole Grains...whole grain products are made with the whole kernel of grain. The bran (outer layer) contains the largest amount of fiber (insoluble), B vitamins, trace minerals and a small amount of protein; the endosperm (middle layer) contains mostly protein and carbohydrates along with small amounts of B vitamins, iron and soluble fiber; and the germ (inner part) is a rich source of trace minerals, unsaturated fats, B vitamins, antioxidants, phytochemicals and a minimal amount of high quality protein.

Enriched Grains...enriched white flour is the finely ground endosperm of the kernel. Some of the nutrients that are milled out are replaced through enrichment. Slice for slice, enriched white bread as well as other enriched grain products, are a good source of iron and or B vitamins (thiamin, riboflavin, niacin and folic acid) as well as complex carbohydrates. Enriched grain products have over twice the amount of folic acid as whole wheat. Compare a slice of enriched white bread with 37mcg to a slice of whole grain bread at 17.5mcg.
HOW FLOUR IS MILLED
(A SIMPLIFIED DIAGRAM)

IT STARTS HERE...

ELEVATOR-storage and care of wheat.

PRODUCT CONTROL-chemists inspect and classify wheat, blending is often done at this point.

SEPARATOR-reciprocating screens remove stones, sticks and other coarse and fine materials.

ASPIRATOR-air currents remove lighter impurities.

DISC SEPARATOR-barley, oats, cockle and other foreign materials are removed.

SCOURER-beaters in screen cylinder scour off impurities and roughage.

WASHER-STONER-high speed rotors circulate wheat and water-stones are removed.

DISC SEPARATOR-barley, oats, cockle and other foreign materials are removed.

ASPIRATOR-air currents remove lighter impurities.

TEMPERING-watertoughens outer bran coats for easier separation-softens or mellows endosperm.

BLENDING-types of wheat are blended to make specific flours.

ENTOLETER-impact machine breaks and removes unsound wheat.

PRODUCT CONTROL-chemists inspect and classify wheat, blending is often done at this point.

ELEVATOR-storage and care of wheat.

MAGNETIC SEPARATOR-iron or steel articles stay here.

BULK STORAGE

FIRST BREAK-corrugated rolls break wheat into coarse particles.

REDUCING ROLLS-

Air currents and sieves separate bran and classify particles (or middlings).

TEMPERING BINS

TEMPERING-water toughens outer bran coats for easier separation-softens or mellows endosperm.

GERM ROLLS

joint.jpg

BLEACHING-flour is matured and color neutralized

MAGNETIC SEPARATOR-iron or steel articles stay here.

BULK STORAGE

CLEAR FLOUR

BULK DELIVERY to bakeries...

by truck

by rail

PATENT FLOUR

SACKED-

for home and bakery use.

ENRICHING-thiamine, niacin, riboflavin and iron are added.

SACKED-

for home and bakery use.

BULK DELIVERY to bakeries...

by truck

by rail

BRAN

SHORTS

GERM

NOTE: This chart is greatly simplified. The sequence, number and complexity of different operations vary in different mills.
AMARANTH (Amaranthus spp.) Amaranth was a staple of Aztec culture, until Cortez decreed that anyone growing the crop would be put to death. Seeds were smuggled to Asia, where local dialects referred to Amaranth as “seed sent by God” as a tribute to its taste and sustenance. Amaranth kernels are tiny and resemble brown caviar when cooked. Today amaranth is making its way back, thanks to a lively, peppery taste and a higher level of protein (16%) than most other grains. In South America, it is often sold on the streets, popped like corn. Amaranth has no gluten, so it must be mixed with wheat to make leavened breads. It is popular in cereals, breads, muffins, crackers and pancakes. Health bonus: Amaranth has a high level of very complete protein; its protein contains lysine, an amino acid missing or negligible in many grains.

BARLEY (Hordum vulgare) Barley is one of the oldest cultivated grains. Egyptians buried mummies with necklaces of barley, and centuries later Edward I of England standardized the inch as equal to “three barley seeds.” It is a highly-adaptable crop, growing north of the Arctic circle and as far south as Ethiopia. Barley has a very tough hull, difficult to remove without losing some bran. Peared barley is not a whole grain (but is still high in fiber). Look for hulled barley or one of the new varieties of hull-less barley starting to be available. Lightly pearled barley is not technically a whole grain (as small amounts of the bran are missing) – but it’s full of fiber and much healthier than a fully-refined grain. Health bonus: The fiber in barley is especially healthy; it may lower cholesterol even more effectively than oat fiber.

BUCKWHEAT (Fagopyrum esculentum) Buckwheat goes way beyond the pancakes mixes we associate it with. Japan’s soba noodles, Brittany’s crêpes and Russia’s kasha are all made with buckwheat. Botanically, buckwheat is a cousin of rhubarb, not technically a grain at all — and certainly not a kind of wheat. But its nutrients, nutty flavor and appearance have led to its ready adoption into the family of grains. Buckwheat tolerates poor soil, grows well on rocky hillsides and thrives without chemical pesticides. Health bonus: Buckwheat is the only grain known to have high levels of an antioxidant called rutin, and studies show that it improves circulation and prevents LDL cholesterol from blocking blood vessels.

BULGUR (Triticum dicoccum) Emmer, an ancient strain of wheat, was one of the first cereals ever domesticated in the Fertile Crescent, and centuries later, it served as the standard daily ration of the Roman legions. But over the centuries, emmer was gradually abandoned in favor of durum wheat, which is easier to hull. By the beginning of the 20th century, higher-yielding wheat strains had replaced emmer almost everywhere, except in Ethiopia, where emmer still constitutes about 7% of the wheat grown. In Italy – and increasingly around the world – emmer is known as farro or grano farro and is staging a comeback as a gourmet specialty. Semolina flour made from emmer is still used today for special soups and other dishes in Tuscany and Umbria, and farro is thought by some aficionados to make the best pasta.

KAMUT® GRAIN (Triticum turgidum turanicum) Kamut® grain is another example of an heirloom grain, once pushed aside by an agricultural monoculture but now returning to add variety to the food supply. Brought back as a souvenir said to be from an Egyptian tomb, this wheat variety was pedigged without much success at the Montana State Fair in 1960 as “King Tut’s Wheat.” Years of selecting, testing and propagating eventually brought the grain – now called Kamut, an ancient Egyptian word for wheat – to prominence. Today, millions of pounds of this rich, butter-tasting wheat are grown on organic farms and made into over 450 whole-grain products around the world. Health bonus: Kamut® grain has higher levels of protein than common wheat, and more Vitamin E.

MILLET (Panicum miliaceum) Millet is rarely served to humans in the United States – here, it’s the grain most often found in bird feeders. Yet it’s the leading staple grain in India, and is commonly eaten in China, South America, Russia and the Himalayas. Millet has a mild flavor and is often mixed with other grains or toasted before cooking, to bring out the full extent of its delicate flavor. Its tiny grain can be white, gray, yellow or red.

OATS (Avena sativa) Oats have a sweet flavor that makes them a favorite for breakfast cereals. Unique among everyday grains, oats almost never have their bran and germ removed in processing. So if you see oats or oat flour on the label, relax: you’re virtually guaranteed to be getting whole grain. In the US, most oats are steamed and flattened to produce “old-fashioned” or regular oats, quick oats, and instant oats. The more oats are flattened and steamed, the quicker they cook – and the softer they become. If you prefer a chewier, nuttier texture, consider steel-cut oats, also sometimes called Irish or Scottish oats. Steel-cut oats consist of the entire oat kernel (similar in look to a grain of rice), sliced once or twice into smaller pieces to help water penetrate and cook the grain. Cooked for 20-30 minutes, steel-cut oats create a breakfast porridge that delights many people who didn’t realize they love oatmeal! Health bonus: Studies show that oats, like barley, contain a special kind of fiber called beta-glucan especially effective in lowering cholesterol. Recent research reports indicate that oats also have a unique antioxidant, avenanthurin, that helps protect blood vessels from the damaging effects of LDL cholesterol.

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Whole Grains Council / Oldways • 266 Beacon St., Boston MA 02116 • www.wholegrainscouncil.org
RICE (Oryza sativa) White rice has been refined, with the germ and bran removed. Whole-grain rice is usually brown – but, unknown to many, can also be black, purple, red or any of a variety of exotic hues. Around the world, rice thrives in warm, humid climates; almost all of the US rice crop is grown in Arkansas, California, Louisiana, Mississippi, Missouri and Texas. Converted rice is parboiled before refining, a process which drives some of the B vitamins into the endosperm so that they are not lost when the bran is removed. As a result, converted rice is healthier than regular white rice, but still is lacking many nutrients found in brown rice. Brown rice is lower in fiber than most other whole grains, but is full of other important nutrients. **Health bonus:** Rice is one of the most easily-digested grains – one reason rice cereal is often recommended as a baby’s first solid. This makes rice ideal for those on a restricted diet or who are gluten-intolerant.

RYE (Secale cereale) Long seen as a weed in more desirable wheat crops, rye eventually gained respect for its ability to grow in areas too wet or cold for most other grains. For this reason it is a traditional part of cuisine in Northern Europe and Russia. Rye was also widely grown in colonial America; some historians believe a fungus, rye ergot, triggered hallucinations leading to the Salem witch trials. Recently the Finnish bakery group Fazer started a three-year program to publicize the health benefits of rye products, in a major push to increase rye consumption. Rye is unusual among grains for the high level of fiber in its endosperm – not just in its bran. Because of this, rye products generally have a lower glycemic index than products made from wheat and most other grains, making them especially healthy for diabetics. **Health bonus:** The type of fiber in rye promotes a rapid feeling of fullness, making rye foods a good choice for people trying to lose weight.

SORGHUM / MILO (Sorghum spp.) Farmers on the Great Plains from South Dakota to Texas appreciate that sorghum thrives where other crops would wither and die; in drought periods, in fact, it becomes partially dormant. Worldwide, about 50% of sorghum goes to human consumption, but in the US, most of the crop is fed to animals, made into wallboard or used for biodegradable packing materials. That’s a shame, because sorghum, also called milo and believed to have originated in Africa, can be eaten like popcorn, cooked into porridge, ground into flour for baked goods, or even brewed into beer. **Health bonus:** Sorghum is especially popular among those with celiac disease.

SPELT (Triticum aestivum spelta) Spelt is a variety of wheat widely cultivated until the spread of fertilizers and mechanized harvesting left it by the wayside in favor of wheats more compatible with industrialization. Spelt can be used in place of common wheat in most recipes. Twelfth-century mystic St. Hildegard is said to have written, “The spelt is the best of grains. It is rich and nourishing and milder than other grain. It produces a strong body and healthy blood to those who eat it and it makes the spirit of man light and cheerful. If someone is ill boil some spelt, mix it with egg and this will heal him like a fine ointment.” Today, the German abbey she founded still sells spelt products and even spelt liqueur. **Health bonus:** Spelt is higher in protein than common wheat. There are anecdotal reports that some people sensitive to wheat can tolerate spelt, but no reliable medical studies have addressed that issue.

TEFF (Eragrostis tef) It is estimated that teff is the principal source of nutrition for over two-thirds of Ethiopians, who make it into the ubiquitous spongy injera flatbread. Teff grains are minute – just 1/150 the size of wheat kernels – giving rise to the grain’s name, which comes from teffa, meaning “lost” in Amharic. This nutritious and easy-to-grow type of millet is largely unknown outside of Ethiopia, India and Australia. Today it is getting more attention for its sweet, molasses-like flavor and its versatility; it can be cooked as porridge, added to baked goods, or even made into “teff polenta.” Teff grows in three colors: red, brown and white. All are whole-grain, because the kernel is simply too small to mill easily. **Health bonus:** Teff has over twice the iron of other grains, and three times the calcium.

TRITICALE (x triticecale rimpai) Triticate (trit-i-kay-lee) is the new kid on the block, a hybrid of durum wheat and rye that’s been grown commercially for only thirty-five years. Rye and wheat have long cross-bred in nature, but the resulting offspring were sterile, until a French scientist, in 1937 discovered how to induce fertility. Triticate was over-hyped as a miracle crop in the 1970s, but initial interest faded when crops were inconsistent and acceptance was slow. Today about 80% of the world’s triticate is grown in Europe. It grows easily without commercial fertilizers and pesticides, making it ideal for organic and sustainable farming.

WHEAT (Triticum aestivum; Triticum turgidum) Wheat has come to dominate the grains we eat because it contains large amounts of gluten, a stretchy protein that enables bakers to create satisfying risen breads. It’s almost impossible to make an acceptable risen loaf without at least some wheat mixed in. Two main varieties of wheat are widely eaten. Durum wheat (Triticum turgidum durum) is made into pasta, while bread wheat (Triticum aestivum vulgare) is used for most other wheat foods. Bread wheat is described as “hard” or “soft” according to its protein content; as “winter” or “spring” according to when its sown; and as “red” or “white” according to color of the kernels. Hard wheat has more protein, including more gluten, and is used for bread, while soft wheat creates “cake flour” with lower protein. Winter and spring wheat differ largely in their growing areas, with northern areas supporting spring wheat and more southerly climates able to plant winter wheat, which is actually planted in the fall and harvested in the spring. Red wheat has more strong-flavored tannins than milder white wheat; in this case the word “white” does not mean that the grain has been refined.

Like the other grains above, wheat can be enjoyed in many different forms other than baked goods and pasta. Bulgur (see above) makes excellent side dishes. Wheat berries – whole wheat kernels – can also be cooked as a side dish or breakfast cereal, but must be boiled for about an hour, preferably after soaking overnight. Cracked wheat cooks faster, as the wheat berries have been split open, allowing water to penetrate more quickly. Some stores also sell wheat flakes, with an appearance similar to rolled oats.

WILD RICE (Zizania spp.) Wild rice is not technically rice at all, but the seed of an aquatic grass originally grown by indigenous tribes around the Great Lakes. Today some commercial cultivation takes place in California and the Midwest, but much of the crop is still harvested by Native Americans, largely in Minnesota. The strong flavor and high price of wild rice mean that it is most often consumed in a blend with other rices or other grains. Wild rice has twice the protein and fiber of brown rice, but less iron and calcium.

If this overview of the world of whole grains has whetted your appetite, visit our website at www.wholegrainscouncil.org where you will find:
- scores of recipes, so you can try cooking with different grains
- sources to buy different grains
- lists of ready-made products made with different grains

Enjoy delicious whole grains at every meal, for better health. Whole grains:
- help you feel full, and control your weight
- reduce your risk of diabetes, and keep blood sugar steady
- keep your heart healthier, and help avoid strokes
- reduce inflammation and inflammatory diseases, like asthma
Whole Grain Stamp

Consumers searching the grocery aisles for authentic whole grain foods now have an effective "search tool" – the Whole Grain Stamp.

Making it easy for shoppers to spot whole grain foods helps close the Whole Grains Gap and promotes a goal long sought by nutrition and medical experts. That's why the Stamp was honored as 2006 Packaging Innovation of the Year.

AN AID FOR BUSY SHOPPERS

The Whole Grain Stamps feature a stylized sheaf of grain on a golden-yellow background with a bold black border. Their eye-catching design makes the Whole Grain Stamp easy to spot on food packages. Busy shoppers welcome this easy shortcut for finding products offering at least a half serving of whole grains.

BASIC STAMP OR 100% STAMP?

There are two different varieties of Stamp, the Basic Stamp and the 100% Stamp.

- If a product bears the 100% Stamp, then all its grain ingredients are whole grains. There is a minimum requirement of 16g (16 grams) – a full serving – of whole grain per labeled serving, for products using the 100% Stamp.

- If a product bears the Basic Stamp, it contains at least 8g (8 grams) – a half serving – of whole grain, but may also contain some refined grain. Even if a product contains large amounts of whole grain (23g, 37g, 41g, etc.), it will use the Basic Stamp if it also contains extra bran, germ, or refined flour.

Each Stamp also shows a number, telling you how many grams of whole grain ingredients are in a serving of the product.

<table>
<thead>
<tr>
<th>THE BASIC STAMP</th>
<th>THE 100% STAMP</th>
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<tbody>
<tr>
<td>Product may contain some extra bran, germ, or refined flour.</td>
<td>For products where ALL of the grain is whole grain.</td>
</tr>
<tr>
<td>Minimum requirement: 8g (8 grams) whole grain per serving. (one half serving of whole grain)</td>
<td>Minimum requirement: 16g (16 grams) whole grain per serving. (a full serving of whole grain)</td>
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</table>
YOU DO THE MATH... IT'S SIMPLE
With the Whole Grain Stamp, you don't need to study ingredients or count grams and ounces to meet the whole grain goals in the latest government guidelines. The Stamp makes it easy to get your recommended three servings or more of whole grains each day:

- Eat three whole grain food products labeled "100% Whole Grain" OR
- Eat six products bearing ANY Whole Grain Stamp

It's simple. All you need to do is look for the Stamp. But if you enjoy knowing just how much whole grain is in the products you're eating, the Whole Grain Stamps tell you – while also reminding you to aim for at least 48g (48 grams) of whole grain overall, each day.

OLDER WHOLE GRAIN STAMPS
Packaging printed earlier than mid-2006 may still show an earlier version of the Whole Grain Stamp, as it appeared before we took off the training wheels and introduced Phase II of the Stamp – with more information for consumers.

The graphic is largely the same as today's Stamp, but the text has three versions:

- "Good Source" identifies products containing at least 8g of whole grains per serving.
- "Excellent Source" identifies products containing at least 16g of whole grains per serving.
- "100% / Excellent" identifies products where all the grain is whole grain and that contain at least 16g of whole grains per serving.

These original graphics are become increasingly rare, as manufacturers use up packaging inventories and transition to new boxes and bags featuring the gram-specific Stamps.

The same rule of thumb applies, though: just LOOK FOR THE STAMP and you'll be assured of getting your recommended three servings or more of whole grains daily.

Whole Grains Council
www.wholegrainscouncil.org
Do any of the statements below remind you of your child?

“Ebony will only eat peanut butter sandwiches!”
“Michael won’t eat anything green, just because of the color.”
“Bananas used to be Matt’s favorite food, now he won’t even touch them!”

Your child may eat only a certain type of food or refuse foods based on a certain color or texture. They may also play at the table and may not want to eat. Don’t worry if your child is a picky eater. Picky eating behavior is common for many children from the age of 2 to 5 years. As long as your child has plenty of energy and is growing, he or she is most likely eating enough to be healthy. If you have concerns about your child’s growth or eating behavior, talk to your child’s doctor.

How to cope with picky eating

Your child’s picky eating is temporary. If you don’t make it a big deal, it will usually end before school age. Try the following tips to help you deal with your child’s picky eating behavior in a positive way. Check the ones that work for you and your child.

- **Let your kids be “produce pickers.”** Let them pick out fruits and veggies at the store.
- **Have your child help you prepare meals.** Children learn about food and get excited about tasting food when they help make meals. Let them add ingredients, scrub veggies, or help stir food.
- **Offer choices.** Rather than ask, “Do you want broccoli for dinner?” ask “Which would you like for dinner, broccoli or cauliflower?”
- **Enjoy each other while eating family meals together.** Talk about fun and happy things. If meals are times for family arguments, your child may learn unhealthy attitudes toward food.
- **Offer the same foods for the whole family.** Don’t be a “short-order cook,” making a different meal for your child. Your child will be okay even if he or she does not eat a meal now and then.
Trying new foods

Your child may not want to try new foods. It is normal for children to reject foods they have never tried before. Here are some tips to get your child to try new foods:

- **Small portions, big benefits.** Let your kids try small portions of new foods that you enjoy. Give them a small taste at first and be patient with them. When they develop a taste for more types of foods, it’s easier to plan family meals.

- **Offer only one new food at a time.** Serve something that you know your child likes along with the new food. Offering more new foods all at once could be too much for your child.

- **Be a good role model.** Try new foods yourself. Describe their taste, texture, and smell to your child.

- **Offer new foods first.** Your child is most hungry at the start of a meal.

- **Sometimes, new foods take time.** Kids don’t always take to new foods right away. Offer new foods many times. It may take up to a dozen tries for a child to accept a new food.

Make food fun!

Help your child develop healthy eating habits by getting him or her involved and making food fun! Get creative in the kitchen with these cool ideas. Check the ones you try at home, and be sure to add your own ideas, too!

- **Cut a food into fun and easy shapes with cookie cutters.**

- **Encourage your child to invent and help prepare new snacks.** Create new tastes by pairing low-fat dressings or dips with vegetables. Try hummus or salsa as a dip for veggies.

- **Name a food your child helps create.** Make a big deal of serving “Maria’s Salad” or “Peter’s Sweet Potatoes” for dinner.

- **Our family ideas to make food fun:**

  ________________________________
  ________________________________
  ________________________________

For more great tips on these and other subjects, go to: ChooseMyPlate.gov/preschoolers/
Phrases that **HELP** and **HINDER**

As the caregiver, you play the biggest role in your child’s eating behavior. What you say has an impact on developing healthy eating habits. Negative phrases can easily be changed into positive, helpful ones!

**Phrases that HINDER**

<table>
<thead>
<tr>
<th>INSTEAD OF ...</th>
<th>TRY ...</th>
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<tbody>
<tr>
<td>Eat that for me. If you do not eat one more bite, I will be mad.</td>
<td>This is kiwi fruit; it’s sweet like a strawberry. These radishes are very crunchy!</td>
</tr>
<tr>
<td>Phrases like these teach your child to eat for your approval and love. This can lead your child to have unhealthy behaviors, attitudes, and beliefs about food and about themselves.</td>
<td>Phrases like these help to point out the sensory qualities of food. They encourage your child to try new foods.</td>
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<tr>
<th>INSTEAD OF ...</th>
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<tr>
<td>You’re such a big girl; you finished all your peas. Jenny, look at your sister. She ate all of her bananas. You have to take one more bite before you leave the table.</td>
<td>Is your stomach telling you that you’re full? Is your stomach still making its hungry growling noise? Has your tummy had enough?</td>
</tr>
<tr>
<td>Phrases like these teach your child to ignore fullness. It is better for kids to stop eating when full or satisfied than when all of the food has been eaten.</td>
<td>Phrases like these help your child to recognize when he or she is full. This can prevent overeating.</td>
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<th>INSTEAD OF ...</th>
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<tbody>
<tr>
<td>See, that didn’t taste so bad, did it?</td>
<td>Do you like that? Which one is your favorite? Everybody likes different foods, don’t they?</td>
</tr>
<tr>
<td>This implies to your child that he or she was wrong to refuse the food. This can lead to unhealthy attitudes about food or self.</td>
<td>Phrases like these make your child feel like he or she is making the choices. It also shifts the focus toward the taste of food rather than who was right.</td>
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<th>INSTEAD OF ...</th>
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<tbody>
<tr>
<td>No dessert until you eat your vegetables. Stop crying and I will give you a cookie.</td>
<td>We can try these vegetables again another time. Next time would you like to try them raw instead of cooked? I am sorry you are sad. Come here and let me give you a big hug.</td>
</tr>
<tr>
<td>Offering some foods, like dessert, in reward for finishing others, like vegetables, makes some foods seem better than others. Getting a food treat when upset teaches your child to eat to feel better. This can lead to overeating.</td>
<td>Reward your child with attention and kind words. Comfort him or her with hugs and talks. Show love by spending time and having fun together.</td>
</tr>
</tbody>
</table>

Adapted from “What You Say Really Matters?” in *Feeding Young Children in Group Settings*, Dr. Janice Fletcher and Dr. Laurel Branen, University of Idaho.