A Menu Planner for the Child and Adult Care Food Program

Child Food Program of Texas 2013

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INTRODUCTION
You Are a Vital Link to Children

As a child care provider, you play a key role in children’s lives.

By working with children each day, you help them learn and grow. By serving them nutritious meals and snacks, you help children get the nourishment and energy they need to learn and grow—and are healthy. That makes your job very important.

Research has shown that there are crucial relationships between nutrition and health, and nutrition and learning. You are in a special position to show children what it means to eat for good health, including how important it is to eat a variety of foods.

More children are in child care today than ever before. Some spend more time in child care than they do at home. The meals and snacks served in your center through USDA’s Child and Adult Care Food Program (CACFP) are an important part of providing proper care.

In this menu planner, you will find information on how to meet your children’s food needs.
Use it to...
- Learn more about the CACFP meal pattern requirements.
- Find practical advice on how to serve high quality meals and snacks.
- Get ideas and tips for menu planning and nutrition education.
- Learn more about the Dietary Guidelines for Americans and the USDA Food Guide Pyramid.

The menu planner comes complete with...
- Sample menus.
- Guidance on keeping and using production records.
- Information on food safety and sanitation.

When used in combination with Child Care Recipes: Food for Health and Fun, this CACFP menu planner is your best tool to use as you plan nutritious meals for the children in your care.
Chapter One
Planning to Meet Children’s Food Needs

THIS CHAPTER HAS THREE PARTS:
• Understanding How Children Grow and Develop
• A Closer Look at Eating Habits
• Feeding Children Special Meals

Understanding How Children Grow and Develop...
Understanding how children grow and develop will help you plan and serve appropriate foods. You can create the best environment for children when you know what they are like at different ages and what each individual child can do.

Baby’s First Year

Birth to 6 months

• At this stage, infants have needs rather than wants. They have their own patterns and rhythms based on their physical needs. Holding and cuddling are very important for them. Children of this age cannot be “spoiled” by their child care providers.
• This is a time of rapid growth—they will double their birth weight in their first 4 to 5 months.
• At birth, an infant’s eyesight is blurry. A newborn’s eyes can only focus at about 8 inches away.
• They can hear, but do not understand words. They can only hear tones.
• Their sense of smell develops quickly. They can tell the difference between people by smell.

7 to 12 months

• Attachments to others grow as the infant experiences pleasant interactions, especially with other babies and the caregiver.
• Children develop likes and dislikes—for people and for what they eat.
• Physical growth is tremendous during this stage. By the end of the first year, an infant may have tripled in birth weight and may have doubled in length.
• Babies learn to crawl, squat down and stand up, carry objects in their hands, and walk during these months.
• Things that are new to them (even pots and pans) fascinate children. They love to look at and feel different sizes, shapes, and textures (soft, hard, smooth, rough, spongy, and furry).
• They recognize familiar voices and faces from far away. They also babble constantly, especially when someone talks to them.
Eating and Food Behaviors of Infants

*Here are some things to keep in mind:*

1. **Providing infants with the right foods will promote good health.**
   It will also give them a chance to enjoy new tastes and textures as they learn good eating habits.

2. **It is the responsibility of the infant’s parents and child care provider to decide:**
   - Whether to serve breast milk or formula
   - If serving formula, what kind
   - When to introduce solid foods
   - What solid foods to introduce

3. **It is important to talk with the child’s parents about what type of food and food textures they want introduced.**
   Introduce one new food at a time, with a week between each new food. If a food does not agree with the baby, you will know the foods to which the baby is sensitive.

4. **Older infants enjoy and can usually manage finger foods (bite-size portions).**
   They have few teeth, but can chew with their gums. Chewing on small pieces of bread, crackers, zwieback, and teething biscuits can help ease their teething pains.

*Here are some tips:*

- **Avoid giving infant’s foods that you do not want them to love when they get older.**
  Occasionally feeding infants such foods as fast food and sweets is fine, but serving these foods on a regular basis can make them strong favorites that will be hard for children to eliminate later in life.

- **Provide variety and repetition of food to keep it interesting.**
  By doing this, you will get infants used to the foods you want them to accept.

- **Make mealtime relaxed and enjoyable.**
  At this age, mealtimes may take up to 45 minutes or longer. The more relaxed and cheerful the atmosphere, the more quickly foods will get eaten. Offer small portions, use a soft baby spoon, and wait while the child finishes each mouthful before offering more. Try not to overfill the spoon to try and speed things up—this will actually slow things down.

- **Be a food role model.**
  Practice the same eating habits you would want the children to follow. For example, if you eat fruit as a snack, the children will want to eat fruit as well.
Toddlers

At 1 year old...

- Teething is a source of irritation and pain. All of a baby’s front teeth and one set of molars come in by his or her second birthday. Be prepared for lots of chewing because of teething.

- Playing consists of imitating others, building with blocks and other stackable items, and putting things into and pouring things out of containers. Spontaneous, unrecognizable scribbling often begins at this age. (Fat pencils, crayons, and non-permanent markers work best.)

- By the end of the first year, a child may have developed a vocabulary of 300 words. One-year-olds use and understand the words “Me”, “Mine”, and “No.” They recognize their own name and can make two- to three-word sentences.

At 2 years old...

- This phase in a young child’s life has been labeled the “terrible twos.” Two-year-olds can be a handful sometimes due to their high energy level and because they are developing so many skills—including walking, running, and eye-hand coordination.

- They are curious and want to do things for themselves. This means you need a flexible schedule and a safe environment for them to explore.

- Imitation is a main method of learning.

- While 2-year-olds are no longer drinking from a bottle, they still use sucking, mouthing, and tasting to explore their world.

- Language ability grows by leaps and bounds during this period. Children speak in two- to five-word sentences, which is an indication of their developing mental abilities.

- Physical growth is not as rapid as before. On the average, by age 2 ½ years, children have reached 50 percent of their adult height.
Eating and Food Behaviors of Toddlers

Here are some things to keep in mind:

1. **Physical growth begins to slow down a bit, and the child’s appetite may begin to decrease.**
   This often causes parents and caregivers to be unnecessarily concerned that toddlers are not eating enough or are not eating enough of the “right” foods. While a decrease in appetite is common at this age, if a toddler’s weight does not seem normal, ask the parents to check with their doctor to be sure the child is in good health.

2. **Children learn to hold and drink from a cup and will quit eating when they are full.**
   Healthy toddlers will decide which foods and how much of the foods offered they will eat. They may enjoy one food for a few weeks, and then refuse it.

3. **Definite food preferences begin to be established.**
   Toddlers prefer lukewarm foods over hot or cold foods. They usually do not like highly seasoned foods, but enjoy sweets.

4. **Children will try new foods if offered in a pleasant, appealing manner.**
   Young children are learning what foods they like and dislike. Be sure to:
   - Offer new foods frequently. Toddlers may need to see a new food offered 6 to 12 times before they will decide to like it. Once children have accepted a food, continue to offer it so the food will remain familiar.
   - Let children know they do not have to eat foods they do not want. This attitude will help children feel comfortable when trying new foods.

5. **While children know how much they need to eat, parents and child care providers are the “gatekeepers” who decide which foods to offer and when meals and snacks will be served.**
   If nutritious foods are served, toddlers can’t go wrong in what they choose to eat. Offering children nutritious and appropriate foods helps them get the nutrients and energy they need. It also sets a good example, starting at a very young age.

   Good foods to try are: fresh fruits and vegetables; breads, crackers, low-sugar cereals, pasta, potatoes, rice, tortillas, and cooked grains; meats, poultry and fish; dairy products including milk, eggs, yogurt and cheese; beans and peas; and foods with small amounts of spices and herbs.

   **Here are some additional tips:**
   - Don’t serve large amounts of juice.
     Try not to serve large amounts of juice throughout the day. It may fill up the child and take the place of other needed nutrients.
   - Don’t serve items that contain too much sugar.
     You can lessen a child’s sweet tooth by keeping sugar to a minimum. Store sweets out of sight. What children cannot see, they probably will not ask for.
Preschoolers

At 3 years old...
- Preschoolers enjoy activities that allow them to express themselves as they wish—art, pretend and dramatic play, and music. While they occasionally share their toys, they are still likely to play alone.
- The “average” 3-year-old child weighs more than 30 pounds and is approximately 36 inches tall.
- The primary teeth have come in. Teething pain and chewing on things are no longer problems.
- Eye-hand coordination becomes more refined. Children this age use a fork or spoon and draw and paint with more control and direction.
- Their vocabulary increases tremendously. They know their first and last names, age, and some parts of their address.

At 4 years old...
- Sharing and cooperative play occur more frequently now than at 3 years old.
- Children want more freedom and independence to explore their abilities. They like to be praised for what they do.
- The average weight of a healthy 4-year-old is 36 pounds. Average height is 40 inches.
- Motor skills become better controlled. This allows them to draw clearer pictures, cut with scissors, and make crude numbers and letters with pencil and paper. They can also throw a ball more accurately, pump on a swing, and dress themselves.
- Intellectual skills are advancing. They understand numbers and letters, size and weight differences, distance and time, and colors.
- Verbal skills continue to expand rapidly. They make up words, enjoy rhyming words, and repeat words and phrases that sound interesting.

At 5 years old...
- Independence continues to be an important issue. Five-year-olds enjoy helping and having responsibilities that they can successfully complete.
- They ask many questions, but now more for information than just social contact. Sentence structure is much more complex. They can carry on a lengthy discussion.
- The brain is 90 percent of its mature size, but the body is only 50 percent of its mature size. The average weight of a healthy 5-year-old is 43 pounds. Average height is 44 inches.
- They have better small motor control. They can copy designs, shapes, figures, letters, and numbers.
- Their attention span continues to grow. A hands-on group activity—or a sit-and listen activity—is now possible.
Eating and Food Behaviors of Preschoolers

Here are some things to keep in mind:

1. **Preschoolers’ eating habits may be erratic.**
   They may be too busy and active to want to sit and eat. Their rate of growth is slowing down, so they may eat less food. They may simply talk throughout the entire meal and forget to eat.

2. **They are establishing food preferences.**
   They know what they like and don’t like. Be sure to pave the way for good habits in the future by providing healthy meals and snacks.

3. **They may enjoy learning about food.**
   There are many ways to spark children’s interest in food. Some suggestions:
   - Discuss different foods with the children.
   - Mix nutrition information in with reading, storytelling, and other activities.
   - Allow the children to have input on what is served.
   - With proper supervision, let them help prepare various food items for a meal.
   - Get books and videos for the children. Select ones that send good nutrition messages about food.
A Closer Look at Eating Habits

Eating habits are formed during the early childhood years and may last a lifetime. Good eating habits do not just happen—they must be learned. Presenting children with a variety of nutritious foods—and limiting their access to low-nutrient foods—can help them learn to make nutritionally sound food choices. All child care providers can support positive eating habits.

On the following pages, you will find tips for:
- Successfully introducing new foods
- Encouraging favorable attitudes toward food
- Encouraging good eating habits

Introducing New Foods

*Think about timing...*
- Introduce only one new food at a time. Offer a very small amount (one to two bites) of the new food at first, so that a child learns new flavors and textures.
- Offer new foods at the beginning of the meal when children are hungry. Also, allow children plenty of time to look at and examine the new food.
- Offer new foods to children when they are healthy and have a good attitude.

*Be positive...*
- When introducing a new food, encourage teachers and staff to display a positive attitude toward it. Children will pick up on adults' attitudes toward foods.
- Enlist the help of an eager child. It is often useful to have a child who is usually open toward trying new foods to taste the new food first. Children will often be more willing to try a food if another person has already tried and liked it.
- Serve a new food with a familiar food. Point out the similarities between the two foods.
- Expect that the new food will be liked.
- Praise the children when they try a new food.

*Keep trying...*
- Offer new foods periodically and remember that toddlers may need to see a new food offered 6 to 12 times before they will decide to like it.
- If a food is still not accepted after several tries, change the way it is prepared and/or served.
- If children accept a new food, serve it again soon so they become accustomed to it.
Encouraging Favorable Food Attitudes and Good Eating Habits

*Be sensitive to children’s needs...*

- Try to understand each child’s personality and reactions to food.
- Serve age-appropriate portions. Dish out child portions instead of adult portions.
- Use child-sized tables, chairs, dishes, glasses, silverware, and serving utensils that young children can handle.

*Help children feel ready to eat...*

- Provide a short transition time between activities and mealtimes.
- Tell children a few minutes ahead of time that it will soon be time to eat. This helps them slow down and get ready.
- Provide some activities that will help them slow down, such as...
  - coloring or drawing
  - playing with blocks
  - listening to soft music
  - reading a story
  - talking about the meal

*Get children interested and involved...*

- Encourage children to participate in mealtime. With your careful supervision, invite them to help with...
  - setting the table
  - bringing food to the table
  - clearing and cleaning the table after eating
- Before the children sit down at the table, discuss the foods that will be served.
- Encourage children to do as much as possible for themselves. First efforts are an important step toward growth.
- Initiate nutrition education activities

*Make eating a pleasure...*

- Serve meals in a bright and attractive room.
- Select and arrange food on plates in ways that make meals interesting and attractive.
- To make meals interesting, include a variety of colors, flavors, textures, and shapes. Differences in temperature can also add interest—for example, crisp, cool, raw vegetables can be a nice contrast to a warm soup.
- Set a good example. Eat at the table with the children and encourage conversation. Invite the children to talk about their food experiences; how the food tastes and smells.

*Foster positive feelings...*

- Allow children to leave food on their plates. They may learn to overeat if they are told to finish their meals or clean their plates.
- Plan plenty of time to allow children to eat without feeling rushed.
- Avoid allowing children to use food to gain special attention.
- Never use food as a reward or punishment.
**Things to Keep in Mind about Overweight and Underweight Children**

It is important that growing children have healthy diets. Children must eat enough food to allow for adequate height and weight gain. Physical activity is an important component in maintaining proper weight.

A determination of whether a child is overweight or underweight should be made only by a licensed physician. Caregivers should never place any child on a special diet without documentation from a physician or other recognized medical authority. Check with your State agency for the documentation you will need to maintain on file for special diets.

**Overweight Children**

- Overweight children are usually not placed on calorie-restricted weight loss diets. This is because their diets must supply them with enough energy and nutrients for proper growth and development.
- When physicians diagnose children as overweight, they usually want children to maintain a constant weight, rather than lose weight. This way, as the children grow and get taller, they will “grow out” of their overweight condition.
- Physicians concerned about a child’s excess weight usually recommend changes in the family’s food choices. They emphasize balanced meals that contain lower fat meats, lower fat dairy products, and more fruits, vegetables, and whole grains.
- Physicians usually recommend changes in the family’s physical activities. Often they suggest increasing physical activities that the family can do together, such as hiking, walking, washing the car, and doing yard work.

**Underweight Children**

- Many children are underweight for a short period of their childhood. With time, their weight should catch up to their height.
- Only a physician should determine if being underweight is a serious condition in a child and if dietary changes should be made.

**To ensure good nutrition and health for ALL children...**

*Caregivers should plan meals that...*

- Meet the appropriate meal pattern(s)
- Contain plenty of fruits, vegetables, and grain products, especially whole grains, with little added fat.

*In addition, the child care program should include sufficient physical activity every day to promote fitness*

**It is important to note...**

- **ALL foods can fit into a child’s diet.** There is no “good food” or “bad food.”
- **Moderation, balance, and variety are important.** In fact, these are the KEYS to a healthy eating pattern for children.
Feeding Children Special Meals
At times, child care providers need to provide special meals to some children. For example, as we will see below, USDA regulations require that special meals be provided to disabled children whose condition requires special medical food(s), food substitution(s), or textural modification(s). Documentation regarding the child’s disability and the modification(s) required must be provided by a licensed physician.

In other situations, such as when a child’s condition does not meet USDA’s definition of disability, child care centers are encouraged, but not required, to serve special meals.

On the following pages are some questions and answers on:
- Food allergies and food intolerances
- Vegetarian meals
- Religious preferences

Food Allergies and Food Intolerances
What causes a food allergy? What are the symptoms?
A food allergy is caused by the body’s immune system reacting inappropriately to a food or food additive. Symptoms include wheezing, diarrhea, rashes, itching, and headaches.

Are food allergies most common in very young children?
Yes. Food allergies are most common in infants, due to their immature digestive systems. Food allergies are usually outgrown during the preschool years.

Which foods are responsible for most allergies in children?
Although any food may cause an allergic reaction, six foods are responsible for most of these reactions in children. These foods are peanuts, eggs, milk, tree nuts, soy, and wheat.

What steps should be taken if a food allergy is suspected?
- Foods that cause allergic reactions should be eliminated from the diet. However, it is important that the diet still contain a variety of foods for healthy growth and development.
- A child should receive a medical evaluation if food allergies are suspected. If the child’s physician determines that the child has a food allergy, a determination should be made of whether the child’s allergic condition meets USDA’s definition of disability.

If a child’s allergic condition meets USDA’s definition of disability, what is required?
USDA regulations require that special meals be provided to disabled children whose condition requires special medical food(s), food substitution(s), or textural modification(s). Documentation regarding the child’s disability and the modification(s) required must be provided by a licensed physician.

What is a food intolerance?
A food intolerance is an adverse food-induced reaction that does not involve the body’s immune system. Lactose intolerance is one example of food intolerance. A person with lactose intolerance lacks an enzyme needed to digest milk sugar. When that person eats milk products, gas, bloating, and abdominal pain may occur.
Do food intolerances meet USDA’s definition of disability?
Food intolerances do not fall under USDA’s definition of disability. Child care programs are not required, but are encouraged, to provide food substitutions for children with food intolerances who cannot consume the regular meal. Documentation of need and the food or foods to be substituted must be provided by a recognized medical authority.

Vegetarian Meals
Can vegetarian meals and snacks be planned to meet the CACFP meal pattern?
Yes. Vegetarian meals and snacks can be planned to meet the CACFP meal pattern. Even though vegetarian diets omit meat or all animal products, certain foods can be served in place of meat, poultry, or fish. These are:
- dry beans
- cheese
- eggs

However, whenever food choices are limited, it is more difficult to meet the body’s needs for energy and essential nutrients.

Without careful planning, what nutrients may be lacking in vegetarian diets?
A child’s growth and development may be compromised when food energy and/or essential nutrients are inadequate to support normal growth. Vegetarian diets, depending on their severity, specifically may lack calories, protein, essential fatty acids, calcium, iron, zinc, riboflavin, vitamin B12, or vitamin D.

What are the different types of vegetarian diets?
- **Vegan (pure vegetarian)**
  Will not eat meat, poultry, fish, milk or milk products, and eggs.
- **Lacto-vegetarian**
  Will consume milk and milk products, but will not eat meats, poultry, fish, or eggs.
- **Lacto-ovo-vegetarian**
  Will consume milk, milk products and eggs, but not meat, poultry, or fish.
- **Pesco-vegetarian**
  Will consume milk and milk products, eggs and fish, but not meat or poultry.

Who can provide more information?
A registered dietitian, or State and/or regional office nutrition coordinator can provide more information on feeding children who are vegetarians.

Religious Preferences
May religious preferences be accommodated in the CACFP?
Religious preferences may be accommodated in the CACFP. Variations can be made in the meal where there is evidence that such variations are nutritionally sound and are necessary to meet religious needs.

How can you obtain more information?
Contact your State CACFP coordinator for additional information on who is eligible for variations in meals for religious reasons.
Chapter Two
CACFP Meal Patterns

**THIS CHAPTER HAS FOUR PARTS:**
- Why CACFP Meal Patterns Are Important
- Meal Pattern Charts
- Meal Components
- Meal Pattern Exceptions

**Why CACFP Meal Patterns Are Important**
One goal of the CACFP is to serve attractive, tasty meals that meet a child’s nutritional needs. Using the CACFP meal pattern, you can offer appealing meals that are consistent with the Dietary Guidelines for Americans. Careful planning is necessary to meet these goals.

**What is a meal pattern?**
A meal pattern is the set of food components, food items, and minimum quantities required for a breakfast, supplement (snack), or lunch or supper for a specific age group of children.

The CACFP meal pattern for infants is shown on pages 24 and 25. The CACFP meal pattern for children is shown on pages 26 through 30.

**What does the CACFP meal pattern help you do?**
It helps you plan well-balanced, nutritious meals and snacks. Meals and snacks planned with the CACFP meal pattern supply the kinds and amounts of foods that children require to help meet their nutrient and energy needs.

**What are the age groups for CACFP meal patterns?**
An important step in planning and preparing meals through the CACFP is determining the age group (or groups) you will be serving and selecting the correct meal pattern for these children. The age groups are designed to reflect the differing nutritional needs of children.

*The CACFP meal pattern for infants is divided into the following age groups:*
- Birth through 3 months
- 4 months through 7 months
- 8 months through 11 months

*For children ages 1 through 12 years old, the CACFP meal pattern is divided into these age groups:*
- Ages 1 through 2 years
- Ages 3 through 5 years
- Ages 6 through 12 years

**Do the meal patterns show minimum requirements?**
The meal patterns specify minimum portion sizes for each meal component. You may serve more of each meal component, but to meet CACFP requirements, you must serve at least the minimum. Older children will need larger servings to satisfy their hunger and to get all the nutrients they need.
Meal Pattern Charts

Use the meal pattern charts to plan meals and snacks that include the right food components. Keep these charts in a convenient location and refer to them each time you plan a new menu.

Meal Pattern Chart for Infants

**CHILD AND ADULT CARE FOOD PROGRAM MEAL PATTERN FOR INFANTS**

<table>
<thead>
<tr>
<th></th>
<th>Breakfast</th>
<th>Lunch or Supper</th>
<th>Snack</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infants Birth</strong></td>
<td><strong>4 to 6 fluid ounces (fl oz) breast milk or formula</strong></td>
<td><strong>4 to 6 fl oz breast milk or formula</strong></td>
<td><strong>4 to 6 fl oz breast milk or formula</strong></td>
</tr>
<tr>
<td>through 3 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Infants 4 months</strong></td>
<td>4 to 8 fl oz breast milk or formula</td>
<td>4 to 8 fl oz breast milk or formula</td>
<td>4 to 6 fl oz breast milk or formula</td>
</tr>
<tr>
<td>through 7 months</td>
<td>0 to 3 tablespoons (Tbsp) infant cereal; 0 to 3 Tbsp infant cereal; 0 to 3 Tbsp fruit and/or vegetable</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Infants 8 months</strong></td>
<td>6 to 8 fluid ounces (fl oz) breast milk or formula</td>
<td>6 to 8 fl oz breast milk or formula</td>
<td>2 to 4 fl oz breast milk or fruit juice</td>
</tr>
<tr>
<td>through 11 months</td>
<td>2 to 4 tablespoons (Tbsp) infant cereal; and/or 1 to 4 Tbsp fruit and/or vegetable</td>
<td>2 to 4 Tbsp infant cereal; and/or 1 to 4 Tbsp meat, fish, poultry, egg yolk, cooked dry beans or peas; or ½ to 2 oz cheese; or 1 to 3 oz cottage cheese, cheese food, or cheese spread; and 1 to 4 Tbsp fruit and/or vegetable</td>
<td>0 to ½ slice bread or 0 to 2 crackers</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>

1. It is recommended that breast milk be served in place of formula from birth through 11 months.
2. For some breastfed infants who regularly consume less than the minimum of breast milk per feeding, a serving of less than the minimum amount of breast milk may be offered, with additional breast milk offered if the infant is still hungry.
3. Infant formula and dry infant cereal shall be iron-fortified.
4. A serving of this component shall be optional.
5. Fruit juice shall be full-strength.
6. Bread and bread alternates shall be made from whole-grain or enriched meal or flour.
## Meal Pattern Chart for Children

**CHILD AND ADULT CARE FOOD PROGRAM MEAL PATTERN FOR CHILDREN**

<table>
<thead>
<tr>
<th>BREAKFAST</th>
<th>Ages 1 year through 2 years</th>
<th>Ages 3 years through 5 years</th>
<th>Ages 6 years through 12 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILK</td>
<td>½ cup</td>
<td>¾ cup</td>
<td>1 cup</td>
</tr>
<tr>
<td>Must be fluid milk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VEGETABLE or FRUIT or JUICE¹</td>
<td>¼ cup</td>
<td>½ cup</td>
<td>½ cup</td>
</tr>
<tr>
<td>GRAINS/BREAD</td>
<td>Bread, enriched or whole-grain and/or cereal:</td>
<td>Bread, enriched or whole-grain and/or cereal:</td>
<td>Bread, enriched or whole-grain and/or cereal:</td>
</tr>
<tr>
<td>Cold dry cereal²</td>
<td>¼ cup*</td>
<td>1/3 cup**</td>
<td>¼ cup***</td>
</tr>
<tr>
<td>or Hot cooked cereal</td>
<td>¼ cup</td>
<td>¼ cup</td>
<td>½ cup</td>
</tr>
<tr>
<td>Cooked pasta or noodle products</td>
<td>¼ cup</td>
<td>¼ cup</td>
<td>½ cup</td>
</tr>
</tbody>
</table>

¹ If you are serving juice: Try not to serve juice to meet the fruit/vegetable requirement too many times throughout the day. It may fill up the children and take the place of other needed nutrients.

² If you are serving cold dry cereal for breakfast:
   * For ages 1 and 2 years, serve: ¼ cup (volume) or 1/3 oz (weight), whichever is less.
   ** For ages 3 through 5 years, serve: 1/3 cup (volume) or ⅓ oz (weight), whichever is less.
   *** For ages 6 through 12 years, serve: ¼ cup (volume) or 1 oz (weight), whichever is less.

---

[Image of breakfast items: pancakes, milk, fruit]
CHILD AND ADULT CARE FOOD PROGRAM MEAL PATTERN FOR CHILDREN

<table>
<thead>
<tr>
<th>Supplement (Snack)</th>
<th>Ages</th>
<th>Ages</th>
<th>Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 year through 2 years</td>
<td>3 years through 5 years</td>
<td>6 years through 12 years</td>
</tr>
</tbody>
</table>

Select 2 of the 4 components shown. If you select milk as one of the components, you may not serve fruit juice as the other component.

**MILK**
Must be fluid milk

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>½ cup</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>¾ cup</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>1 cup</td>
</tr>
</tbody>
</table>

**MEAT or MEAT ALTERNATE**
Meat, poultry, or fish (cooked, lean meat without bone)

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>½ oz</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>½ oz</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>1 oz</td>
</tr>
</tbody>
</table>

Cheese

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>½ oz</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>½ oz</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>1 oz</td>
</tr>
</tbody>
</table>

Egg (large)

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>½</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>½</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>½</td>
</tr>
</tbody>
</table>

Cooked dry beans or peas

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>1/8 cup</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>1/8 cup</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>¼ cup</td>
</tr>
</tbody>
</table>

Peanut butter or other nut or seed butter

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>1 Tbsp</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>1 Tbsp</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>2 Tbsp</td>
</tr>
</tbody>
</table>

Nuts and/or seeds¹

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>½ oz</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>½ oz</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>1 oz</td>
</tr>
</tbody>
</table>

Yogurt, plain or sweetened²

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>2 oz</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>2 oz</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>4 oz</td>
</tr>
</tbody>
</table>

**VEGETABLE or FRUIT OR JUICE³**

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>½ cup</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>½ cup</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>¾ cup</td>
</tr>
</tbody>
</table>

**GRAINS/BREADS**
A serving is a bread or bread alternate and/or cereal

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>½ slice</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>½ slice</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>1 slice</td>
</tr>
</tbody>
</table>

Cereal, enriched or whole-grain

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>¼ cup*</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>1/3 cup**</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>¾ cup***</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>¼ cup</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>¼ cup</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>½ cup</td>
</tr>
</tbody>
</table>

Cooked pasta or noodle products

<table>
<thead>
<tr>
<th>Ages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year through 2 years</td>
<td>¼ cup</td>
</tr>
<tr>
<td>3 years through 5 years</td>
<td>¼ cup</td>
</tr>
<tr>
<td>6 years through 12 years</td>
<td>½ cup</td>
</tr>
</tbody>
</table>

¹ If you are serving nuts and seeds for a supplement (snack):
For determining combinations:
1 oz of nuts or seeds = 1 oz of cooked lean meat, poultry, or fish.
Tree nuts and seeds that may be used as meat alternates are listed on page 34.

**CAUTION:** Children under 4 years of age are at the highest risk of choking. For this age group, USDA recommends that nuts and/or seeds be ground or finely chopped and served to children in prepared food. (See Appendix A for information on how to prevent choking.)

² **Commercially prepared yogurt is now permitted as a meat/meat alternate.**
You may serve 4 oz (weight) or 1/2 cup (volume) of plain, sweetened, or flavored yogurt to fulfill the equivalent of 1 oz of the meat/meat alternate component. For younger children, 2 oz (weight) or 1/4 cup (volume) fulfills the equivalent of 1/2 oz of the meat/meat alternate requirement.

³ **If you are serving juice:** Try not to serve juice to meet the fruit/vegetable requirement too many times throughout the day. It may fill up the children and take the place of other needed nutrients.

⁴ **If you are serving cold dry cereal for a supplement (snack):**
* For ages 1 and 2 years, serve: 1/4 cup (volume) or 1/3 oz (weight), whichever is less.
** For ages 3 through 5 years, serve: 1/3 cup (volume) or 1/2 oz (weight), whichever is less.
*** For ages 6 through 12 years, serve: 3/4 cup (volume) or 1 oz (weight), whichever is less.
<table>
<thead>
<tr>
<th>Lunch or Supper</th>
<th>Ages 1 year through 2 years</th>
<th>Ages 3 years through 5 years</th>
<th>Ages 6 years through 12 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILK</td>
<td>½ cup</td>
<td>¾ cup</td>
<td>1 cup</td>
</tr>
<tr>
<td>MEAT or MEAT ALTERNATE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat, poultry, or fish (cooked, lean meat without bone)</td>
<td>1 oz</td>
<td>1 ½ oz</td>
<td>2 oz</td>
</tr>
<tr>
<td>Cheese</td>
<td>1 oz</td>
<td>1 oz</td>
<td>2 oz</td>
</tr>
<tr>
<td>Egg (large)</td>
<td>½</td>
<td>⅔</td>
<td>1</td>
</tr>
<tr>
<td>Cooked dry beans or peas</td>
<td>¾ cup</td>
<td>3/8 cup</td>
<td>½ cup</td>
</tr>
<tr>
<td>Peanut butter or other nut or seed butter</td>
<td>2 Tbsp</td>
<td>3 Tbsp</td>
<td>4 Tbsp</td>
</tr>
<tr>
<td>Nuts and/or seeds</td>
<td>½ oz</td>
<td>¾ oz</td>
<td>1 oz</td>
</tr>
<tr>
<td>Yogurt, plain or sweetened</td>
<td>4 oz</td>
<td>6 oz</td>
<td>8 oz</td>
</tr>
<tr>
<td>VEGETABLE or FRUIT OR JUICE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serve two different vegetables and/or fruits to equal</td>
<td>¾ cup</td>
<td>½ cup</td>
<td>¾ cup</td>
</tr>
<tr>
<td>GRAINS/BREADS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A serving is a bread or bread alternate and/or cereal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bread, enriched or whole-grain</td>
<td>½ slice</td>
<td>½ slice</td>
<td>1 slice</td>
</tr>
<tr>
<td>Cooked cereal grains, enriched or whole-grain</td>
<td>¾ cup</td>
<td>¾ cup</td>
<td>¾ cup</td>
</tr>
<tr>
<td>Cooked pasta or noodle products</td>
<td>¼ cup</td>
<td>¼ cup</td>
<td>½ cup</td>
</tr>
</tbody>
</table>

1 If you are serving nuts and seeds for lunch or supper: This portion can meet only one-half of the total serving of the meat/meat alternate requirement.

   For determining combinations:
   1 oz of nuts or seeds = 1 oz of cooked lean meat, poultry, or fish.

   Tree nuts and seeds that may be used as meat alternates are listed on page 34.

   CAUTION: Children under 4 years of age are at the highest risk of choking. For this age group, USDA recommends that nuts and/or seeds be ground or finely chopped and served to children in prepared food. (See Appendix A for information on how to prevent choking.)

2 Commercially prepared yogurt is now permitted as a meat/meat alternate.

   You may serve 4 oz (weight) or 1/2 cup (volume) of plain, sweetened, or flavored yogurt to fulfill the equivalent of 1 oz of the meat/meat alternate component. For younger children, 2 oz (weight) or 1/4 cup (volume) fulfills the equivalent of 1/2 oz of the meat/meat alternate requirement.

3 If you are serving juice: Try not to serve juice to meet the fruit/vegetable requirement too many times throughout the day. It may fill up the children and take the place of other needed nutrients.
Meal Components
Here is more information about each of the meal components used in the CACFP meal pattern for children. These components are:

- Milk
- Meat and Meat Alternates
- Vegetables and Fruits
- Grains and Breads

Milk
Milk is an excellent source of protein, calcium, phosphorus, riboflavin, and vitamins A and D. Low-fat or skim milk is generally fortified with vitamins A and D.

Here are some things you need to know about this component:
- The milk component of the meal may be any fluid type of pasteurized whole, low-fat, or skim milk that is flavored or unflavored or cultured buttermilk. All milk served must meet State and local standards for fluid milk.
- At breakfast or snacks, use milk as a beverage, on cereal, or as a beverage and on cereal. At lunch or supper, milk must be served as a beverage.

To add calcium and improve the nutritional quality of the meal:
- You can use additional milk (fluid, evaporated, or nonfat dry milk) to prepare soups, casseroles, puddings, bakery items, or other baked or cooked products.
- However, this additional milk does not contribute to the required quantity at the meal.

Meat and Meat Alternates
Meat and meat alternates, as a food group, provide protein, iron, zinc, B vitamins (thiamin, riboflavin, niacin, B12), and other nutrients. Some choices within the group (cheese and yogurt) are not sources of iron but are high in protein.

Here are some things you need to know about this component:
- The meat and meat alternate component must be served at lunch and supper. Include a serving of cooked lean meat (beef, pork, lamb, veal), poultry, fish, cheese, cooked dry beans or peas, eggs, peanut butter or other nut or seed butters (almond, sesame, sunflower), or nuts or seeds (see caution on page 34), yogurt, or any combination.
- The meat and meat alternate may be served as part of the snack. At breakfast, it may be served as an additional item.
- For lunch and supper, the meat and meat alternate must be served in the main dish or in the main dish and one other menu item.
About Nuts and Seeds...

- **For the snack, how much of the meat and meat alternate requirement may nuts and seeds fulfill?**
  Nuts and seeds may fulfill all of the meat and meat alternate requirement for the snack.

- **For lunch or supper, how much of the meat and meat alternate requirement may nuts and seeds fulfill?**
  Nuts and seeds may fulfill up to one-half of the meat and meat alternate requirement for lunch or supper. To fulfill the lunch or supper requirement, nuts and seeds must be combined with another meat or meat alternate.

  For determining combinations: 1 ounce of nuts or seeds is equal to 1 ounce of cooked lean meat, poultry, or fish.

- **Which nuts and seeds may be used as a meat alternate?**
  Peanuts, soynuts, tree nuts (almonds, Brazil nuts, cashews, hazelnuts, macadamia nuts, pine nuts, pistachios, walnuts, and pecans), and seeds (sunflower, sesame, squash, and pumpkin).

### CAUTION: Children under 4 years old are at the highest risk of choking. As a result...

- When you are serving children under 4 years old, USDA recommends nuts and/or seeds be served ground or finely chopped in a prepared food.
- Be aware that meat products, such as meat sticks and hot dogs, can also be choking hazards.
- Be careful about children choking on bones, especially in chicken and fish.

*For more information on choking, see Appendix A, Infant and Child Lifesaving Steps.*

About yogurt...

Yogurt is very popular with children. Children like the smooth texture of yogurt, and it can be flavored for children’s tastes. Here are some things to keep in mind about serving yogurt as part of the meat and meat alternate component. Commercially prepared yogurt may be used as a meat or meat alternate for children age 1 year and older.

- Yogurt is a very good source of calcium. However, yogurt has no iron and often is sweetened, so it should not be a frequent choice at lunch or supper as a substitute for meat/poultry.
- Serve 4 ounces (weight) or ½ up (volume) of plain or sweetened and flavored yogurt to fulfill the equivalent of 1 ounce of the meat and meat alternate component.
- Six ounces (weight) or ¾ cup (volume) fulfills the equivalent of 1 ½ ounce of the meat and meat alternate requirement.
- Homemade yogurt and frozen yogurt or other yogurt-flavored products (such as yogurt bars, yogurt-covered fruit and/or nuts) may not be credited as a meat or meat alternate.
- When purchasing yogurt, read and compare the labels to know what you are buying.
- The fruit within yogurt, whether blended, mixed, or presented on top, cannot be credited towards the fruit requirement.
- Extra fruit that you add to the yogurt, such as fresh strawberries, canned peaches, or banana slices, can count towards the fruit component.
Vegetables and Fruits

Vegetables and/or fruits, as a food group, are an important part of a varied diet and contain substances linked to good health. These foods are generally low in fat in their natural form. You will also get more dietary fiber into children's diets by serving a wide variety of vegetables and fruits.

Here are some things you need to know about this component:

- At breakfast, a serving of fruit or vegetable or full-strength (100 percent) fruit or vegetable juice is required. (See page 37 for some menu planning tips, such as ways to include foods containing vitamin C. Also see page 37 for a cautionary note about unpasteurized juices.)
- For lunch and supper, serve two or more vegetables and/or fruits at each meal. For these meals, up to one-half of the total requirements may be met with full-strength fruit or vegetable juice.
- For the snack, juice may not be served if milk is selected as the only other component.

More about vegetables and fruits...

- Cooked vegetables means a serving of drained vegetables.
- A serving of cooked or canned fruit consists of fruit and juice.
- Thawed frozen fruit includes fruit with the thawed juice.

Some Menu Planning Tips...

- For variety, serve fruits and/or vegetables for mid-morning and mid-afternoon snacks.
- Breakfast is a good time to serve foods containing vitamin C, such as citrus fruits and juices, like oranges or grapefruit. Some other fruits containing vitamin C are bananas, strawberries, and cantaloupe.
- Select canned fruits that are packed in fruit juice or light syrup.
- Consider using dried fruits, such as apricots, raisins, and prunes, to provide variety in menus.
- See Appendix B What Foods are Good Sources of Vitamin A, Vitamin C, Calcium, and Iron?

CAUTION: SERVE PASTEURIZED JUICES

Serious outbreaks of foodborne illness have been traced to the drinking of unpasteurized juices. Pasteurizing kills any harmful bacteria that may be present in juice. Therefore, it is highly recommended that you serve only those juices that have been pasteurized. To help you identify juices that have not been pasteurized, the Food and Drug Administration requires a warning about unpasteurized juice on these products.
Grains and Breads
Grain products add interest and variety to meals. They can be a good source of vitamins and minerals as well as complex carbohydrates (starch and dietary fiber). Below are important facts about this component along with some menu planning tips. For a complete list of acceptable grains and breads and minimum serving sizes, refer to Appendix C.

Facts about Grains and Breads...

- **What is important to know about grain and bread items?**
  Grain and bread items must be enriched or whole-grain, made from enriched or whole-grain meal or flour, or if the product is a cereal, it must be whole-grain, enriched, or fortified. Bran and germ are credited the same as enriched or whole-grain meal or flour.

- **Why is folic acid one of the nutrients added to enrich products?**
  Since early 1996, U.S. food manufacturers have been required to add folic acid to most enriched breads, flours, cornmeal, pasta, rice, breakfast cereals, and other grain products to reduce the risk of neural tube birth defects in newborns. This is just one example of how enriching foods can be helpful.

- **What are some examples of enriched breads, cereals, and pasta? What do they contribute to a child's diet?**
  Enriched breads, cereals, and pasta are sources of complex carbohydrates (starch); thiamin; niacin; and iron. Examples include:
  - Bagels
  - Noodles
  - Cornbread
  - Corn muffins
  - Grits
  - Pita bread
  - Crackers
  - Ready-to-eat cereal
  - Pasta
  - White bread and rolls

- **What are some examples of whole-grain breads, cereals, and pasta? What do they contribute to a child’s diet?**
  Whole-grain breads, cereals, and pasta are sources of complex carbohydrates (starch and dietary fiber); copper; iron; magnesium; phosphorus; thiamin; riboflavin; and niacin. Examples include:
  - Brown rice
  - Whole-wheat pasta
  - Corn tortillas
  - Whole-wheat crackers
  - Oatmeal
  - Whole-wheat bread and rolls
  - Whole-grain rye bread
  - Whole-grain, ready-to-eat cereals

- **Do some grains/breads contain added fat?**
  Yes, some grains/breads contain added fat. Some examples of these foods include croissants, donuts, honey buns, sweet rolls, cakes, cookies, snack-type crackers, tortilla chips, and other kinds of snack chips.

  If you want to serve any of these products, be sure to read food labels to be aware of the amount of fat they contain, and be careful to limit the frequency that these foods are served to children. It is suggested that these kinds of foods be served no more than twice a week.
Menu Planning Ideas for Adding Grain Products to Your Menus...

When making sandwiches...
- Make sandwiches with whole-wheat bagels.
- Use ½ slice whole-wheat bread and ½ slice white bread.

When preparing main dishes or salads...
- Use rice, noodles, oats, cornmeal, or bulgur in main dishes.
- Serve different kinds of pasta salads for a change of pace.

When baking or buying grain products...
- Make or buy quick breads, muffins, crackers, or cookies with whole grains or wholegrain flours.
- Substitute whole-grain flour for part of the flour used in recipes.
- Serve whole-grain breads and cereals at breakfast and for snacks.
- Read ingredient labels to determine what is in the product. (Ingredients are listed in order by weight.)

Some Important Reminders about Bread and Bread Alternates...
- See Appendix C for a complete list of acceptable grains/breads. Appendix C is an important resource as you plan menus. It contains a complete list of acceptable grains and breads and minimum serving sizes.
- Check food labels carefully to see if snack foods are enriched. Some grain-based snack-type products (such as hard pretzels, hard bread sticks, and tortilla chips made from enriched or whole-grain meal or flour) can be used to meet the bread requirement. Check the food label to ensure these products are enriched.
- Keep in mind that some products will not count for lunch or supper even though they may be used for breakfast and/or snacks. Sweet grain-based products, such as toaster pastries, coffee cakes, donuts, sweet rolls, cake and cookies may be used as a bread alternate for breakfast and/or snacks but may not be used as a bread alternate for lunch or supper. However, USDA recommends that they be served no more than twice a week because of their high sugar and/or fat content.
- Be aware that some foods contain more sugar, fat, or salt than others. Some bread items and the items you serve with them (such as jams, jellies, margarine, and spreads) may contain more sugar, fat, or salt than others. Keep this in mind when considering how often to serve them.
Meal Pattern Exceptions
Using the CACFP meal pattern for menu planning is an important requirement for participating in the CACFP. May a child care center request an exception? Yes, but only under certain circumstances as described below.

Under what circumstances may a child care center request approval for an exception to using the CACFP meal pattern?

A child care center may request approval from its State agency for an exception to using the CACFP meal pattern for menu planning when the center contracts to have meals provided by a school and that school does the following two things:

- Participates in the National School Lunch Program and/or School Breakfast Program; and
- Uses an approved menu planning alternative.

Under these circumstances, the child care center may request approval from the State agency for the school to use the same menu planning system for the child care meals as it does for school meals.

For more information, contact your State agency.
Chapter Three
Tools for Planning Quality Meals

This chapter has five parts:

- What is Good Nutrition?
- Nutrients Needed for Growth and Development
- The Dietary Guidelines for Americans
- The USDA Food Guide Pyramid
- Understanding Food Labels

What is Good Nutrition?
We all know generally what nutrition is. It is the process by which our bodies take in and use food. But why is it so important? What is good nutrition?

Good nutrition is having the calories we need for energy and the nutrients essential for:

- Proper growth, repair, and maintenance of body tissues.
- Resistance to disease and infection.
- Prevention of deficiencies that lead to problems such as anemia, goiter, scurvy, and rickets.

In recent decades, medical researchers have found that good nutrition can also help reduce the risks of coronary heart diseases and certain types of cancer.

While we can sometimes get by with less than an optimum diet, to thrive we need a healthy diet. A healthy diet provides:

- Essential nutrients and energy to prevent nutritional deficiencies and excesses.
- The right balance of carbohydrate, fat, and protein to reduce risks for chronic disease.
- A variety of foods, including plenty of grains, vegetables, and fruits.

Nutrients Needed for Growth and Development
Many different nutrients are needed for good health. These include carbohydrates, fat, protein, vitamins, minerals, and water. Most foods contain more than one nutrient. And some foods provide more nutrients than others.

The best strategy? Choose a variety of foods.
To include the greatest amount of nutrients and meet the recommendations of the Dietary Guidelines for Americans, choose a variety of foods for each meal throughout the week.

A perfect food with all essential nutrients does not exist. A food may be a good source of some vitamins and minerals, but still lack other important ones. By regularly serving a variety of foods, you will help children learn healthy food habits. You will also help make sure the children will not become bored with the foods you offer them.
**Carbohydrates**

Carbohydrates are our most important source of energy. Carbohydrates come from many sources and are made up of two different types: simple carbohydrates and complex carbohydrates.

- **What do simple carbohydrates provide?**
  Simple carbohydrates (for example, the sugars which are found in milk and fruit) provide our bodies with energy that goes to work for our bodies right away.

- **What do complex carbohydrates provide?**
  Complex carbohydrates give a longer lasting form of energy. Foods rich in complex carbohydrates come from grains (pasta, breads, and cereals), vegetables, and legumes (dried beans and peas).

- **How much of the foods we eat should be carbohydrates?**
  Our daily diets need to include foods that provide simple carbohydrates and foods that provide complex carbohydrates. Over half of the foods we eat should be from these foods.

**Protein**

Protein is needed for building new tissue and forming new cells. The body can also use protein as a source of energy.

- **What are sources of protein?**
  Meat is a good source of protein along with milk, eggs, yogurt, and cheese. Other protein sources are grains and legumes, which are also rich in complex carbohydrates. Serving meat alternatives should be considered because of the amount of fat we find in meats and often because of how these foods are prepared for eating.

- **What does protein contribute to a child’s health?**
  Protein is needed to help children grow. When a child is sick, the body needs protein to get well. Protein will help the body fight off germs. If a child falls and breaks a bone or scrapes a knee, protein will be used to repair the body.

  Too little protein in the diet can stop a child from growing or learning. Excess protein may be used by the body for energy or stored as body fat.

**Fat**

Fat is the most concentrated energy source in the diet. It provides more than twice as many calories per gram as either proteins or carbohydrates. Fats are made of fatty acids. Fatty acids are required for brain development, vision, and the formation of some hormones. Fatty acids may be “saturated” or “unsaturated.”

- **What are saturated fats?**
  Fats that are made up mostly of saturated fatty acids are called saturated fats. Saturated fats cause our bodies to make cholesterol and can lead to heart disease.

  Saturated fats come mainly from animal foods, such as fatty meats, whole milk, and whole milk products. It is important to offer children lean meats and low fat or reduced fat milk, cheese, and yogurt.
Why should a child’s diet include some fat?
Fats give children the extra energy they need to play hard by supplying muscles with special long-lasting fuel. Unlike adults, most children have very little fat stored in their bodies (this is because of their greater energy needs for growth and activity).

What are some tips about fat?
Children need the constant supply of concentrated energy available in fat. This does not mean that children need high fat diets, but it does mean we need to:

- Make whole milk available for toddlers (children under 2 years old).
- Make reduced-fat or low-fat (not nonfat, skim, or fat-free) milk available for preschoolers.

While we want to limit fried foods and foods high in fat, especially saturated fat, we have to be careful not to restrict all fats from children’s diets.

Vitamins
Vitamins are organic substances needed by the body in very small amounts. Many chemical reactions in the body depend on vitamins. They help release energy from carbohydrates, fats, and proteins.

What foods contain vitamins A, D, E, and K?
Vitamins A, D, E, and K are four important vitamins. They are fat-soluble. These vitamins are found in colorful fruits and vegetables and in foods containing fats and oils, such as dairy products. While meeting children’s needs for all these vitamins is important, children’s diets are most often low in vitamin A.

What foods contain vitamin C and B complex vitamins?
The remaining vitamins (vitamin C and B complex vitamins) are water-soluble. Vitamin C is found mostly in fruits and vegetables. Vitamin B is found in meats and milk as well as in fruits, vegetables, and grains.

Minerals
Minerals are needed in small amounts and are used for many purposes, including building strong bones and teeth and making hemoglobin in red blood cells. They also maintain body fluids and chemical reactions.

What are some examples of minerals?
Examples of minerals include calcium, iodine, iron, magnesium, potassium, sodium, and zinc.

Water
Water is an important part of an adequate diet. Water is needed to replace the body water lost in urine and sweat. It helps transport nutrients, remove wastes, and regulate body temperature.

Why do we need to offer water frequently to children?
Young children may get busy and forget to drink enough water, especially in hot weather. Encourage toddlers and preschoolers to consume water by offering it frequently during the day.

For more information, see Appendix D.
Appendix D is a helpful resource. It lists these major nutrients and tells you more about what each contributes to growth, development, and good health. It also lists food sources.
The Dietary Guidelines for Americans

The best way to provide healthy food choices for children is to apply the messages of the Dietary Guidelines for Americans to your menus and food items.

The Dietary Guidelines are a set of recommendations designed for healthy Americans ages 2 years and older. They do not apply to infants and toddlers under the age of 2 years.

- **What is the purpose of the Dietary Guidelines?**
  The Dietary Guidelines answer the basic question: “How should Americans eat to stay healthy?”

  They reflect the best available scientific and medical knowledge about food choices that promote health and help prevent chronic diseases.

- **Who publishes the Dietary Guidelines?**
  The Dietary Guidelines are published jointly by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services.

  Every 5 years, the Guidelines are reviewed by a panel of experts to determine whether the existing standards should be altered and, if so, recommend changes.

**What do the Dietary Guidelines recommend?**

Nutrition and Your Health: Dietary Guidelines for Americans (Fourth Edition, 1995) recommends the following. As explained above, these are recommendations designed for people 2 years old and older—not infants or toddlers under the age of 2 years.

1. Eat a variety of foods.
2. Balance the food you eat with physical activity—maintain or improve your weight.
3. Choose a diet with plenty of grain products, vegetables, and fruits.
4. Choose a diet low in fat, saturated fat, and cholesterol.
5. Choose a diet moderate in sugars.
6. Choose a diet moderate in salt and sodium.
7. If you drink alcoholic beverages, do so in moderation.

**The Dietary Guidelines emphasize moderation. They are meant to be applied over a period of time, not to one food or one meal.**

Following the Dietary Guidelines is a great way to have a healthy diet so that we can have healthier and more active lives, and reduce the risk of chronic disease. It is important to remember that these guidelines are meant to be applied to a diet over a period of time, not to one food or one meal. They call for moderation and the avoidance of extremes in the diet. On the following pages, we will look at each of the guidelines in more detail.
Eat a variety of foods
Eating a variety of foods is the cornerstone of a healthy diet. Why is this true? Here are some important reasons:

- Foods contain combinations of nutrients and other healthy substances. No one food provides all the nutrients needed for good health.
- To make sure we consume all of the nutrients and other substances needed for health, we need to choose a variety of foods.
- There are no “good” or “bad” foods. All foods can be part of a healthy diet if balance and moderation are achieved.

As you plan meals for children...
Keep in mind that it is important to obtain nutrients from a variety of foods, not from a few highly fortified foods or supplements. This is because:

- Serving a variety of foods is the best way to provide children with adequate calories as well as nutrients.
- Relying on fortified foods or supplements may limit the nutrients in meals served to children.
- There are some substances in foods—particularly in fruits, vegetables, and whole grains—for which requirements and functions have not yet been established, even though our bodies need and use them. A varied diet will help avoid shortages of these substances as well as others.
Menu Planning Tips for Variety

**Main Dishes**
- Plan a different meat or meat alternate for each day in the week.
- Use a variety of meat or meat alternates, such as eggs, turkey sausage, ham, beef, low fat cheese, low fat yogurt, peanut butter, refried beans, etc.

**Vegetables and Fruits**
- Serve seasonal fresh fruits/vegetables whenever possible.
- Include raw or cooked fruits and/or vegetables in salads.
- Plan to use raw or cooked fruits in fruit cups and desserts.
- Use a different combination of two or more servings of vegetables and fruits each day. Include all forms—fresh, canned, frozen, and dried.
- Serve a variety of full-strength fruit or vegetable juices such as: apple, grape, pineapple-orange, pineapple-grapefruit, orange, and tomato.
- Include foods that are high in vitamin A and vitamin C.
- Plan to include vegetables and fruits frequently in snacks.

**Grains and Breads**
- Plan to use a different kind of grain/bread each day.
- In main and side dishes, include a variety of enriched rice, macaroni, noodles, and other pasta products. Serve brown rice as well as white rice.
- Serve loaf breads or hot breads, such as rolls, sandwich buns, muffins, biscuits, or cornbread as often as possible.
- Look for more opportunities to use whole grains in recipes and menus.
- Serve Spanish rice with tacos or burritos.
- Serve whole-wheat crackers or cornbread with chili.
- Use whole-grain flours to enhance flavors and increase fiber.
- Use a variety of hot and cold cereals. Look for cereals that supply fiber and contain moderate amounts of sugar and salt.
- Include several whole-grain cereals and breads each week.
- Limit your use of sweet grains/breads at breakfast and at snacks.

**Milk**
- Serve whole milk as a beverage and/or on cereal to toddlers (children between 12 months and 2 years of age).
- Serve low fat milk as a beverage and/or on cereal to children 2 years of age and older.
Balance the food you eat with physical activity—maintain or improve your weight

Children need enough food for proper growth and normal development. Calorie needs of children differ due to body size, growth spurts, and levels of physical activity. Obesity in childhood is a growing problem in our nation. A poor diet and a sedentary lifestyle are the major contributors.

Health professionals recommend that childhood obesity be prevented by increasing physical activity. They also recommend teaching children to eat grains, vegetables, fruits, as well as low-fat dairy foods and other protein-rich foods.

Staying active helps children...

Physical activity is essential for everyone. It is important to encourage children to get in the habit of exercise at a young age. Physical activity helps children have fun and maintain a healthy weight. It also helps them...

- Develop strong muscles.
- Develop a healthy heart and lungs.
- Have strong bones.
- Develop motor skills, balance, and coordination.
- Develop positive attitudes.
- Improve their self-esteem.

How can you help children be active?

Regular physical activity is important to maintaining health. It burns calories, helps with weight control, and helps prevent certain diseases later in life. While physical activity is not a CACFP requirement, at least 30 to 45 minutes of physical activity will give the children in your care a healthy boost each day. Here are some things you might do:

- Encourage outdoor play.
- Promote active play, noncompetitive sports, and games, such as running games, tag, jumping, hide and seek, throwing and catching, kickball, and hand toss.
- Plan lively activities that children love, such as musical chairs and other traditional favorites like Duck, Duck, Goose; London Bridge; Red Light, Green Light; and Simon Says.
- Demonstrate how to do exercises like sit-ups and jumping jacks.
- Plan to take children on outside walks, such as before mealtime.
- Limit the amount of time children spend watching television and playing games on the computer.

Menu Planning Tips for Maintaining Healthy Weight

The more physical activity we get, the more energy we use. Encourage physical activity—and be sure to provide the calories children need to be active.

- Serve plenty of vegetables and fruits.
- Serve more pasta, rice, breads, and cereals without fats and sugars added in preparation or at the table.
- Serve less fat and fewer high-fat foods.
- Limit cookies and sweets to no more than two times per week
Choose a diet with plenty of grain products, vegetables, and fruits
Most of the calories in a diet should come from grain products, vegetables, and fruits. These foods provide vitamins, minerals, complex carbohydrates (starch and dietary fiber), and other substances that are important for good health. They are usually low in fat, depending on how they are prepared.

Researchers continue to study the role of fiber in healthy diets and in decreasing the risk of chronic diseases. Some of the benefits associated with a high-fiber diet come from other components present in these foods, not just from fiber itself. Therefore, fiber is best obtained from foods rather than supplements.

Menu Planning Tips for Increasing Grains, Vegetables, and Fruits

Main Dishes
- Try serving vegetarian baked beans, beans and rice, bean burrito, lentil or split pea soup, or other vegetarian main dishes for variety. Keep in mind that cooked dry beans or peas can be used as a meat alternate or as a vegetable but not as both in the same meal.
- Use green peppers, mushrooms, zucchini, and onions as pizza toppings. Add spinach or broccoli to lasagna.
- Serve submarine sandwiches on whole-wheat rolls.
- Serve a variety of hot and cold pasta salads.
- Increase proportion of grains to other ingredients. For example, serve a thicker pizza crust.
- Add grains such as pre-cooked rice and oats to ground beef in meat loaf and similar casseroles. Use bulgur or barley to thicken soups.

Vegetables and Fruits
- Serve vegetables higher in fiber, such as cooked dry beans, broccoli, tomatoes, leafy greens, potatoes with skin, and carrots.
- Serve raw vegetable salads.
- Serve vegetarian baked beans or other bean dishes, such as black-eyed peas and low fat refried beans.
- Serve fresh fruits higher in fiber, such as those with edible skins—like apples, pears, nectarines, peaches—and those with edible seeds, such as berries and bananas.
- Serve fresh fruits and vegetables as finger foods.
- Try combining two or three fruits or vegetables to contrast colors and textures (carrot and celery sticks, for example, or grape halves and peach slices). Serve colorful fruit or vegetable cups often.
- Season vegetables with herbs for taste appeal.
- Include vegetables and fruits often in snacks.
Grains and Breads

- Serve quick breads, muffins, crackers, or cookies made with whole grains or wholegrain flours. (Examples of whole-grain flours include cornmeal, masa, whole-wheat flour, oats, bulgur, and barley.)
- Substitute whole-wheat flour for part of the white flour in recipes. When introducing whole grains, try starting with 10 percent whole-grain flour or grains. Gradually increase the amount each time the recipe is prepared.
- Make oat flour by grinding oatmeal in a blender. You can use oat flour with other flours for breading, baking, and thickening sauces.
- Use rice, noodles, oats, cornmeal, or bulgur in main dishes or in side dishes, such as salads, hot grains, and desserts.
- Serve a variety of pasta salads.
- Plan a variety of whole-grain breads and cereals at breakfast and for snacks.
- Serve sandwiches with one slice of whole-wheat bread and one slice of white bread. This is a good way to introduce children to whole-wheat bread.
Choose a diet low in fat, saturated fat, and cholesterol
In general, health professionals believe that food habits established in childhood are important in preventing heart disease later in life. They recommend reducing the risk of heart disease by decreasing the amount of total fat, saturated fat, and cholesterol in the diet.

However, we must remember that advice in the Dietary Guidelines about limiting fat, saturated fat, and cholesterol does not apply to infants and toddlers below the age of 2 years.

In fact, the American Academy of Pediatrics states, “No restriction should be placed on the fat and cholesterol content of the diets of infants less than 2 years...” The first 2 years of a child’s life, as the Academy explains, is a time “when rapid growth and development require high energy intakes.”

- **What is recommended for children over the age of 2 years?**
  The Dietary Guidelines recommend that children over the age of 2 years should gradually adopt a diet that, by about 5 years of age, contains no more than 30 percent of calories from fat.

  The American Academy of Pediatrics, concerned that some individuals may “over interpret” the need to limit children’s fat intakes, has also recommended that children’s diets contain no less than 20 percent of total calories from fat.

- **What are the best ways to gradually reduce fat in children’s diets?**
  Changes to reduce the amount and type of fat in meals must be practical and acceptable, with children learning to enjoy a wide variety of foods.

  As children begin to consume fewer calories from fat, they should replace these calories by eating more grain products, vegetables, fruits, low-fat milk products or other calcium rich foods, and beans, lean meat, poultry, fish, or other protein-rich foods.
Menu Planning Tips for Reducing Fat

**Main Dishes**
- Choose entrees that can be prepared without added fat. Bake, broil, or boil instead of fry. Trim fat from meats.
- Serve lean meats, fish, poultry, as well as cooked dry beans, dry peas, and lentils. Consider serving dishes that combine meat or meat alternates with grains—beans and rice, for example.
- Be careful when selecting pre-cooked breaded meats, fish, or poultry. These products may contain excess fat. Check fat content and select those products that are lower in fat and bake rather than fry them.
- Use sparingly processed meat items such as lunch meat and hot dogs. These items are generally higher in fat.
- Serve cooked dry beans or canned beans in main dishes like chili, burritos, and tostadas.
- Use part-skim mozzarella cheese and low-fat cottage or ricotta cheese in recipes listing cheese as an ingredient.
- Drain all meat after cooking.
- To lower saturated fat, cut the fat in recipes by one-fourth or one-third without losing the great taste. See Appendix E for suggestions on how to trim the fat when cooking, baking, sautéing, stir-frying, and deep-fat cooking.

**Vegetables and Fruits**
- Serve reduced-fat salad dressings.
- Balance higher fat foods in menus with items lower in fat. For example, with chicken nuggets serve baked potatoes or steamed fresh vegetables rather than French fries.
- Steam, simmer, or bake vegetables without adding butter or other fats.
- Season vegetables with herbs, spices, salsa, or lemon juice.
- Serve fresh fruit.
- Substitute plain low-fat yogurt for part of the mayonnaise or creamy salad dressings in salads.
- Serve fresh vegetable strips with low-fat yogurt dip, salsa, or low-fat salad dressing.
- Use non-stick cooking spray when sautéing or baking potato wedges.
- Use fruit purees, such as prune puree or applesauce, in place of up to half of the fat in some baked goods.
- Prepare fruits and vegetables used in recipes without adding fat.

**Grains and Breads**
- Plan menus that contain a variety of lower fat grain products, such as bagels, English muffins, and pita bread.
- Serve jam or jelly on bread and rolls in place of high fat spreads.
- Use only a moderate amount of high-fat condiments like butter or regular mayonnaise on bread and rolls. Instead, use low-fat mayonnaise, mustard, catsup, and vegetable relishes such as salsa.
- Serve a variety of low-fat grain products—such as noodles, brown rice, barley, and bulgur—prepared with little or no added fat.
- Make or buy low-fat baking mixes.
- Use a non-stick cooking spray to grease baking pans.
- Use vegetable oil or fruit purees instead of butter, lard, or shortening.

**Milk**
- Serve low-fat (such as 1 percent) milk to children 2 years of age and older to help decrease the fat content of meals.
Purchasing Tips for Reducing Fat

When purchasing **fats, oils, or salad dressings**...
- Revise purchase orders to prohibit saturated vegetable oils, such as coconut oil, palm oil, palm kernel oil, and hydrogenated shortening or stick-type margarine.
- Purchase soft margarine, which is lower in saturated fat than stick margarine.
- Purchase lower fat salad dressings. Try newest versions of low-fat mayonnaise, especially for use in salads or salad dressing mixes.

When purchasing **milk**...
- Purchase low-fat milk and other low-fat dairy products for children 2 years of age and older.

When purchasing **entrees**...
- Review the prepared entree products you purchase to determine if good quality, lower fat products are available.

When purchasing **meat**...
- Purchase ground chicken or turkey (without skin) to mix with lean ground beef.
- Purchase leaner meats (such as ground beef with no more than 15 percent fat).
- Purchase tuna packed in water instead of oil.
- Purchase reduced-fat processed meats, such as reduced-fat frankfurters and deli-meats.

When purchasing **fruits and vegetables**...
- Purchase oven-ready French fries instead of fries for deep-fat frying.

When purchasing **grains and breads**...
- Purchase lower fat variety breads (such as bagels, pita bread, pancakes, flour tortillas, English muffins, etc.) to serve more frequently instead of higher fat grain products such as croissants, donuts, and sweet rolls.
Choose a diet moderate in sugars
Offer and use sugars in moderation. Sugars and many foods that contain them in large amounts supply calories, but they may be limited in vitamins and minerals. Eating sugars can lead to tooth decay, especially when eaten between meals.

Foods contain sugars in various forms. Read ingredient labels for clues on sugar content. If one or more of the following words appears first or several times on the label, then the food probably contains a large amount of sugar: sugar, sucrose, glucose, maltose, dextrose, lactose, fructose, honey, fruit juice, and syrups.

Menu Planning Tips for Using Less Sugar
- Use seasonal fresh fruits and vegetables when possible. Avoid adding sugar or honey to fresh fruits.
- Use fruits packed in light syrup or juice. These will be sweet, so there is no need to add extra sugar.
- Do not add sugar to vegetables such as stewed tomatoes, corn, or green beans.
- Use fresh or frozen fruits in snacks.
- Limit your use of sweet snacks and sweet breakfast foods. Use cereals that are not sugar-coated. If children are reluctant to give up higher sugared cereals, mix a small amount of the higher sugar cereals with the non-sugary cereals.
- Modify recipes for sweet snacks and sweet breakfast items to reduce sugar without compromising quality.
Choose a diet moderate in salt and sodium
Table salt contains sodium and chloride. Both are essential in the diet. However, most Americans consume more salt and sodium than they need. Foods containing salt provide most of the sodium in the diet. Much of it is added during processing and manufacturing. For this reason, use salt sparingly, if at all, in cooking and at the table.

Currently, there is no way to predict who will develop high blood pressure. However, it is a good idea to do both of the following:
- Serve foods lower in sodium.
- Reduce salt during food preparation.

This may help some children avoid high blood pressure when they become adults.

Menu Planning Tips for Reducing Salt and Sodium
*Foods with a lot of added salt include:*
- Cured and processed meats
- Cheeses
- Ready-to-eat snacks
- Prepared frozen entrees and dinners
- Packaged mixes
- Canned soups
- Salad dressings
- Pickles

*If you are planning to serve any of these foods:*
- Check the sodium content.
- Select foods that have less sodium.

**ALSO:**
*When preparing foods...*
- Season foods lightly with salt.
- Review recipes for ways to reduce sodium, such as: (1) substituting herbs and spices for some of the salt; and/or (2) reducing the amount of salt added.
- Do not add salt when cooking pasta and rice.
- Do not boil down the vegetable liquid when preparing canned vegetables. (Boiling down the vegetable liquid can increase the amount of salt the vegetables absorb.)

*When deciding what to serve...*
- Read food labels carefully for sodium content. Choose foods that are lower in sodium.
- Keep in mind that fresh and frozen vegetables that are lightly seasoned with salt are generally lower in sodium than canned ones.
- Limit the number of times you serve salted snacks, such as crackers or pretzels.
- Serve smaller amounts of salty condiments, such as mustard, catsup, relish, and salad dressing—or serve them less often.
Support programs that encourage children to choose a drug-free and alcohol-free lifestyle

The final Dietary Guidelines recommendation is targeted to adults and states: “If you drink alcoholic beverages, do so in moderation.”

Children and teens should not drink alcoholic beverages. Use of alcoholic beverages involves risks to health and other serious problems. As someone who cares about children’s health and well-being, support programs that encourage children to choose a drug-free and alcohol-free lifestyle.
The USDA Food Guide Pyramid

The USDA Food Guide Pyramid is an outline of what to eat each day based on the Dietary Guidelines. The Pyramid makes it easier to understand what is meant by good nutrition. It also helps us plan for healthy changes in our diets.

How can the Food Guide Pyramid help you?

The Food Guide Pyramid is not a rigid prescription. It is a general guide that lets you choose a healthful diet that is right for you and the children in your care. Just by looking at the Pyramid, you and your children can get a good picture of the kinds of foods to eat.

The Food Guide Pyramid emphasizes the foods from the major food groups shown in the three lower sections of the Pyramid. The tip is the smallest part of the Pyramid and these foods—fats, oils, and sweets—may be eaten in small amounts.

Has USDA adapted the Food Guide Pyramid for children?

Yes. USDA has adapted the original Pyramid to provide special guidance for young children. The USDA Food Guide Pyramid for Young Children is targeted toward children ages 2 to 6 years old.

Like the traditional Food Guide Pyramid, the Pyramid for Young Children is an outline of what to eat each day based on the Dietary Guidelines. It similarly emphasizes balanced meals, moderation, and variety in food choices, with special emphasis on grain products, fruits, and vegetables. There are some differences, however, and these are explained on the next page.

It is important to keep in mind that the Food Guide Pyramid for Young Children does not adjust serving sizes for different ages of children. Refer to CACFP meal patterns in Chapter 2 for information about serving sizes.

What is the main focus of the Pyramid for Young Children?

The main focus of the Food Guide Pyramid for Young Children is on eating a variety of foods. The Pyramid divides foods into five major food groups: grains, vegetables, fruits, milk, and meat.

The foods shown in the Pyramid are those that many children know and enjoy. Each of these food groups provides some, but not all, of the nutrients and energy children need. No one food group is more important than another. After all, for proper health and proper growth, children need to eat a variety of different foods every day.
How is the Pyramid for Young Children different from the original?
The Food Guide Pyramid for Young Children is different from the original in several ways. For example:

- The food group names are shorter and use single numbers for numbers of servings, rather than ranges.
- The Pyramid graphic was designed to be appealing to young children. It uses realistic food items, in single-serving portions.
- It eliminates the abstract “sprinkles” that symbolized fat and added sugar in the original Pyramid. It replaces them with drawings in the tip of the Pyramid.
- It emphasizes the educational message that physical activity is important. Surrounding the Pyramid are drawings of young children engaged in active pursuits.

See Appendix F, Food Guide Pyramid for Young Children.
Understanding Food Labels
Food labels are sources of accurate nutrition information about individual food products. Food labels can help us select foods that are healthful and nutritious. When you select a food product, most nutrition information will be listed under a section called “Nutrition Facts.” It is important to read the entire label and not simply the claims about nutrition.

What information must every food label include?
According to Federal guidelines, every food label must include all of the following information:
- The common name of the product.
- The name and address of the manufacturer, packer, or distributor.
- The net contents in terms of weight, measure, or count.
- The ingredients, in order of predominance by weight from greatest to least.
- Nutrition information.
- Serving size.

As listed, are the serving sizes for adults or children?
The serving sizes listed are for healthy adults and not for children, so serving sizes on packages would need to be adjusted for children.

Are terms such as “low fat” clearly defined?
Terms such as low fat, high fiber, free, low, light and others are clearly defined. (See Appendix G for a chart of nutrient terms and their definitions.)

What is listed under Nutrition Facts?
The Nutrition Facts panel includes information on:
- total calories
- dietary fiber
- calories from fat
- sugars
- total fat
- protein
- saturated fat
- vitamin A
- cholesterol
- vitamin C
- sodium
- calcium
- total carbohydrate
- iron

How is Percent Daily Value information helpful?
The information provided under Percent Daily Value helps you see how a food fits into a 2,000 calorie reference diet. The value tells you if a food contains a little or a lot of a nutrient. Use the Percent Daily Value to compare foods. Look for a lower value for nutrients most people need to limit, such as fat, saturated fat, cholesterol, or sodium. Look for a higher value for nutrients most people need to increase in their diets, such as carbohydrates, vitamins, and minerals.

To use the Percent Daily Value for children, will you need to make adjustments?
Yes. The Percent Daily Value is based on an adult’s reference diet of 2,000 calories per day. The average energy recommendation for children ages 1 through 3 years is 1,300 calories a day. The average for children ages 4 through 6 years is 1,800 calories per day. To use the Percent Daily Value for children, you will need to make adjustments, as appropriate.
What will the ingredients list help you do?
The ingredients list will help you choose foods with the ingredients you want. The ingredient in the greatest amount is listed first and the ingredient in the least amount is listed last.

The Food Label at a Glance
The food label carries an up-to-date, easier to use nutrition information guide, which is required on almost all packaged foods. The guide serves as a key to help in planning a healthy diet. (The illustration below is only a sample. Exact specifications are available from the Food and Drug Administration.)

<table>
<thead>
<tr>
<th>Nutrition Facts: This title signals that the label contains the required information.</th>
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</table>
| **Nutrition Facts**
Serving Size 1/2 cup (about 82g)
Serving Per Container 8

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories 200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% Daily Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat 14g</td>
</tr>
<tr>
<td>Saturated Fat 9g</td>
</tr>
<tr>
<td>Trans Fat 0g</td>
</tr>
<tr>
<td>Cholesterol 55mg</td>
</tr>
<tr>
<td>Sodium 40mg</td>
</tr>
<tr>
<td>Total Carbohydrate 17g</td>
</tr>
<tr>
<td>Dietary Fiber 1g</td>
</tr>
<tr>
<td>Sugars 14g</td>
</tr>
<tr>
<td>Protein 3g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List of nutrients: This list covers those nutrients most important to the health of today's consumers. Most consumers need to worry about getting too much of certain nutrients (fat, for example) rather than too few vitamins or minerals, as in the past.</th>
</tr>
</thead>
</table>
| **List of nutrients:**
Vitamin A 10%  •  Vitamin C 0%
Calcium 10%  •  Iron 6%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

| Calories: 2,000 2,500 |
| --- | --- |
| Total Fat | Less than 65g 20g |
| Saturated Fat | Less than 20g 25g |
| Cholesterol | Less than 300mg 300mg |
| Sodium | Less than 2,400mg 2,400mg |
| Total Carbohydrate | 300g 375g |
| Dietary Fiber | 25g 30g |
| Calories per gram: Fat 9g  •  Carbohydrate 4g  •  Protein 4g |

<table>
<thead>
<tr>
<th>Calories per gram: The labels of larger packages like this one tell the number of calories per gram of fat, carbohydrate, and protein.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Calories from fat:</strong> Calories from fat are shown on the label to help consumers meet dietary guidelines that recommend people get no more than 30 percent of the calories in their overall diet from fat.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percent Daily Value: This shows how a food fits into the overall daily diet</th>
</tr>
</thead>
</table>
| **Percent Daily Value:**
This shows how a food fits into the overall daily diet

<table>
<thead>
<tr>
<th>A note about daily values: Some daily values are maximums, as with fat (65 grams or less). Others are minimums, as with carbohydrate (300 grams or more). On the label of larger packages such as the one pictured here, the daily values for a 2,000 calorie diet and a 2,500 calorie diet are listed.</th>
</tr>
</thead>
</table>
Chapter Four
ABC’s of Successful Menu Planning

THIS CHAPTER HAS EIGHT PARTS:
• How Important Is Menu Planning?
• Basic Menu Planning Principles
• Family-Style Meal Service
• Special Considerations
• Staff and Equipment
• Food Ordering and Purchasing
• Steps to Successful Menu Planning
• Sample Menus

How Important Is Menu Planning?
In a successfully managed CACFP operation, menu planning may be the most crucial step. The nutritional value of meals—and compliance with Federal program requirements—depend on careful menu planning.

Good planning can make a huge difference!
The menu influences almost every aspect of the food service operation, from what foods are purchased and how they are prepared, to whether or not meals are popular with the children.

This chapter looks at the ABC’s of successfully planning appealing meals. It also reviews the menu planning process and some important planning principles.

Basic Menu Planning Principles
Advances in food technology make it possible to select foods in many forms—frozen or chilled, partially or totally prepared, pre-portioned or in bulk, pre-prepared or as ingredients to put together “from scratch.”

All of this makes menu planning exciting as well as challenging. Where do you begin? The basic menu planning principles listed below and discussed on the following pages are a good starting point. Keep them in mind as you think about your children’s preferences and nutrition needs.

The five basic menu planning principles are...
1. Strive for balance.
2. Emphasize variety.
3. Add contrast.
4. Think about color.
5. Consider eye appeal.
MENU PLANNING PRINCIPLE #1

*Strive for balance.*

As you work to plan meals that are nourishing, appealing, and taste good, you will want to strive for balance in a number of ways. As you select and combine foods:

- **Balance flavors in appealing ways.**
  Make sure individual foods, when served together, make a winning combination.

  Too many mild flavors may make a meal too bland.

  Too many strongly flavored foods may make a meal unacceptable to children. For example, a lunch or supper menu with sausage pizza, Cajun potatoes, coleslaw, brownie, and milk has too many spicy and strong flavors.

- **Balance higher fat foods with ones that have less fat.**

  Avoid having too many higher fat foods in the same week. In other words, do not include sausage pizza on a week’s menu if you are already planning to serve hot dogs and chicken nuggets.

  Look for ways to use low-fat side dishes to balance a higher fat entree. For example, with a grilled cheese sandwich, serve carrot and celery sticks.

MENU PLANNING PRINCIPLE #2

*Emphasize variety.*

Serving a variety of foods is important because no one food or group of foods can give us everything we need for a healthy diet. Variety also makes menus interesting and appealing. To add variety:

- **Include a wide variety of foods from day to day.**
  Avoid planning the same form of food on consecutive days, such as meatballs with spaghetti on Monday and meat ravioli on Tuesday.

- **Vary the types of main courses you serve.**
  For example, serve casseroles one day, soup and sandwiches the next, or perhaps a main-dish salad.

- **Include different forms of foods, and prepare them in a variety of ways.**
  For instance, some vegetables are good eaten raw. If you usually serve a particular vegetable cooked, serve it uncooked if it is good that way. Or cook it but use a different recipe or seasoning. In any case, be sure the “different way” of serving is as appealing as the “usual way.”

- **Include a surprise item or a small amount of a new or unfamiliar food periodically.**
  For example, try adding raw cauliflower, red cabbage, or spinach to a salad.
MENU PLANNING PRINCIPLE #3

Add contrast.
Strive for contrasts of texture, flavor, and methods of preparation.

- **Think about the texture of foods as well as their taste and appearance.**
  For added appeal, serve a green salad or raw vegetable with spaghetti. Serve a crisp fruit or vegetable with a burrito, and crisp steamed carrots and broccoli with meatloaf. Pair toasted garlic bread and cold broccoli salad with cheese ravioli.

- **Avoid having too much of the same type of food in the same meal.**
  A lunch with too many starches or too many sweets lacks contrast as well as balance. So does a meal with too many heavy foods. If you are serving a hearty casserole, plan to serve a vegetable or fresh fruit.

- **Use a pleasing combination of different sizes and shapes of foods.**
  Within a meal, present foods in several different shapes, such as cubes, mounds, shredded bits, and strips. A meal with cubed meat, diced potatoes, mixed vegetables, and fruit cocktail needs more contrast in size and shape of foods.

MENU PLANNING PRINCIPLE #4

Think about color.
Use combinations of colors that go together well, and strive for contrast and maximum color presentation. A good rule of thumb is to use at least two colorful foods in each menu for visual appeal.

- **Avoid using too many foods of the same color in the same meal.**
  A meal with turkey, rice, cauliflower, white bread, pears, and milk would lack color contrast. A better combination would be turkey and cranberry sauce, green peas, whole-wheat bread, orange slices, and milk.

- **Remember that vegetables and fruits are great for adding natural color to side dishes as well as entrees.**
  A slice of tomato really brightens up a potato salad. A fresh sliced grape or strawberry livens up a dish of diced pears or peaches.

- **Use colorful foods in combination with those that have little or no color.**
  Serve broccoli spears with whipped potatoes, for example. Add pimento or green pepper to corn. Serve a bright red apple and green lettuce with a hamburger, baked beans, and milk. Serve green peas and apricots with oven-fried chicken, mashed potatoes, and milk.

- **And don’t forget spices.**
  It’s easy to sprinkle on a dash of cinnamon to canned fruit or a little paprika on vegetables and potatoes for added color.

MENU PLANNING PRINCIPLE #5

Consider eye appeal.
Your children’s first impressions will be how a meal looks. Make sure what you serve looks good as well as tastes good.

- **Think of the total presentation.**
  As you plan for color, consider the color of the dishes, plates, or trays to be used as well as the colors of the foods.

- **Plan the way you will place the menu items on the tray or plate.**
  Visualize how the food will look when served and decide on the most attractive arrangement.
Family-Style Meal Service

Family-style meal service means serving foods in bowls or dishes on the table. Children are encouraged to serve themselves, or serve themselves with help from an adult.

Enough food must be placed on the table to provide the full required portion size for all the children at the table.

*Family-style meal service has some advantages...*

- **Family-style meals allow children to identify and be introduced to new foods, new tastes, and new menus.** Children are often unsure about new foods. Seeing new foods and watching others serve themselves gets them interested. They are more willing to try a small serving when they see other children trying new foods.

- **Children can choose the amount of food they want to have on their plate.**
  When foods are served family-style, children may choose to take a small portion of food, knowing that the food will still be available if they would like a second serving. Children feel more in control to judge their hunger and fullness throughout the meal, knowing that more food is within easy reach.

- **Children practice good table manners and new skills with their hands and fingers.**
  Serving themselves gives children time to practice skills like passing, pouring, and scooping foods. Taking turns, sharing, and politely turning down foods are all a part of the table manners children learn by participating in family-style meal service.

Special Considerations

As you apply the basic menu planning principles, keep in mind any special considerations, such as:

- regional food preferences
- holidays and other special occasions
- climate and seasons
- product availability

*Here are some menu planning tips...*

- **Food preferences:**
  Consider the regional, cultural, and personal food preferences of the children you serve, but don’t be afraid to introduce new foods from time to time. Include new foods and encourage children to try them.

- **Holidays and special occasions:**
  Plan festive meals and snacks for national holidays, center events, and special occasions like parents’ visiting days. Don’t forget National Nutrition Month in March!

- **Climate or seasons:**
  Include more hot foods in cold weather, and more cold foods in warm weather.

- **Product availability:**
  Use foods in season. Plan to serve plenty of fresh fruits and vegetables when they are plentiful, reasonably priced, and are at the peak of quality.
Staff and Equipment
You will want to plan meals you can prepare and serve with available facilities, equipment, and staff. Here are some tips...

When thinking about equipment and space...
- Consider the kind and size of food preparation and cooking equipment; also think about freezer and refrigeration space.
- Consider sheet and baking pans, serving bowls, and other equipment used in meal preparation and service.
- Consider the numbers, kinds, and sizes of serving tools and dishes (or compartments in a compartment tray) needed to serve each meal.

When thinking about staff time and workload...
- Plan meals and snacks that can be prepared in the time available.
- Consider the amount of self-preparation required for each menu, such as vegetables to be cut up or items to be made from scratch.
- Balance the workload—food preparation and clean-up—from day to day and from week to week.

Food Ordering and Purchasing
In some centers, menu planners are also responsible for ordering and purchasing food. If this is part of your job, you may find the following tips helpful.

When ordering and purchasing food...
- Consider the availability of foods from local suppliers. If you need to reduce the number of food deliveries, you can plan menus that include fresh produce on consecutive days. Do the same for commercially baked breads.

- Operate within a budget, and pre-cost your menu. Keep records of the approximate cost per serving of each menu item in order to determine what each meal will cost as well as the average meal cost per month. You can make substitutions if the average cost of the menu runs too high.

- Keep abreast of price trends and the market availability of various foods. Identify extremes—items which are very high priced or those which are very low priced—with a view to minimizing or maximizing their use in the menu.

- Use USDA-donated foods where/when available. If you receive USDA donated foods, use them as efficiently and creatively as you would if you had purchased the food.

- Keep records of food purchased, used, and available in inventories. These records help in planning future purchases and menus. Also keep participation records and production records that note acceptability.
Steps to Successful Menu Planning
In this section, we will look closely at the following steps:
- Schedule a time to plan menus. Collect menu resources.
- Think about changes you want to make.
- Select a timeframe.
- Select the main dish.
- Select the other menu item or items.
- Evaluate what you have planned.

MENU PLANNING STEP # 1
Schedule a time to plan menus. Collect menu resources.
- Plan menus well in advance, preferably a month or more ahead of the time they are to be served.
  You will want to:
  - Review previous menus and any other food service records that indicate the children’s preferences.
  - Involve children, parents, and other interested parties in the planning.
  - Select and test food products and recipes.

  To be prepared, you will want to pull together a variety of menu resources.
  These might include, for example, past successful menus or recipe files. Check at your local or university library for additional resources.

  For easy reference, have on hand copies of food production and inventory records.
  Also have available publications such as USDA’s Food Buying Guide for Child Nutrition Programs and Child Care Recipes: Food for Health and Fun. (See Appendix H for more information on available resources.)

MENU PLANNING STEP # 2
Think about changes you want to make.
- Review your menus, the products you purchase, and preparation techniques.
- With the Dietary Guidelines and children’s nutrition needs and preferences in mind, take another look at what you have been serving.
  - Do menus meet CACFP meal pattern requirements?
  - Are you planning sufficient variety?
  - Do you need more servings of grains/breads?
  - Do you need more servings of whole grains?
  - Can you serve more vegetables/fruits?
  - How often do you serve low-fat entrees?
  - Do you need to serve some foods less often?
MENU PLANNING STEP # 3
Select a timeframe.

- If you determine that cycle menus will work for your child care facility, begin by selecting a timeframe for a cycle menu.
  The cycle menu is the master plan of meal planning. Cycle menus are menus planned for a period of time and repeated on a regular basis. A cycle can be any number of weeks that works for your meal service.

- What are the advantages of cycle menus?
  If carefully planned, cycle menus have a number of advantages. For example, they offer variety.
  They are flexible, allowing for substitutions. In addition, they can save time in repetitive functions such as gathering information, planning menus, selecting foods, developing specifications, costing, and arranging work schedules.

  They can also:
  - Be adapted easily for varied ages.
  - Allow flexibility for such things as seasonal changes, holidays, and special events.
  - Allow more time for other tasks, such as training and nutrition education.

Some Tips for Getting the Most Out of Cycle Menus

- Flexibility is the key! Review menus frequently to make adjustments for changes in availability of USDA foods, to take advantage of an especially good buy or a seasonal food, and to allow for a special occasion.

- So that holidays and special activities won’t go unrecognized, be sure to note them on the calendar well in advance. Designate specific dates when a special menu is to be substituted for the one in the cycle.

- Plan one cycle for each season: Fall (September, October, November); Winter (December, January, February); Spring (March, April, May); and Summer (June, July, August).

- Be ready to make adjustments. For example, if you receive USDA foods that don’t fit in, you may want to make changes to your menu.

- Keep a small inventory of substitute items to use in the event of an emergency

MENU PLANNING STEP # 4
Select the main dish.

- Main dishes should be selected first in menu planning because they are the central focus of a meal. They form the framework around which you will plan the rest of the menu.

- Be careful when selecting main dishes:
  - If you include a main dish that is not central to the meal or is not recognized by children as the main dish, this could result in poor acceptance.
  - Follow a plan for providing a variety of main dishes.
  - If you repeat the same main dish during a 2-week period, consider varying the other foods served with it.
  - Make sure processed products have a CN label (see Appendix M) or other acceptable documentation which indicates crediting information.
MENU PLANNING STEP # 5
Select the other food item or items.

- Include food items that complement the main dish.
- Plan to use plenty of vegetables, fruits, and grains.
- Keep in mind that children like to eat many vegetables raw as well as cooked.
- Introduce new foods, starting with small amounts.

MENU PLANNING STEP # 6
Evaluate what you have planned.

- Before you decide to wrap up a planning session, look over what you have planned.

- Looking at your menus, ask yourself questions like the following:
  - Do your meals comply with the requirements of the CACFP? By meeting these requirements, you are making sure your meals will qualify for the appropriate Federal reimbursement.
  - Do the meals provide children with adequate calories and nutrients while reducing fat, saturated fat, and sodium?
  - What kind of example do the meals set for the children? Are they consistent with the recommendations of the Dietary Guidelines? Do they encourage children to eat a variety of foods?
  - Will the foods on the menu appeal to children and look good?
  - Do you have sufficient staff and equipment to prepare and serve the meal you have planned?
  - What about cost?
  - Do your menus repeat any of the foods you have selected for other meals on that day?

- See Appendix I for a checklist of questions for evaluating what you have planned.

Sample Menus
The following are sample menus for children ages 3 to 5 years. They are intended to be a guide for you when you are planning your own menus. These menus meet meal pattern requirements for components and serving sizes.

What are the special notations on the menus?

- Recipe numbers:
  For many of the suggested food items, a recipe number is given. This indicates the item can be prepared with a recipe from the USDA publication Child Care Recipes: Food for Health and Fun (FNS-304). For example, in addition to Orange Juice, the snack for Day Three includes Muffin Square, Recipe A-11. The entree for lunch on that day is BBQ Beef Sandwich, Recipe F-8.

- USDA commodities:
  If a menu item utilizes commodities, you will see an “X” in the column next to the one listing the recipe number. For example, breakfast for Day Four includes Milk, Orange Sections, Pancake (Recipe A-12), and Maple Applesauce Topping (Recipe C-1). You will see an “X” in the commodities column for each of those items except for Milk.
<table>
<thead>
<tr>
<th></th>
<th>Menu</th>
<th>Serving Size</th>
<th>Child Care Recipe</th>
<th>Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td>Chocolate Milk</td>
<td>¾ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bagel, cinnamon raisin</td>
<td>½ serving (.5 oz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cream Cheese</td>
<td>1 Tbsp</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strawberries</td>
<td>½ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Snack</strong></td>
<td>Low-fat Yogurt, flavored</td>
<td>2 oz</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pear, fresh</td>
<td>½ cup</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td>Milk, 1%</td>
<td>¾ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pizza, Mexican (1 ½ oz meat; ½ serving bread; 1/8 cup vegetable)</td>
<td>2 pieces</td>
<td>D-13</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Carrots, raw, strips</td>
<td>1/8 cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dip for Carrots</td>
<td>2 Tbsp</td>
<td></td>
<td>E-15</td>
</tr>
<tr>
<td></td>
<td>Watermelon</td>
<td>¾ cup</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Day One Sample Breakfast Menu**
Chocolate Milk, 1%
Cinnamon Raisin Bagel
Cream Cheese
Strawberries
### DAY TWO

<table>
<thead>
<tr>
<th>Meal</th>
<th>Menu</th>
<th>Serving Size</th>
<th>Child Care Recipe</th>
<th>Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td>Milk, 1%</td>
<td>¾ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Apricot Halves, canned</td>
<td>½ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>French Toast</td>
<td>½ serving (1.1 oz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Syrup</td>
<td>1 Tbsp</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Margarine</td>
<td>1 tsp</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Snack</strong></td>
<td>Peach Slices, canned</td>
<td>½ cup</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Graham Crackers</td>
<td>½ serving (.5 oz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Peanut Butter Dip</td>
<td>1 Tbsp</td>
<td></td>
<td>G-1</td>
</tr>
<tr>
<td></td>
<td>Water</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td>Milk, 1%</td>
<td>¾ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teriyaki Chicken (1 ½ oz chicken)</td>
<td>1 portion</td>
<td></td>
<td>D-12</td>
</tr>
<tr>
<td></td>
<td>Fresh Fruit Cup</td>
<td>1/8 cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stir-Fry Vegetables (1 ¼ cup vegetable)</td>
<td>¼ cup</td>
<td></td>
<td>I-10</td>
</tr>
<tr>
<td></td>
<td>Not Fried Rice (1/8 cup vegetable; ½ serving bread)</td>
<td>1/3 cup</td>
<td>A-8</td>
<td></td>
</tr>
</tbody>
</table>

#### Day Two Sample Snack Menu
- Peach Slices
- Graham Crackers
- Peanut Butter Dip
- (Water as beverage)

#### Day Two Sample Lunch Menu
- Milk, 1%
- Teriyaki Chicken
- Fresh Fruit Cup
- Stir-Fry Vegetables
- Not Fried Rice

### DAY THREE

<table>
<thead>
<tr>
<th>Meal</th>
<th>Menu</th>
<th>Serving Size</th>
<th>Child Care Recipe</th>
<th>Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td>Milk, 1%</td>
<td>¾ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Banana</td>
<td>½ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Raisin Bread, toasted</td>
<td>½ slice (.5 oz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Margarine</td>
<td>1 tsp</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Snack</strong></td>
<td>Orange Juice</td>
<td>½ cup</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Muffin Square</td>
<td>½ serving</td>
<td></td>
<td>A-11</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td>Milk, 1%</td>
<td>¾ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BBQ Beef Sandwich (1 ½ oz beef; 1/8 cup vegetable; 1 serving bread)</td>
<td>½ sandwich</td>
<td>F-8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coleslaw (1/8 cup vegetable)</td>
<td>1/8 cup</td>
<td></td>
<td>E-9</td>
</tr>
<tr>
<td></td>
<td>Tomatoes, sliced</td>
<td>¼ cup</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Day Three Sample Snack Menu
- Orange Juice
- Muffin Square

#### Day Three Sample Lunch Menu
- Milk, 1%
- BBQ Beef
- Coleslaw
- Sliced Tomatoes
### DAY FOUR

<table>
<thead>
<tr>
<th>Menu</th>
<th>Serving Size</th>
<th>Child Care Recipe</th>
<th>Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk, 1%</td>
<td>¾ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange Sections</td>
<td>¼ cup</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Pancake</td>
<td>½ serving (.6 oz)</td>
<td>A-12</td>
<td></td>
</tr>
<tr>
<td>Maple Apple-sauce Topping (1/4 cup fruit)</td>
<td>¼ cup</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Snack</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chocolate Milk, 1%</td>
<td>½ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crackers, Animal</td>
<td>½ serving (.5 oz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk, 1%</td>
<td>¾ cup</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Peanut Butter Sandwich</td>
<td>1 serving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broccoli Cheese Soup</td>
<td>½ cup</td>
<td>H-5</td>
<td>X</td>
</tr>
<tr>
<td>Pineapple cubes, in juice</td>
<td>¼ cup</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Day Four Sample Breakfast Menu**
- Milk, 1%
- Orange Sections
- Pancake
- Maple Applesauce Topping

### DAY FIVE

<table>
<thead>
<tr>
<th>Menu</th>
<th>Serving Size</th>
<th>Child Care Recipe</th>
<th>Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk, 1%</td>
<td>¾ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple Wedges</td>
<td>½ cup</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>English Muffin, whole wheat, toasted</td>
<td>½ serving (.5 oz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jam</td>
<td>1 tsp</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Snack</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat Crackers</td>
<td>½ serving (.4 oz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grape Juice</td>
<td>¼ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chocolate Milk, 1%</td>
<td>¾ cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuna Patty (1 ¾ oz fish; ½ bread serving)</td>
<td>1 Patty</td>
<td>D-10</td>
<td></td>
</tr>
<tr>
<td>Oven Fries</td>
<td>2 pieces (3/8 cup vegetable)</td>
<td>I-5</td>
<td>X</td>
</tr>
<tr>
<td>Green Beans</td>
<td>1/8 cup</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**Day Four Sample Breakfast Menu**
- Milk, 1%
- Apple Wedges
- Toasted Whole Wheat English Muffin with Jam
Chapter Five
Quality Meals

THIS CHAPTER HAS FOUR PARTS:
- Set Quality Standards for Food
- Serve Quality Food
- Choose Healthy Preparation Techniques
- Protect the Nutrients in Food

Set Quality Standards for Food
Set standards not only for taste, but also for appearance, texture, and temperature. In doing this, consider the children’s ages and preferences—for example, some children like their pizza crust thicker and chewier than others.

Listen to what children have to say about the food and watch their actions and reactions. Also, watch to see what foods they end up throwing away.

As you work to set quality standards...
- **Use proven recipes and good quality ingredients.**
  Before serving a new item, plan the procedures for preparing it. Make sure all new food items are tasted before they are served.

- **Keep quality in mind. Check daily to be sure top quality is maintained.**
  You will not be able to serve quality meals if your suppliers give you inferior products. Prior to sending out bids or getting price quotations, review potential suppliers to ensure they are as concerned as you are about quality. If you are receiving meals from a vendor, make sure the company has the same standard of quality as you do.

- **Use good judgment about cooking times and preparation techniques.**
  Know how to test for top quality by smell, sight, taste, and temperature.

- **Understand basic differences between home cooking and institutional cooking.**
  These include, among other things, differences in quantities, temperatures, cooking times, equipment, and procedures (such as working with pre-cooked portions, and staggering cooking and holding times).

- **Understand the importance of food safety.**
  Understand that food safety is important at every step—from purchasing and receiving, to storing, handling, preparing, cooking, serving, and storing leftovers. See Appendix J for more information about food safety and sanitation.
Serve Quality Food
The items you serve to children are only as good as the quality of ingredients put into each recipe. To ensure first-rate results:
1) purchase the finest quality possible
2) store and handle carefully
3) check your cooking techniques

How can you ensure quality?

- **Carefully select how you will prepare and hold each food.**
  For example, plan to cook vegetables in batches and avoid holding for more than 15 to 20 minutes before serving. This will help retain flavor, color, and nutrients.

- **Do not overcook.**
  Accidents and mistakes happen. But if a food burns or falls short in other ways, don’t make the second mistake of serving that food. Overcooking can also cause food to lose nutritional value.

- **Always taste before serving.**
  Make sure food has been prepared and seasoned to appeal to children and not adults.

- **Keep foods at the proper temperature.**
  Keep hot foods hot (140°F and above) and cold foods cold (below 40°F). Proper temperatures are important for food safety as well as taste and appearance. Cool hot foods slightly just before serving to young children. See Appendix J for more information about food safety.

- **Feature freshness!**
  For example, serve salad greens that are crisp and green.

- **Serve eye-appealing foods.**
  Like adults, children notice and are influenced by how foods look.

Choose Healthy Preparation Techniques
There is no one right way to cook a particular food. However, certain techniques can help you achieve a desired result, such as minimizing nutrient loss or enhancing flavor without adding a lot of fat.

*Here are some tips...*

- **It is important to retain nutrients during preparation and cooking.**
  Consider the merits of various cooking techniques and select carefully.

- **When no fat is added, baking is a great low-fat cooking method.**
  Baking on a rack—or draining the fat after baking—helps make meat, poultry, and fish even lower in fat.

- **Steam cooking is another no-fat method and is versatile and quick.**
  It produces a high quality product without extra fat. It also minimizes nutrient loss. For example, steamed vegetables generally retain more vitamin C than boiled vegetables.
Protect the Nutrients in Food
No matter how careful you are, food preparation of any kind destroys some nutrients. Excessive losses, however, can be reduced through proper preparation techniques.

How can you help prevent nutrient loss?
Water-soluble vitamins such as vitamin C and the B vitamins are easily destroyed by excess water, air, heat, and light. They are also affected by the pH balance (i.e., too much or too little acid) of the cooking liquid. Fat-soluble vitamins A, D, E, and K are more stable.

To avoid losing nutrients, be careful with:
- **Water.** Soaking food in water dissolves water-soluble vitamins and minerals. Avoid it except when absolutely necessary. If foods, such as vegetables, must be soaked or remain in water during cooking, use as small amount of water as possible and use the leftover cooking liquid in soup or in another product. Or steam vegetables in small batches for best quality.
- **Heat.** Heating food causes nutrient loss, especially vitamin C. Avoid prolonged overcooking.
- **Light.** Milk is an excellent source of riboflavin; but if it is allowed to stand open or is exposed to light, considerable destruction of riboflavin can occur. A light-obstructing container, such as a cardboard carton, can help prevent this. If you are using another type of container, be sure to store it away from light.
- **PH Balance.** Baking soda should not be added to green vegetables to retain color during cooking or to dry peas and beans to decrease cooking time. Baking soda makes the cooking water alkaline, destroying thiamin and vitamin C.
- **Air.** Vitamins A, C, E, K, and the B vitamins—are destroyed by exposure to air.

To reduce nutrient loss:
- Cut and cook vegetables in pieces that are as large as possible.
- Store foods with proper covers.
- Cook vegetables as soon as possible after cutting.
- Cook vegetables until “just tender.”
- Prepare food as close to serving time as possible.
- Serve raw vegetables when possible.
When cooking with grains...
Health experts encourage Americans to choose grains and breads as a major component of a nutritious diet. This is why grains and breads form the base of the USDA Food Guide Pyramid. To provide maximum benefit, they must be prepared correctly.

To retain the nutrients in grains, remember:

- Rice should not be washed before cooking. Rice is enriched by spraying with vitamins and minerals. When you wash rice, the enrichment is washed off.
- Browning uncooked rice before adding water can destroy a lot of the thiamin content.
- Rinsing cooked grains and pasta causes considerable loss of nutrients and is not recommended.

When preparing fruits and vegetables...
Because of advances in food technology, fruits and vegetables are available in many forms—fresh, frozen, or canned; whole or pre-cut; bulk or pre-portioned. In any form, fruits and vegetables need to be handled and stored correctly to retain nutrients and ensure food safety.

For best results when cooking vegetables:

- Prepare small amounts. Avoid long exposure to heat. Fresh or frozen vegetables can be cooked by several different methods. You can steam, bake, or sauté them. Regardless of the cooking method you choose, it is better to prepare small amounts than to cook single large batches. Nutritive value is lost and quality is lowered with long exposure to heat.

- To retain nutrients and bright colors, cook “just until tender.” Steaming is a good way to cook vegetables.

- Use carefully timed “batch cooking” to avoid having vegetables held too long before serving. A good rule of thumb: the quantity you cook should not exceed the amount you can serve in 15 minutes. This applies to both vegetables served alone and to vegetables used in recipes such as beef or chicken stir-fry.
Chapter Six
Menu Planning Records

THIS CHAPTER HAS FOUR PARTS:
- Good Records Are Helpful
- Production Records
- Standardized Recipes
- Processed Foods

Good Records Are Helpful
Good recordkeeping is part of any successful food service operation. A tool like the production record helps you plan from day to day. How much food needs to be prepared for a particular meal or snack? The production record tells you at a glance.

Helpful in many ways...
Good records also provide a valuable written history for future planning. They help you:
- see trends
- evaluate what works best with your children
- decide what changes need to be made

In addition, during State reviews your records demonstrate that your meals comply with CACFP requirements.

Production Records
Production records vary in format, but any good record accomplishes two things.
- First, it gives you information—such as what foods and recipes to use, and what portion sizes to serve.
- Second, it enables you to record information, such as actual quantities prepared and number of meals and snacks served.

For best results, plan ahead...
A production record is a working tool which outlines the type and quantity of foods that need to be purchased and available for the meal service. To be a successful planning tool, production records should be started well in advance of the meal service.
What is needed on a Production Record?

For starters, the production record should show the:

- child care site
- meal date
- menu type (breakfast, snack, lunch, or supper)

In addition, it should indicate the following:

- Food components (meat and meat alternate, etc.) and other items, including condiments.
- Recipe or food product used.
- Planned/projected number of portions and serving sizes for each age group.
- Planned/projected number of portions and serving sizes for adults.
- Total amount of food prepared (for example, number of servings, pounds, cans).
- Actual number of reimbursable meals served.
- Actual number of non-reimbursable meals served (such as to adults).
- Leftovers and substitutions

Completing a Production Record

When is a production record filled in?

- The menu planner completes the first part of the production record in advance.
- After the meal is served, the remaining sections are completed. These include such information as actual amounts of food used, the number of meals served, and leftovers.

What specific information is needed?

- **Menu item (or food item) used and form:** All food items must be listed.
- **Recipe or product:** It is critical to specify exact recipes and products that are to be used. (If on the day of service, the preparer or server uses a different recipe or product than the one specified here by the menu planner, the food provided to children may not meet the meal requirements as planned.) List the recipe number if it is a USDA quantity recipe and the name of the food and its form (such as shredded lettuce). For processed foods, list brand name and code number.
- **Age or grade group(s):** You need to identify the age group being served. If a menu serves more than one age group at a site, you may use one production record to show this, but notations for each age group should be clear. Adjusted portion sizes for age groups specified need to be shown for menu items, recipes, and products.
- **Portion or serving size:** Indicate portion size or serving size. This information is important to ensure that the correct portion size is served as well as planned and prepared.
- **Total projected servings:** Forecast, or predict, the approximate number of servings needed of each menu item. Projecting the number of servings is the first step in determining how much food to buy or order, how much time to allot for preparation, and which equipment to use.
- **Amount of food (or purchase units) used:** Indicate how much food was used. These records should be kept to verify that the planned menu was actually prepared and served.
- **Actual number of meals served:** At the end of the meal service, record the number of reimbursable meals that were actually served to children. Also record the number of non-reimbursable meals that were served (such as to adults).
- **Leftovers:** Record any leftovers.

See Appendix K for a sample production record.
Standardized Recipes
A standardized recipe is one that has been tried, adapted, and retried several times—and has been found to produce the same good results and yield every time as long as:

- the exact procedures are followed
- the same type of equipment is used
- the ingredients are of the same quality and in the same quantities

What are the advantages of using standardized recipes?

- **Standardized recipes help ensure product quality.**
  They provide food items of consistent quality.
  The same amount of product is produced each time.
  The same portion size is provided each time.

- **Menu planning will be more consistent because:**
  You can accurately predict the number of portions from each recipe.
  Predictable yield will help eliminate unexpected leftovers and substitutions.

- **Costs are easier to control.**
  Inventory is easier because recipes specify exact amounts of ingredients.
  You can better manage purchasing and storage.

- **The same good results can be produced time after time.**
  As a result, children will be happier because food quality will be consistent.

*A good source of quantity recipes...*
Child Care Recipes: Food for Health and Fun from USDA (FNS-304) contains standardized recipes and kitchen tips that will make your menu planning and food preparation easier.

The recipes can help you add variety to your menus, with plenty of fruits, vegetables, and grain products.

Developed in quantities of 25 and 50 servings, the recipes have been tested, and retested, for product quality, consistency, and yield in child care centers nationwide.
What kind of information should be included on a standardized recipe form?
If you are standardizing your own recipe, or modifying an already standardized recipe, you will want to keep careful records. These records should include the following information:

- **Yield:** Indicate serving size and number of servings.
- **All ingredients:** Identify form (such as fresh, frozen, or canned); packing medium (such as canned in juice or light syrup, frozen with added sugar or plain); and fat content (such as “20% fat ground beef” or “ground pork, no more than 30% fat”).
- **Correct measures, weights, and/or pack size.**
- **Preparation procedures.**

See Appendix L for information on equivalent measures, scoops, ladles, and weights and measures.

For which menu items will you need to keep recipes?
Recipes are needed for any menu item that contains more than one ingredient, such as Beef Stir-Fry, seasoned vegetables, and sandwiches.

Processed Foods
You will need to keep records of processed foods used in meals. See below for what kind of information you want to have on hand.

What kind of records will you need to keep?
You will need either...

- ...a Child Nutrition Label (see Appendix M for more information on Child Nutrition Labels)
- ...or a statement from the manufacturer which documents the product and the food components and amounts that are credited to that product. Manufacturers must use the current USDA Food Buying Guide for Child Nutrition Programs to determine yields of food components.

Check with your State agency regarding the specific information that needs to be provided by the manufacturer.
Chapter Seven
Feeding Children Responsively

THIS CHAPTER HAS THREE PARTS:
• Building a Child-Centered Program
• Incorporating Nutrition Education Into Your Program
• Ideas for Nutrition Education Activities

Building a Child-Centered Program
How can you make meals and snacks as “child-friendly” as the rest of the activities at your center? You probably have found lots of ways. Here are some added tips for making mealtime a special experience that children look forward to, learn from, and enjoy.

Making Meals Special...
Meals and snacks offer special opportunities for:
▪ providing happy, relaxed experiences
▪ helping children develop positive food attitudes
▪ building children’s confidence and social skills
▪ communicating with parents

To make the most of these opportunities, try to...
▪ Achieve quality service. Make sure meals are both attractive and tasty.
▪ Encourage social interaction. Teach the children the social aspects of dining as well as how to feed themselves.
▪ Make mealtime a happy time. Provide a transition or quiet time just before meals so that mealtime can be relaxed. Make sure the room is attractive and appealing for young children. Use bright colors and decorations that children like.
▪ Avoid making children feel rushed. Allow children to take their own time to eat. Having to eat in a hurry may spoil the pleasure of eating. In addition, short meal times may encourage poor eating habits. For example, children who are feeling pressured may choose to quickly consume their favorite foods and ignore other nutritious foods in the meal. Also, they may learn to eat too rapidly, a habit that may lead to over-eating and obesity.
▪ Make the most of your menus. Use your menus as a tool to communicate with parents. Send a copy of your menus home with the children. Include your phone number and let parents know they can approach you.
▪ Add excitement to your meals. Expand on activities and cultural events happening in the classroom. Plan activities and/or special meals around holidays or other special events, such as the beginning of spring, National Apple Week, and National Nutrition Month.
Incorporating Nutrition Education into Your Program

Nutrition education is learning about foods and how they are important to health. It should be part of child care because it helps children in many ways.

How does nutrition education help children?

Nutrition education helps children...
- Form positive attitudes about food and eating.
- Learn to accept a wide variety of foods.
- Establish healthful eating habits early in life.
- Learn to share and socialize at mealtime (in a group eating situation).
- Be ready to continue learning while at child care.

How can you make nutrition education part of your child care center?

Here are some tips:

1. Get children involved in activities with food and eating.
   Children are natural explorers. They are constantly asking questions and discovering the world around them. Children learn through their play and through hands-on activities.
   - Think of ways that you can provide learning activities that involve the senses of touch, smell, taste, hearing, and seeing.
   - Allow children to handle food, mix it, prepare it, smell it, and taste it.
   - Help them learn to describe foods as they see them. Ask them to talk about a food’s color, shape, and texture.

2. Plan activities that match children’s abilities and interests.
   Children develop rapidly. Activities should take into consideration the children’s developmental readiness. This includes both what the children are mentally ready to learn and what they are physically capable of doing.

   Younger children are not able to perform the same tasks that older children can. When planning a nutrition education activity, think about the age of the children. Almost any activity can be changed to fit the abilities and the interests of the children being taught.

3. Plan simple activities before harder ones.
   Children, like adults, want to be successful in what they do. You can help children be successful by planning activities that are simple and then moving to harder ones.

   For example, have the children learn the names of foods. Then as they get older, get them involved in food preparation activities such as measuring.

4. Build on what a child already knows.
   Children learn by building on something they already know. When you introduce a new topic about food and eating, connect it to something already familiar to the child.

   For example, most children have seen adults put gasoline in their cars. Explain that just as gas makes cars go, food “makes children go.” It helps them be able to grow and play. Just as gas is fuel for cars, food is fuel for people.
Ideas for Nutrition Education Activities
Learning about different foods and their importance to health can be fun for children. As the following ideas show, nutrition education activities can...

- be lively and varied
- take place in a variety of settings
- be combined with many other activities

Let’s Take a Road Trip!

- **Plan a trip to the local grocer.**
  Many large grocery chains have tours especially for younger children. Take them to the produce aisle to learn more about unfamiliar fruits and vegetables.

- **Live near a rural area? A trip to a farm can show children where food comes from.**
  Give them a chance to watch cows being milked, or fruits being harvested. Take them to a farm or an orchard and help them pick their own berries, pumpkins, or apples!

- **Is there a food manufacturing or bottling plant nearby?**
  Arrange a visit for the children. They will be fascinated by the big machinery. And, especially if they have already visited a farm, they will see a connection between how food is grown and how it gets to the grocery shelf.

- **A bakery is a great place for children to learn how bread is made.**
  Think about allowing the children to bake their own bread loaves once you get back to the child care center!

Let’s Have Fun with Food!

- **Play a guessing game with the children.**
  Everyone enjoys a mystery. Place different fruits or vegetables in paper bags, and have the children identify the mystery food by feel alone! (Make sure children wash their hands first.)

- **Match pictures of foods and food products.**
  Show the children pictures of foods (such as milk, corn, and apples). Then give them pictures to help them identify various forms that those foods can take (in this case, for example, cheese and yogurt, cornbread and cereal, applesauce and apple pie). Be creative!

- **Have a colorful tasting party with new and familiar foods.**
  Cut up fruits and vegetables that the children might not normally eat (kiwi, star fruit, mango, broccoli or cauliflower, turnips, or mild radishes). Add some more familiar fruits and vegetables, along with some dip. Be sure that the display is colorful!

- **Show what you can do with a single vegetable or fruit and the different forms it can take.**
  For instance, show children that a carrot can be shredded, sliced, diced, grated, or cut into sticks. Explain that it can be eaten raw or cooked.
It’s Learning Time!

- **Have children build their own Food Guide Pyramids.**
  Using pictures of foods from magazines or newspaper advertisements have the children create their own Food Guide Pyramids by placing different foods in their proper places.

- **Make a giant Food Guide Pyramid on the floor with string.**
  Give children pictures of different foods and have them place the foods where they think they should be on the Pyramid.

- **Teach children their colors by using fruits and vegetables.**
  Eggplant, grapes, oranges, carrots, red and green apples, celery sticks, broccoli, bananas, and summer squash are all great foods to use!

- **Help children learn about different cultures.**
  Share with them foods that other people from different countries eat. Use a map to find those countries, and share foods they might eat there. For example, locate Central America and talk about and taste pineapple. Do the same with Africa and peanuts, and Japan and rice.

- **Plant miniature herb gardens.**
  Show the children how simple herbs can make cooked vegetables taste even better.

- **Teach the children how to count using food.**
  For example, have them count small pieces of fruit (such as pineapple tidbits or grape halves) or grains (such as oat cereal or cooked macaroni). After they count, they can eat! Make sure that children wash hands first, and that clean dishes and handling procedures are used.

- **Set up a “grocery store” in the play area.**
  Fill the store with a variety of foods—real or plastic examples, empty cartons, or pictures. Include nutritious foods (fruits, veggies, juices, grain products, meats, and dairy products) and foods that are not full of nutrients (i.e., cookies, soda, and candy). Let the children “go shopping” and learn how to make wise food choices.

- **Help the children grow potato plants.**
  Stick toothpicks into white or sweet potatoes, and then suspend the potatoes in a cup full of water. Place them in a window, supply them with plenty of water, and watch the potatoes sprout!

- **Include special foods during holiday and ethnic celebrations.**
  Invite the children to bring in their family’s favorite recipes for that day or season.

- **Use stories to help show children how food can be prepared.**
  The classic story “Stone Soup” is a great way to show children how foods can be combined to make delicious meals. (You could act out the story, and then serve that soup for lunch!)

- **Use foods to help children learn about tastes, textures, and sounds.**
  (How does this taste—sweet or tart? Is it crunchy, or chewy? How does it sound?)
Chefs in Training!

- **Show children where orange juice comes from.**
  Give each child a plastic juicer and an orange. Have the children roll the oranges, then cut in half...then let them make their own cup of juice for their snack.

- **Create banana pops!**
  Give each child half of a banana and a Popsicle stick. Let the child peel the banana, insert the stick, and then roll the banana in granola cereal. Place the “banana pop” in a Styrofoam holder, and place in the freezer for a few hours.

- **Allow the children to help make a fruit salad.**
  Use their favorite fruits! The fruit salad can be part of one of their meals or part of a snack.

- **Show the children how to make “fruit parfaits.”**
  Use fresh or canned fruit layered with low-fat yogurt or low-fat cottage cheese.

- **Have fun making a dip.**
  Finger foods always taste better with a dip. Allow the children to experiment with adding spices or condiments to yogurt or pureed fruit. Supply them with sliced fruits, vegetables and/or bread wedges and crackers, and stand back.

- **Make colorful pizzas!**
  Children love to make their own lunches—and pizza is a favorite of most. Supply them with half of an English muffin, tomato sauce, cheese, and vegetable toppings. Let them build their own pizzas and watch you place them in the oven.

- **Let the children make their own fruit shakes.**
  These are especially refreshing on a hot day. Using frozen fruit and low-fat milk, help the children pour the ingredients into a blender. In a few minutes, each child will have a delicious treat. (Don’t forget the straws!)

**CAUTION:** If a food prepared by children is used to meet a meal or snack component, you must ensure that the quantity is sufficient to meet meal pattern requirements and that the food safety procedures are followed.
APPENDIXES

APPENDIX A
- Infant and Child Lifesaving Steps

APPENDIX B
- What Foods Are Good Sources of Vitamin A, Vitamin C, Calcium, and Iron?

APPENDIX C
- Acceptable Grains/Breads

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- Major Nutrients

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- How to Trim the Fat

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- Evaluating What You Have Planned

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APPENDIX K
- Sample Menu Production Record

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- Common Weights and Measures

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- What is the Child Nutrition Labeling Program
Appendix A
Infant and Child Lifesaving Steps

YOU CAN HELP PREVENT CHOKING

Always watch or sit with children during meals and snacks. Young children, ages 2 to 3 especially, are at risk of choking on food and remain at risk until they can chew and swallow better by about age 4.

Using the Food Guide Pyramid for Young Children, offer 2 to 3 year olds the same variety of foods as the rest of the children in your care, but prepared in forms that are easy for them to chew and swallow.

Watch children during meals and snacks to make sure they:

- Sit quietly.
- Eat slowly.
- Chew food well before swallowing.
- Eat small portions and take only one bite at a time.
- Finish swallowing before leaving the table.

The foods which are popular with young children are often the ones which have caused choking.

**Foods that may cause choking:**

- Firm, smooth, or slippery foods that slide down the throat before chewing, like:
  - hot dog rounds
  - hard candy
  - large pieces of fruit
  - granola
  - peanuts
  - whole grapes
  - cherries with pits

- Small, dry, or hard foods that are difficult to chew and easy to swallow whole, like:
  - popcorn
  - small pieces of raw carrot, celery, or other raw hard vegetables
  - nuts and seeds
  - potato and corn chips
  - pretzels

- Sticky or tough foods that do not break apart easily and are hard to remove from the airway like:
  - spoonfuls or chunks of peanut butter or other nut/seed butters
  - chunks of meat
  - chewing gum
  - marshmallows
  - raisins and other dried fruit

Fix table foods so that they are easy to chew:

- Cut foods into small pieces or thin slices.
- Cut round foods, like hot dogs, lengthwise into thin strips.
- Remove all bones from fish, chicken, and meat.
- Cook food, such as carrots or celery, until slightly soft. Then cut into sticks.
- Remove seeds and pits from fruit.
- Spread peanut butter thinly.

- Small pieces of raw carrot, celery, or other raw hard vegetables
- Nuts and seeds
- Potato and corn chips
- Pretzels

Sticky or tough foods that do not break apart easily and are hard to remove from the airway like:

- Spoonfuls or chunks of peanut butter or other nut/seed butters
- Chunks of meat
- Chewing gum
- Marshmallows
- Raisins and other dried fruit

- Hot dog rounds
- Hard candy
- Large pieces of fruit
- Granola
- Peanuts
- Whole grapes
- Cherries with pits

- Popcorn
- Small pieces of raw carrot, celery, or other raw hard vegetables
- Nuts and seeds
- Potato and corn chips
- Pretzels

- Sticky or tough foods that do not break apart easily and are hard to remove from the airway like:
  - Spoonfuls or chunks of peanut butter or other nut/seed butters
  - Chunks of meat
  - Chewing gum
  - Marshmallows
  - Raisins and other dried fruit
American Red Cross

Infant & Child Lifesaving Steps

CHECK CALL CARE

- Check the scene for safety
- Check the victim for consciousness, breathing, pulse, and bleeding
- Dial 9-1-1 or local emergency number
- Care for conditions you find

INFANTS
(birth to 1)

If conscious but choking...

- Give 5 back blows...
- And 5 chest thrusts
- Repeat blows and thrusts until object comes out

If not breathing...

- Give 1 slow breath about every 3 seconds

If air won’t go in...

- Give 5 back blows...
- And 5 chest thrusts
- Look for and clear any object from mouth
- Reattempt breaths
- Repeat steps 1, 2 & 3 until breaths go in or help arrives

If not breathing and no pulse...

- Give CPR—repeat sets of 5 compressions and 1 breath

If bleeding...

CHILDREN
(1-8)

If conscious but choking...

- Give abdominal thrusts until object comes out

If not breathing...

- Give 1 slow breath about every 3 seconds

If air won’t go in...

- Give up to 5 abdominal thrusts
- Look for and clear any object from mouth
- Reattempt breaths

If not breathing and no pulse...

- Give CPR—repeat sets of 5 compressions and 1 breath

Local Emergency Telephone Number:

Everyone should know what to do in an emergency. Call your local American Red Cross for information on CPR and first aid courses.
Appendix B
What Foods Are Good Sources of Vitamin A, Vitamin C, Calcium, and Iron?

Children need many different nutrients to grow and be healthy. That is why it is important to include a variety of foods in the meals and snacks you serve.

This Appendix lists foods that are good sources of four key nutrients: Vitamin A, Vitamin C, Calcium, and Iron. A good food source contributes at least 10 percent of the Recommended Daily Allowance (RDA) for a particular nutrient.

Here’s how to read the charts:
Foods and serving sizes are listed in the first two columns. The third column shows what percentage of the RDA a serving provides, as follows:

<table>
<thead>
<tr>
<th>Symbol:</th>
<th>For children ages 1 to 3 years old, one serving contains...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GOOD</td>
</tr>
<tr>
<td></td>
<td>BETTER</td>
</tr>
<tr>
<td></td>
<td>BEST</td>
</tr>
</tbody>
</table>
## FOODS THAT CONTAIN VITAMIN A

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>% of RDA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meat/Meat Alternates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver (beef, pork, chicken, or turkey) braised</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td><strong>Meat/Meat Alternates – Fish/Seafood</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mackerel, canned</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td><strong>Fruits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apricots:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canned, juice pack</td>
<td>2 halves</td>
<td></td>
</tr>
<tr>
<td>Dried, cooked, unsweetened</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Dried, uncooked</td>
<td>5 halves</td>
<td></td>
</tr>
<tr>
<td>Cantaloupe</td>
<td>¼ cup, diced</td>
<td></td>
</tr>
<tr>
<td>Cherries, red sour, fresh</td>
<td>¼ cup pitted</td>
<td></td>
</tr>
<tr>
<td>Mandarin orange sections</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Mango, raw</td>
<td>¼ medium</td>
<td></td>
</tr>
<tr>
<td>Melon balls (cantaloupe and honeydew)</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Nectarine</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Papaya</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Plums, canned, juice pack</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Prunes, dried, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Watermelon</td>
<td>1 cup</td>
<td></td>
</tr>
</tbody>
</table>
FOODS THAT CONTAIN VITAMIN A  
continued

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>% of RDA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vegetables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beet greens, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Bok Choy, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Broccoli, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Carrots, raw or cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Chicory greens, raw</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Collards, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Dandelion greens, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Escarole, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Kale, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Mustard greens, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Peas and carrots, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Peppers, sweet red, raw</td>
<td>½ small</td>
<td></td>
</tr>
<tr>
<td>Plantain, cooked</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Pumpkin, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Romaine lettuce</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Spinach, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Squash, winter (acorn, butternut, etc.)</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Sweet potato</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Swiss chard, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Tomato (juice, paste, or puree)</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Turnip greens, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td><strong>Milk</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk, low-fat or skim</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>Serving Size</td>
<td>% of RDA</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Meat/Meat Alternates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver (beef or pork), braised</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Liver (chicken)</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td><strong>Meat/Meat Alternates – Fish/Seafood</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clams, steamed or canned</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Mussels, steamed or poached</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td><strong>Fruits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple, raw</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Banana</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Blackberries, raw</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Blueberries, raw</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Cantaloupe</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Grapefruit</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Grapefruit juice</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Grapefruit-orange juice</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Grapefruit and orange sections</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Guava, raw</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Honeydew</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Kiwi</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Kumquat</td>
<td>1 fruit</td>
<td></td>
</tr>
<tr>
<td>Mandarin orange sections</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Mango</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Nectarine</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Orange</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Orange juice</td>
<td>3/8 cup</td>
<td></td>
</tr>
<tr>
<td>Papaya</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Peach Frozen</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Fresh, raw</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Pear</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Pineapple, fresh or canned</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Pineapple juice, canned</td>
<td>3/8 cup</td>
<td></td>
</tr>
<tr>
<td>Pineapple-grapefruit juice</td>
<td>3/8 cup</td>
<td></td>
</tr>
<tr>
<td>Pineapple-orange juice</td>
<td>3/8 cup</td>
<td></td>
</tr>
<tr>
<td>Plum, raw</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Raspberries</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Strawberries</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Tangelo</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Tangerine</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Tangerine juice</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Watermelon</td>
<td>½ cup</td>
<td></td>
</tr>
</tbody>
</table>
### FOODS THAT CONTAIN VITAMIN C

To help the body take in more iron, include a good source of vitamin C with meals, especially if the meal does not include meat, fish, or poultry.

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>% of RDA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vegetables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asparagus, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Beans, green or yellow, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Beans, lima, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Bean sprouts, raw or cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Bok choy, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Broccoli, raw or cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Brussels sprouts, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Cabbage, green, raw or cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Cabbage, red, raw or cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Cauliflower, raw or cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Chard, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Chili peppers, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Chicory, raw</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Chinese cabbage, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Collards, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Dandelion greens, raw</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Escarole, raw</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Kale, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Kohlrabi, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Mustard greens, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Okra, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Onion, medium, raw</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Parsnips, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Peas, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Peppers, green and red, raw/cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Plantain, green or ripe, boiled</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Poke greens, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Potato, baked or boiled</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Radishes, raw</td>
<td>3 large</td>
<td></td>
</tr>
<tr>
<td>Romaine lettuce, raw</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Rutabaga, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Snow peas, raw or cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Spinach, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Squash, summer or winter, raw/cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Sweet potato, baked, boiled, canned</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Tomato</td>
<td>½ medium</td>
<td></td>
</tr>
<tr>
<td>Tomato juice</td>
<td>3/8 cup</td>
<td></td>
</tr>
<tr>
<td>Tomato-vegetable juice</td>
<td>3/8 cup</td>
<td></td>
</tr>
<tr>
<td>Turnip greens with turnips, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Turnips, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Watercress, raw</td>
<td>¼ cup</td>
<td></td>
</tr>
</tbody>
</table>
## FOODS THAT CONTAIN CALCIUM

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>% of RDA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meat Alternates – Fish</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mackerel, canned</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Salmon, canned with bones</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Sardines, canned with bones</td>
<td>1 each</td>
<td></td>
</tr>
<tr>
<td><strong>Meat Alternates – Cheese</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottage cheese, low-fat</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Natural cheese—blue, brick, camembert, feta, gouda, Monterey jack, mozzarella, muenster, provolone, and Roquefort</td>
<td>½ oz</td>
<td></td>
</tr>
<tr>
<td>Natural cheese—gruyere, Swiss, parmesan, and Romano</td>
<td>½ oz</td>
<td></td>
</tr>
<tr>
<td>Processed cheese—cheddar or Swiss</td>
<td>¾ oz</td>
<td></td>
</tr>
<tr>
<td>Ricotta cheese</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Yogurt—flavored or with fruit, or plain</td>
<td>4 oz</td>
<td></td>
</tr>
<tr>
<td><strong>Meat Alternates – Nuts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Almonds, unblanched, dry-roasted</td>
<td>1 oz</td>
<td></td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spinach, cooked</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td><strong>Grains/Breads</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pancakes, plain, fruit, buckwheat, or whole-wheat</td>
<td>4”</td>
<td></td>
</tr>
<tr>
<td>Waffles, bran, cornmeal, and/or fruit</td>
<td>4” square</td>
<td></td>
</tr>
<tr>
<td>Waffles, plain</td>
<td>4” square</td>
<td></td>
</tr>
<tr>
<td><strong>Milk</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buttermilk</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Chocolate milk</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Dry, nonfat milk, reconstituted</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Evaporated, whole or nonfat, diluted</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Low-fat or nonfat milk</td>
<td>½ cup</td>
<td></td>
</tr>
<tr>
<td>Whole milk</td>
<td>½ cup</td>
<td></td>
</tr>
</tbody>
</table>
## FOODS THAT CONTAIN IRON

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>% of RDA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meat/Meat Alternates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beef brisket</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Beef, ground, extra lean, broiled</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Beef liver</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Beef, pot roast, braised</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Beef, rib roast, roasted</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Beef, short ribs, braised</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Beef, steak, broiled</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Beef, stew meat, simmered</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Calf liver</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Chicken or turkey liver</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Liverwurst</td>
<td>1 oz</td>
<td></td>
</tr>
<tr>
<td>Pork liver</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Tongue, braised</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Turkey, dark meat, roasted, no skin</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td><strong>Meat/Meat Alternates – Eggs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large egg</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Meat/Meat Alternates – Fish/Seafood</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clams, steamed or canned</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Mackerel, canned</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Mussels, steamed</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Oysters, steamed or canned</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Shrimp, broiled or canned</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td>Trout, baked or broiled</td>
<td>1 ½ oz</td>
<td></td>
</tr>
<tr>
<td><strong>Meat Alternates – Dry Beans, Peas, and Lentils</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black-eyed peas (cowpeas)</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Chickpeas (garbanzo beans)</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Kidney beans</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Lentils</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Pinto beans</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td>¼ cup</td>
<td></td>
</tr>
<tr>
<td>White beans</td>
<td>¼ cup</td>
<td></td>
</tr>
</tbody>
</table>
## FOODS THAT CONTAIN IRON continued

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>% of RDA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meat Alternates – Nuts and Seeds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine nuts (pignolias)</td>
<td>1 Tbsp</td>
<td></td>
</tr>
<tr>
<td>Pumpkin or squash seeds, roasted</td>
<td>1 Tbsp</td>
<td></td>
</tr>
<tr>
<td><strong>Fruits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prunes, dry, cooked</td>
<td>1/4 cup</td>
<td></td>
</tr>
<tr>
<td>Raisins, seedless</td>
<td>1/4 cup</td>
<td></td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beans, lima, cooked</td>
<td>1/4 cup</td>
<td></td>
</tr>
<tr>
<td>Beans, black, cooked</td>
<td>1/4 cup</td>
<td></td>
</tr>
<tr>
<td>Black-eyed peas, cooked</td>
<td>1/4 cup</td>
<td></td>
</tr>
<tr>
<td>Chard, cooked</td>
<td>1/4 cup</td>
<td></td>
</tr>
<tr>
<td>Spinach, cooked</td>
<td>1/4 cup</td>
<td></td>
</tr>
<tr>
<td><strong>Grains/Breads</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bagel, plain, pumpernickel, or whole-wheat</td>
<td>1/2 medium</td>
<td></td>
</tr>
<tr>
<td>Cereals, ready-to-eat, enriched</td>
<td>1/2 oz</td>
<td></td>
</tr>
<tr>
<td>Muffin, bran</td>
<td>1/2 medium</td>
<td></td>
</tr>
<tr>
<td>Noodles, cooked</td>
<td>1/2 cup</td>
<td></td>
</tr>
<tr>
<td>Oatmeal, instant, enriched</td>
<td>1/3 cup</td>
<td></td>
</tr>
<tr>
<td>Pita bread, plain or whole-wheat</td>
<td>1/2 medium</td>
<td></td>
</tr>
<tr>
<td>Pretzel, soft</td>
<td>1/2</td>
<td></td>
</tr>
<tr>
<td>Rice, white, regular, cooked</td>
<td>1/3 cup</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Acceptable Grains/Breads

What makes a product acceptable to serve as a grains/breads item for the CACFP?

- All grains/breads items must be enriched or whole-grain, made from enriched or whole-grain meal or flour, or if it is a cereal, the product must be whole-grain, enriched or fortified. Bran and germ are credited the same as enriched or whole-grain meal or flour.

- The label must indicate that the product is enriched or whole-grain; made from enriched or whole-grain meal or flour as well as bran and/or germ; or fortified. If it is enriched, the item must meet the Food and Drug Administration's Standards of Identify (21 CFR Section 136, 137, 139) for enriched bread, macaroni and noodle products, rice, or cornmeal.

- The item must be provided in quantities specified in the regulations. One-quarter (¼) of a serving is the smallest amount allowable to be credited toward the minimum quantities of grains/breads specified in program regulations.

- A full serving is required for children 6 years of age and older.

- A half serving is the minimum required for children under 6 years of age.

How will you know a particular product contains enough whole-grain or enriched flour or meal?

There are a number of different ways. The one you choose will depend on whether you are using a recipe or buying a commercial product.

If you are using your own recipe...

- You can calculate this yourself as shown on pages C-4 and C-5.

If you are using a standardized recipe from the USDA publication Child Care Recipes: Food for Health and Fun (FNS-304)...

- Refer to the crediting of each recipe. Look, for example, at Pineapple Scones, Recipe A-1. Under the heading “SERVING,” you will see the following: “1 scone provides the equivalent of 1 ½ slices of bread.”

If you are buying a commercial product...

- The manufacturer can supply you with this information;
- Or you can consult USDA guidance materials, such as the lists shown on pages C-6, C-7, and C-8. These lists show equivalent minimum serving sizes for a wide variety of purchased food items.
How will you use the USDA lists of equivalent minimum serving sizes for purchased items?
For each group of foods, you will find minimum weights for a full serving, a half serving, and a one-quarter serving. Cornbread, for example, is listed in Group C.

Here’s how you will use this information:
If you are serving a child 6 years or older, you need to provide a full serving. Looking at the column on the right, you see that a full serving of cornbread needs to weigh at least 31 grams (or 1.1 oz.) to contain the required 14.75 grams of whole-grain or enriched flour or meal.

If you are serving a child younger than 6 years old, you need to provide at least a half serving. You see that a half serving of cornbread must weigh at least 16 grams (or .6 oz.).

What else is important to know about grains/breads?
When making decisions about which recipes to use and which products to buy, keep in mind the following important considerations:

1. USDA recommends that cookies, granola bars, and similar foods be served in a supplement (snack) no more than twice a week.

2. Donuts, coffee cakes, and sweet rolls are allowed as a bread item in breakfasts and supplements only.

3. French, Vienna, Italian, and Syrian breads are commercially prepared products that often are made with un-enriched flour. Check the label or ask the manufacturer to be sure the product is made with enriched flour.

4. The amount of dried bread in a half serving of stuffing should weigh at least 10 grams (.4 oz.).

5. Whole-grain, enriched, or fortified breakfast cereals (cold, dry, or cooked) are traditionally served as a breakfast item, but may be served in meals other than breakfast.
Calculating the Grain Contribution in a Recipe

You have a recipe that will make 25 corn muffins. Since it is not a USDA standardized recipe, you do not know what one muffin will contribute to meeting the grains/breads requirement. How will you calculate this?

1. **Start with basic information about minimum requirements:**
   ONE full serving of a grains/breads product must contain at least 14.75 grams (.52oz) of whole-grain or enriched flour or meal.

2. **List the ingredients per 25 servings and the quantity of grain stated in pounds.**
   Your recipe calls for 8 ounces all-purpose flour and 3 ounces yellow cornmeal for 25 servings.

3. **Multiply the quantity of grains by the number of grams per pound (454 grams = 1 pound).**
   You convert ounces to pounds as follows: 8oz = .5lb and 3oz = .1875 lb. You multiply .5 by 454 and .1875lb by 454. This tells you how many grams of flour and cornmeal are in 25 servings. Add grams of flour and grams of cornmeal, and you get total grams of grains (312.125 grams).

4. **Divide the total grams of grains by 25 servings.**
   This tells you the number of grams per serving of whole-grain or enriched flour in each muffin (12.485 grams).

5. **Divide the number of grams per serving by 14.75.**
   (A FULL serving of grains/breads requires 14.75 grams of whole-grain or enriched flour or grain.) You will get .8464 grams.

6. **Round DOWN to the nearest ¼ of a serving.**
   This tells you what one muffin contributes to meeting the requirement for one full serving of enriched or whole-grain flour, cereal, or meal. Completing the calculations, as shown on the next page, you determine that one of these corn muffins will provide the equivalent of ¾ slice of bread.

**CALCULATIONS:**

<table>
<thead>
<tr>
<th>Whole-grain or enriched flour and/or meal:</th>
<th>Quantity needed for 25 servings (in pounds):</th>
<th>Multiplied by 454 grams (g) (1 lb = 454 g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-purpose flour</td>
<td>8 oz = .5 lb</td>
<td>.5 x 454 = 227</td>
</tr>
<tr>
<td>Yellow cornmeal</td>
<td>3 oz = .1875 lb</td>
<td>.1875 x 454 = 85.125</td>
</tr>
</tbody>
</table>

1. **To get total grams of grain in 25 servings, you add:**
   227 plus 85.125 = 312.125

2. **To get grams of grain in each muffin, you divide:**
   312.125 by 25 = 12.485

3. **To determine grain contribution, you divide:**
   12.485 by 14.75 = .8464

4. **You round DOWN to the nearest ¼ of a serving:**
   .8464 rounds down to .75 (%) of a serving

*You have determined that 1 serving (1 muffin) provides the equivalent of ¾ slice of bread.*

(A half serving is the minimum required for children under 6 years of age. For children 6 years of age and older, a full serving is required.)
# A Guide to Equivalent Minimum Serving Sizes

The following charts show minimum serving sizes for a wide variety of purchased products. Keep in mind that a half serving is the minimum required for children under 6 years of age. For children 6 years of age and older, a full serving is required.

## Group A

<table>
<thead>
<tr>
<th>Minimum Serving Size for Group A</th>
<th>Group A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 serving = 20 gm or 0.7 oz</td>
<td>Bread type coating</td>
</tr>
<tr>
<td>¾ serving = 15 gm or 0.5 oz</td>
<td>Bread sticks (hard)</td>
</tr>
<tr>
<td>½ serving = 10 gm or 0.4 oz</td>
<td>Chow mein noodles</td>
</tr>
<tr>
<td>¼ serving = 5 gm or 0.2 oz</td>
<td>Crackers (saltines and snack crackers)</td>
</tr>
<tr>
<td>Stuffing (dry) Note: Weights apply to bread in stuffing</td>
<td>Croutons</td>
</tr>
</tbody>
</table>

**SUMMARY:** When you buy items from Group A, a full serving should have a minimum weight of 20 gm (0.7 oz). A half serving should have a minimum weight of 10 grams (0.4 oz).

## Group B

<table>
<thead>
<tr>
<th>Minimum Serving Size for Group B</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 serving = 25 gm or 0.9 oz</td>
<td>Bagels</td>
</tr>
<tr>
<td>3/4 serving = 19 gm or 0.7 oz</td>
<td>Batter type coating</td>
</tr>
<tr>
<td>1/2 serving = 13 gm or 0.5 oz</td>
<td>Biscuits</td>
</tr>
<tr>
<td>1/4 serving = 6 gm or 0.2 oz</td>
<td>Breads (white, wheat, whole-wheat, French, Italian)</td>
</tr>
<tr>
<td></td>
<td>Buns (hamburger and hot dog)</td>
</tr>
<tr>
<td></td>
<td>Crackers (graham crackers—all shapes; animal crackers)</td>
</tr>
<tr>
<td></td>
<td>Egg roll skins</td>
</tr>
<tr>
<td></td>
<td>English muffins</td>
</tr>
<tr>
<td></td>
<td>Pita bread (white, wheat, whole-wheat)</td>
</tr>
<tr>
<td></td>
<td>Pizza crust</td>
</tr>
<tr>
<td></td>
<td>Pretzels (soft)</td>
</tr>
<tr>
<td></td>
<td>Rolls (white, wheat, whole-wheat, potato)</td>
</tr>
<tr>
<td></td>
<td>Tortillas (wheat or corn)</td>
</tr>
<tr>
<td></td>
<td>Tortilla chips (wheat or corn)</td>
</tr>
<tr>
<td></td>
<td>Taco shells</td>
</tr>
</tbody>
</table>

**SUMMARY:** When you buy items from Group B, a full serving should have a minimum weight of 25 grams (0.9 oz). A half serving should have a minimum weight of 13 grams (0.5 oz).
<table>
<thead>
<tr>
<th>Group C</th>
<th>Minimum Serving Size for Group C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cookies (plain)</td>
<td>1 serving = 31 gm or 1.1 oz</td>
</tr>
<tr>
<td>Cornbread</td>
<td>¼ serving = 23 gm or 0.8 oz</td>
</tr>
<tr>
<td>Corn muffins</td>
<td>½ serving = 16 gm or 0.6 oz</td>
</tr>
<tr>
<td>Croissants</td>
<td>¼ serving = 8 gm or 0.3 oz</td>
</tr>
<tr>
<td>Pancakes</td>
<td></td>
</tr>
<tr>
<td>Pie crust (dessert pies, fruit turnovers, and meat/meat alternate pies)</td>
<td></td>
</tr>
<tr>
<td>Waffles</td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:** When you buy items from Group C, a *full serving* should have a minimum weight of 31 grams (1.1 oz). A half serving should have a minimum weight of 16 grams (0.6 oz).

<table>
<thead>
<tr>
<th>Group D</th>
<th>Minimum Serving Size for Group D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donuts (cake and yeast raised, unfrosted)</td>
<td>1 serving = 50 gm or 1.8 oz</td>
</tr>
<tr>
<td>Granola bars (plain)</td>
<td>3/4 serving = 38 gm or 1.3 oz</td>
</tr>
<tr>
<td>Muffins (all, except corn)</td>
<td>1/2 serving = 25 gm or 0.9 oz</td>
</tr>
<tr>
<td>Sweet roll (unfrosted)</td>
<td>1/4 serving = 13 gm or 0.5 oz</td>
</tr>
<tr>
<td>Toaster pastry (unfrosted)</td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:** When you buy items from Group D, a *full serving* should have a minimum weight of 50 grams (1.8 oz). A *half serving* should have a minimum weight of 25 grams (0.9 oz).

<table>
<thead>
<tr>
<th>Group E</th>
<th>Minimum Serving Size for Group E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cookies (with nuts, raisins, chocolate pieces and/or fruit purees)</td>
<td>1 serving = 63 gm or 2.2 oz</td>
</tr>
<tr>
<td>Donuts (cake and yeast raised, frosted or glazed)</td>
<td>3/4 serving = 47 gm or 1.7 oz</td>
</tr>
<tr>
<td>French toast</td>
<td>½ serving = 31 gm or 1.1 oz</td>
</tr>
<tr>
<td>Grain fruit bars</td>
<td>¼ serving = 16 gm or 0.6 oz</td>
</tr>
<tr>
<td>Granola bars (with nuts, raisins, chocolate pieces and/or fruit)</td>
<td></td>
</tr>
<tr>
<td>Sweet rolls (frosted)</td>
<td></td>
</tr>
<tr>
<td>Toaster pastry (frosted)</td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:** When you buy items from Group E, a *full serving* should have a minimum weight of 63 grams (2.2 oz). A half serving should have a minimum weight of 31 grams (1.1 oz).
### Group F

<table>
<thead>
<tr>
<th>Minimum Serving Size for Group F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cake (plain, unfrosted)</td>
</tr>
<tr>
<td>Coffee cake</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:** When you buy items from Group F, a full serving should have a minimum weight of 75 grams (2.7 oz). A half serving should have a minimum weight of 38 grams (1.3 oz).

---

### Group G

<table>
<thead>
<tr>
<th>Minimum Serving Size for Group G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brownies (plain)</td>
</tr>
<tr>
<td>Cake (all varieties, frosted)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:** When you buy items from Group G, a full serving should have a minimum weight of 115 grams (4 oz). A half serving should have a minimum weight of 58 grams (2 oz).

---

### Group H

<table>
<thead>
<tr>
<th>Minimum Serving Size for Group H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Breakfast cereals (cooked)</td>
</tr>
<tr>
<td>Bulgur or cracked wheat</td>
</tr>
<tr>
<td>Macaroni (all shapes)</td>
</tr>
<tr>
<td>Noodles (all varieties)</td>
</tr>
<tr>
<td>Pasta (all shapes)</td>
</tr>
<tr>
<td>Ravioli (noodle only)</td>
</tr>
<tr>
<td>Rice (enriched white or brown)</td>
</tr>
</tbody>
</table>

**SUMMARY:** When you buy items from Group H, a full serving should have a minimum of ½ cup cooked product (25 grams dry). A half serving should have a minimum of 1/4 cup cooked product (or 13 grams dry).

---

### Group I

<table>
<thead>
<tr>
<th>Minimum Serving Size for Group I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ready-to-eat breakfast cereal (cold dry)</td>
</tr>
</tbody>
</table>

**SUMMARY:** When you serve items from Group I, a full serving should measure 3/4 cup or weigh 1 ounce, whichever is less. A half serving should measure 3/8 cup or weigh 0.5 ounce, whichever is less.
Appendix D

Major Nutrients

Here are some facts about major nutrients including what they contribute to good health and in what foods they are found. The nutrients are organized in seven groups:

- Carbohydrates
- Macrominerals
- Proteins
- Microminerals
- Fats
- Water
- Vitamins

While you are not required to use this information to plan healthy meals, it may be useful as a resource to share with teachers and parents. Similarly, although some of the food sources listed may be less suitable for center meals than others, they might be appropriate for nutrition education activities.

1. Carbohydrates
   - Supply energy (4 calories per gram).
   - Spare proteins to be used for growth and maintenance of body tissues rather than energy.
   - Provide fiber if whole grain.
   - Food sources include: complex carbohydrate foods include breads, cereals, pasta, rice, and starchy vegetables such as potatoes, green beans, corn, and lima beans. Simple carbohydrate foods include sugar, honey, syrup, candy, soft drinks, icings, and fruit.

2. Proteins
   - Build and repair body tissues.
   - Help antibodies fight infection.
   - Supply energy (4 calories per gram) if more is consumed than needed to build and repair body tissues.
   
   Food sources include: meat, poultry, fish, eggs, milk, yogurt, cheese, dried beans and peas, and nuts and nut butters.

3. Fats
   - Supply the most concentrated source of energy (9 calories per gram).
   - Carry fat-soluble vitamins A, D, E, and K.
   - Provide feeling of fullness and satisfaction since fats take longer to digest.
   
   Food sources include: oils, shortening, butter, margarine, mayonnaise, salad dressings, table cream, and sour cream.
4. **Vitamins**

- **Vitamin C (Ascorbic Acid)**
  - Helps form cementing substances such as collagen that hold body cells together, thus strengthening blood vessels and hastening healing of wounds and bones.
  - Increases resistance to infections.
  - Helps body absorb iron in the diet.
  *Food sources include:* cantaloupe, grapefruit, grapefruit juice, honeydew melon, kiwi fruit, mandarin orange sections, mango, orange juice, papaya, strawberries, tangerines, asparagus, broccoli, Brussels sprouts, cabbage, cauliflower, kale, sweet green and red peppers, sweet potatoes.

- **Thiamin (B1)**
  - Helps body cells obtain energy from food.
  - Helps keep nerves healthy.
  - Promotes good appetite and digestion.
  *Food sources include:* meat, poultry, fish, dried beans and peas, nuts, enriched and whole-grain breads and cereals.

- **Riboflavin (B2)**
  - Helps cells use oxygen to release energy from food.
  - Helps keep eyes healthy and vision clear.
  - Helps keep skin around mouth and nose healthy.
  *Food sources include:* milk, liver, meat, poultry, fish, eggs, and green leafy vegetables.

- **Niacin (B3)**
  - Helps cells use oxygen to release energy from food.
  - Maintains health of skin, tongue, digestive tract, and nervous system.
  *Food sources include:* liver, meat, poultry, and fish, peanuts and peanut butter, dried beans and dried peas, and enriched and whole-grain breads and cereals.

- **Vitamin A**
  - Helps keep eyes healthy and able to adjust to dim light.
  - Helps keep skin healthy.
  - Helps keep lining of mouth, nose, throat and digestive tract healthy and resistant to infection.
  - Promotes growth.
  *Food sources include:* liver, dark green and deep yellow vegetables (such as broccoli, collards and other green leafy vegetables, carrots, pumpkin, sweet potatoes, and winter squash), butter and fortified margarine, whole milk, vitamin A-fortified nonfat milk, and vitamin A-fortified low-fat milk.

- **Vitamin D**
  - Helps body absorb calcium.
  - Helps body build strong bones and teeth.
  *Food sources include:* vitamin D-fortified milk.
  *In addition:* Exposure to sunlight is another source of Vitamin D. (Vitamin D is produced in the skin with stimulus of sun.)
- **Vitamin E**
  - Active in maintaining the involuntary nervous system, vascular system, and involuntary muscles.
  
  *Food sources include:* vegetable oils, margarine made from vegetable oils.

- **Vitamin K**
  - Necessary for proper blood clotting.
  
  *Food sources include:* green leafy vegetables, milk, meat, eggs.

- **Folate (Folic Acid or Folacin)**
  - Helps body produce normal red blood cells.
  - Helps in the biochemical reactions of cells in the production of energy.
  - Reduces the risk of neural tube birth defects in newborns.
  
  *Food sources include:* most enriched breads, flour, corn meal, pasta, rice and other grain products; vegetables; mustard and turnip greens; liver; citrus fruit juices; and legumes.

- **Biotin**
  - Essential in the breakdown of carbohydrates, lipids, and proteins in the body.
  
  *Food sources include:* liver, kidneys, egg yolk, vegetables and fruits (especially bananas, grapefruits, watermelon, and strawberries).

- **Pantothenic Acid**
  - Aids in the metabolism of fat.
  - Aids in the formation of cholesterol and hormones.
  
  *Food sources include:* liverwurst, meats, poultry, egg yolk, wheat germ, rice germ, tomato paste, sweet potatoes, oatmeal, and milk.

- **Pyridoxine (B6)**
  - Needed to help nervous tissues function normally.
  - Helps to maintain the health of the skin and red blood cells.
  - Assists in the metabolism of proteins, carbohydrates, and fats.
  
  *Food sources include:* liver, lean meats, cereals, vegetables, and milk.

- **Cyanocobalamin (B12)**
  - Necessary in the development of normal growth.
  - Helps in the metabolism of folate.
  - Helps protect against pernicious anemia. (Pernicious anemia primarily results from the body’s inability to absorb vitamin B12. However, it can result from a deficiency of vitamin B12 in the diet.)
  
  *Food sources include:* liver, fish and seafood, meats, eggs, chicken, and milk.
5. **Macrominerals**
   - **Calcium**
     - Needed for bone rigidity.
     - Helps in blood clotting.
     - Aids in muscle contraction, normal nerve functions.
     *Food sources include:* milk (nonfat, low-fat, and whole), yogurt, and cheese, green leafy vegetables such as kale, collards, mustard greens, and turnip greens.
   - **Phosphorous**
     - Helps build strong bones and teeth.
     - Aids in all phases of calcium metabolism.
     *Food sources include:* meat, poultry, liver, fish, eggs, milk, other dairy products, grain products, lima beans, legumes, nuts and seeds.
   - **Magnesium**
     - Helps regulate body temperature, muscle contractions, and the nervous system.
     - Helps cells utilize carbohydrates, fats, and proteins.
     *Food sources include:* green leafy vegetables, nuts (including Brazil nuts, almonds, and cashews), meats, beef liver, salmon, cheddar cheese, milk, eggs, and dry beans and peas.
   - **Sodium, Chloride, Potassium**
     These three work together to:
     - Regulate the flow of fluids in the body.
     - Help regulate the nervous system.
     - Help regulate the muscle functions, including heart.
     - Help regulate nutrient absorption in the cells.
     *Food sources include:* sodium and chloride are found in table salt. Potassium is found in meats, milk, bananas, leafy green vegetables, and citrus fruits.

6. **Microminerals**
   - **Iron**
     - Combines with protein in the blood to form hemoglobin.
     *Food sources include:* liver and other organ meats, egg yolks, dried legumes, ground beef, leafy green vegetables, shellfish, enriched breads, fortified cereals.
   - **Zinc**
     - Plays an important role in the formation of protein in the body, thus assists in wound healing, blood formation, and general growth and maintenance of all tissues.
     *Food sources include:* oysters, organ meats, beef, pork, chicken, turkey, wheat germ.
   - **Copper**
     - Necessary in the formation of hemoglobin.
     *Food sources include:* liver, shell fish, nuts and seeds, prunes, whole-wheat grain and bran products, barley, lima beans, white and sweet potatoes, tomato juice, and turnip greens.
Manganese
- Necessary for normal development of bones and connective tissues.
**Food sources include:** nuts, rice, whole grains, beans, and leafy green vegetables.

Selenium
- Works in conjunction with vitamin E to protect cells from destruction.
**Food sources include:** fish, organ meats, shellfish, eggs, and grains and plants grown in selenium-rich soil.

Chromium
- Maintains normal glucose uptake into cells.
- Helps insulin bind to cells.
**Food sources include:** vegetable oils, egg yolks, whole grains, and meats.

Iodine
- Needed by thyroid gland to produce thyroxin, which is essential for the oxidation rates of cells.
**Food sources include:** iodized salt, ocean fish, seaweed, and milk.

Fluoride
- Helps reduce incidence of tooth decay.
**Sources include:** fluoridated drinking water, seafood, tea, fruits and vegetables grown in areas where natural fluoride level in the water is high, and fluoridated toothpaste.

7. Water
- Is essential for life.
- Represents two-thirds of our body weight.
- Is part of every living cell.
- Is the medium for all metabolic changes (digestion, absorption, and excretion).
- Transports nutrients and all body substances.
- Helps maintain body temperature.
- Acts as a lubricant.
**Sources include:** drinking water, liquid foods, water in foods, and water released when carbohydrates, protein, and fats are metabolized in the body.
Appendix E

How to Trim the Fat

Ways to Gradually Reduce Fat without Losing Flavor

As you develop menus, you will want to gradually begin introducing lower fat versions of higher fat favorites. A little fat goes a long way, but not every menu item needs to be lower in fat. So go slowly, and remember practicality and acceptability are still key when planning menus young children will happily consume.

There are lots of ways to be creative when you’re cutting back on fat. You’ve probably already discovered many! Add these ideas to your list if they are not already on it.

- When adding fats to recipes, select unsaturated fats such as liquid oils or soft margarine.
- Cook rice, grains, and beans in defatted broth and add herbs, garlic, or onions for more taste.
- Trim fat from meats.
- Drain all meats after cooking.
- De-fat whenever possible. If your center has the ability to quickly chill and reheat foods in a safe manner, allow time to let your stews, soups, and braised dishes cool so that the fats will rise to the top, congeal, and be easy to spoon off.

Tips for Low-fat Baking

Did you know that...

- You can generally cut the fat in your recipes by ¼ without losing the great taste in baked items.
- Chilled, undiluted evaporated fat-free milk can be a great substitute for cream.
- Some yeast breads such as French bread and English muffins can be made successfully without fat.

You may also be interested to find out that...

- Decreasing the fat too much in rolled cookies can make dough that is difficult to roll out. Switching to soft drop cookies allows you to cut fat with better results.
- You can use fruit purees, such as prune puree or applesauce, in place of up to half the fat in some baked goods.

For best results in reducing total fat and/or saturated fat...

- Replace butter and lard with soft margarine or vegetable oil.
- Use a non-stick cooking spray on baking pans.
- Check ingredient labels and recipes for high-fat foods. When possible, choose similar products without high-fat ingredients.
How to Use Less Fat when Sautéing and Stir-Frying

- Brush the pan with oil just to coat it or use a nonstick spray made from vegetable oil.
- Typically, using a vegetable oil spray will add less than 10 fat calories to a pan of sautéed vegetables. In contrast, 2 tablespoons of oil add an extra 240 fat calories.
- When stir-frying, keep the oil in your kettle very hot. Vegetables soak up cold oil more quickly than hot oil.
- Cut back on buttering vegetables by using one part margarine and one part lemon juice.
- Experiment with ways to add flavor and moisture without adding fat. Marinades are a good way to do this. Also try using chicken or meat broth, concentrated fruit juice, or perhaps fresh fruit or vegetable juice.
Appendix F
USDA Food Guide Pyramid for Children

TIPS for Using the FOOD GUIDE PYRAMID for Young Children 2 to 6 years old

United States
Department of
Agriculture

Center for Nutrition
Policy and Promotion

March 1999
Program Aid 1647
**Plan for Your Young Child... The Pyramid Way**

Use this chart to get an idea of the foods your child eats over a week. Pencil in the foods eaten each day and pencil in the corresponding triangular shape. (For example, if a slice of toast is eaten at breakfast, write in “toast” and fill in one Grain group pyramid.) The number of pyramids shown for each food group is the number of servings to be eaten each day. At the end of the week, if you see only a few blank pyramids...keep up the good work. If you notice several blank pyramids, offer foods from the missing food groups in the days to come.

<table>
<thead>
<tr>
<th></th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
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<tbody>
<tr>
<td>Milk</td>
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<td>Meat</td>
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<td>Vegetable</td>
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<td>Fruit</td>
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<td>Grain</td>
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**Breakfast**

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**Snack**

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**Dinner**

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### Appendix G

**Nutrient Descriptions and Their Definitions**

<table>
<thead>
<tr>
<th>Description</th>
<th>Definition</th>
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<tbody>
<tr>
<td><strong>Free</strong></td>
<td>The reference amount used on the food label contains none or a very small amount: less than 5 calories; less than 5 mg sodium; less than 0.5 g total fat and saturated fat; less than 2 mg cholesterol or 0.5 g sugar.</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>The reference amount contains no more than 40 calories; 140 mg sodium; 3 g fat.</td>
</tr>
<tr>
<td><strong>Lean</strong></td>
<td>The reference amount of meat, poultry, seafood, and game meats contains less than 10 g fat, 4.5 g saturated fat, and 95 mg cholesterol.</td>
</tr>
<tr>
<td><strong>Extra lean</strong></td>
<td>The reference amount contains less than 5 g fat, 2 g saturated fat, and 95 mg cholesterol.</td>
</tr>
<tr>
<td><strong>High</strong></td>
<td>The reference amount contains 20% or more of the Daily Value for a particular nutrient.</td>
</tr>
<tr>
<td><strong>Good source</strong></td>
<td>The reference amount contains 10% to 19% of the Daily Value for a particular nutrient.</td>
</tr>
<tr>
<td><strong>Reduced</strong></td>
<td>The reference amount of a nutritionally altered product contains 25% less of a nutrient or 25% fewer calories than a reference food. “Reduced” cannot be used if the reference food already meets the requirement for a “low” claim.</td>
</tr>
<tr>
<td><strong>Less</strong></td>
<td>The food contains 25% less of a nutrient or 25% fewer calories than a reference food.</td>
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<td><strong>Light</strong></td>
<td>1) An altered food contains 1/3 fewer calories or contains 50% of the fat in a reference food; if 50% or more of the calories come from fat, the reduction must be 50% of the fat; or 2) The sodium content of a low-calorie, low-fat food has been reduced by 50%; or 3) The term describes such properties as texture and color, as long as the label explains the intent (for example, “light brown sugar” or “light and fluffy”).</td>
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<tr>
<td><strong>More</strong></td>
<td>A serving contains at least 10% more of the Daily Value of a nutrient than a reference food.</td>
</tr>
<tr>
<td><strong>% Fat free</strong></td>
<td>A product must be low-fat or fat-free, and the percentage must accurately reflect the amount of fat in 100 g of a food. Thus, 2.5 g of fat in 50 g of food results in a “95% fat-free” claim.</td>
</tr>
<tr>
<td><strong>Healthy</strong></td>
<td>A food is low in fat and saturated fat, and a serving contains no more than 480 mg sodium and no more than 60 mg of cholesterol.</td>
</tr>
<tr>
<td><strong>Fresh</strong></td>
<td>1) A food is raw, has never been frozen or heated, and contains no preservatives; or 2) The term accurately describes the product (for example, “fresh milk,” or “freshly baked bread”).</td>
</tr>
</tbody>
</table>

*Fresh frozen The food has been quickly frozen while still fresh; blanching is allowed before freezing to prevent nutrient breakdown. The Food and Drug Administration will not allow the use of the above nutrient claims on infant and toddler foods. The terms “unsweetened” and “unsalted“ are allowed on infant and toddler foods because they relate to taste and not nutrient content.*
Appendix H

Information Resources

NFSMI
(800) 321-3054

The National Food Service Management Institute (NFSMI), located at the University of Mississippi, is committed to improving the operation and quality of all Child Nutrition Programs, including CACFP. This is accomplished through staff development programs, training experiences, educational materials, and a national satellite network. The Institute is funded by a grant from USDA’s Food and Nutrition Service.

For information on food service, food preparation, meeting the Dietary Guidelines, or available videos and training packages, contact the NFSMI’s clearinghouse at (800) 321-3054, or visit their website at www.nfsmi.org, or write:

National Food Service Management Institute
The University of Mississippi
P.O. Drawer 188
University, MS 38677-0188

FNIC
(301) 504-571

The Food and Nutrition Information Center (FNIC) is located at USDA’s National Agricultural Library in Beltsville, Maryland. USDA program participants may borrow child care reference materials, videos, and training materials free of charge. Sample Nutrition Education and Training materials are available at FNIC. Food labeling material is also available. On-line bibliographies are offered to assist in research. Contact FNIC at (301) 504-5719, or visit their website at www.nal.usda.gov/fnic/, or write:

USDA/NAL/FNIC
10301 Baltimore Boulevard, Room 304
Beltsville, MD 20705-2351

NMCHC
(888) 434-4MCH

The National Maternal and Child Health Clearinghouse (NMCHC) offers publications on nutrition, maternal health, child health, and children with special health care needs. Contact the Clearinghouse at (888) 434-4MCH, or visit their website at www.nmchc.org, or write:

National Center for Education in Maternal and Child Health
2000 15th Street, North, Suite 701
Arlington, VA 22201-2617

NRC-for Health and Safety in Child Care
(703) 524-7802

The National Resource Center for Health and Safety in Child Care provides information services, training and technical assistance, conferences for sharing experiences and knowledge, and develops and distributes resource materials. Contact the center at (703) 524-7802, or visit their website at nrc.uchsc.edu, or write:

The National Resource Center for Health and Safety in Child Care
8201 Greensboro Drive, Suite 600
McLean, VA 22102

ADA
(800) 366-1655

The American Dietetic Association’s National Center for Nutrition and Dietetics offers a Consumer Nutrition Hotline at (800) 366-1655. Listen to a food and nutrition message, speak to a Registered Dietitian, or obtain a referral to a Registered Dietitian in your area. For more information, visit their website at www.eatright.org, or write to:

The American Dietetic Association
National Center for Nutrition and Dietetics
216 W. Jackson Blvd.
Chicago, IL 60606-6995
Other Resources

Contact your State administering agency for assistance in obtaining any of the following publications.


Food Guide Pyramid for Young Children 2 to 6 Years Old, the poster and booklet are available to the public on USDA’s Center for Nutrition Policy and Program webpage at www.usda.gov/cnpp or through the Government Printing Office.


Food and Nutrition Service Regional Offices

Mid-Atlantic Regional Office
Mercer Corporate Park
300 Corporate Boulevard
Robbinsville, NJ 08691-1598

Delaware, District of Columbia,
Maryland, New Jersey, Pennsylvania,
Puerto Rico, Virginia, Virgin Islands,
West Virginia

Midwest Regional Office
77 West Jackson Boulevard
20th Floor
Chicago, IL 60604-3507

Illinois, Indiana, Michigan,
Minnesota, Ohio, Wisconsin

Mountain Plains Regional Office
1244 Speer Boulevard
Suite 903
Denver, CO 80204-3585

Colorado, Iowa, Kansas, Missouri,
Montana, Nebraska, North Dakota,
South Dakota, Utah, Wyoming

Northeast Regional Office
10 Causeway Street
Boston, MA 02222-1069

Connecticut, Maine, Massachusetts,
New Hampshire, New York, Rhode Island,
Vermont

Southeast Regional Office
77 Forsyth Street SW, Suite 112
Atlanta, GA 30303-3427

Alabama, Florida, Georgia, Kentucky,
Mississippi, North Carolina, South Carolina,
Tennessee

Southwest Regional Office
1100 Commerce Street
Room 5-C-30
Dallas, TX 75242-9980

Arkansas, Louisiana, New Mexico,
Oklahoma, Texas

Western Regional Office
550 Kearny Street
Room 400
San Francisco, CA 94108-2518

Alaska, Arizona, California, Hawaii, Idaho,
Nevada, Oregon, Washington, Guam
Appendix I
Evaluating What You Have Planned

Evaluate your menus by asking yourself questions like the following...

GENERAL CHECKLIST

1. Meal Requirements
   Do menus meet the minimum requirements of the CACFP meal pattern? Yes No

2. Foods Selected
   Do the food choices have appealing colors and textures? Yes No
   Do the menus have foods with different shapes, sizes, and colors? Yes No
   Do the menus complement each other? Yes No
   Have you incorporated seasonal foods and USDA commodities if you receive them? Yes No
   Have you introduced any new food items? Yes No

3. Staffing and Equipment
   Can some preparation safely be done ahead? Yes No
   Can you prepare and serve meals with available equipment? Yes No
   Are oven and surface-cooking areas adequate for items planned? Yes No

4. Cost
   Have you considered cost? Yes No
   Do high and low cost foods balance in menus? Yes No

5. Menus, Recipes, and Other Food Service Records
   Have you specified the standardized recipes, preparation techniques, and processed foods to be used? Yes No
   Are portion sizes stated in correct amounts? Yes No
   Have you listed on the menu the condiments to be served? Yes No

6. Special Considerations
   Is a vitamin C food included two to three times a week? Yes No
   Are vitamin A foods included two to three times per week? Yes No
   Are iron-rich foods included each day? Yes No
   Are whole-grain products offered at least once a week? Yes No
   Are assorted dry cereals offered at least once a week? Yes No
   Are fresh fruits or vegetables offered on several different days? Yes No
**Appendix L**  
Common Weights and Measures

| 1 tablespoon = 3 teaspoons | 1 cup = 16 tablespoons |
| 1/8 cup = 2 tablespoons or 1 fluid ounce | 1/2 pint = 1 cup or 8 fluid ounces |
| 1/4 cup = 4 tablespoons | 1 pint = 2 cups |
| 1/3 cup = 5 1/3 tablespoons | 1 quart = 4 cups |
| 3/8 cup = 6 tablespoons | 1 gallon = 4 quarts |
| 1/2 cup = 8 tablespoons | 1 peck = 8 quarts (dry) |
| 2/3 cup = 10 4/3 tablespoons | 1 bushel = 4 pecks |
| 3/4 cup = 12 tablespoons | 1 pound = 16 ounces |

**Scoops**

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<tr>
<th>Scoop No.</th>
<th>Level Measure</th>
<th>Suggested Use*</th>
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<tbody>
<tr>
<td>6</td>
<td>2/3 cup</td>
<td>Entree salads</td>
</tr>
<tr>
<td>8</td>
<td>1/2 cup</td>
<td>Entree</td>
</tr>
<tr>
<td>10</td>
<td>3/8 cup</td>
<td>Desserts, meat patties</td>
</tr>
<tr>
<td>12</td>
<td>1/3 cup</td>
<td>Vegetables, muffins, desserts, salads</td>
</tr>
<tr>
<td>16</td>
<td>1/4 cup</td>
<td>Muffins, desserts</td>
</tr>
<tr>
<td>20</td>
<td>3 1/3 tablespoons</td>
<td>Muffins, sauces, sandwich fillings</td>
</tr>
<tr>
<td>24</td>
<td>2 2/3 tablespoons</td>
<td>Cream puffs</td>
</tr>
<tr>
<td>30</td>
<td>2 tablespoons</td>
<td>Large drop cookies</td>
</tr>
<tr>
<td>40</td>
<td>1 4/5 tablespoons</td>
<td>Drop cookies</td>
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**Ladles**

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<tr>
<th>Number on Ladle</th>
<th>Approximate Measure</th>
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<td>1 fluid ounce</td>
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<td>2 fluid ounces</td>
<td>1/4 cup</td>
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<td>4 fluid ounces</td>
<td>1/2 cup</td>
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<tr>
<td>6 fluid ounces</td>
<td>3/4 cup</td>
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<tr>
<td>8 fluid ounces</td>
<td>1 cup</td>
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<tr>
<td>12 fluid ounces</td>
<td>1 1/2 cups</td>
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</table>
Weights and Measures

**Bread:**
Dry: 1/3 cup = 1 slice  
Soft: 3/4 cup = 1 slice

**Butter:**
1 stick = 8 Tbsp or 1/2 cup  
4 sticks = 2 cups or 1 lb

**Cheese, American:**
1 lb = 2 2/3 cups, cubed  
Loaf 1 lb = 16 to 20 slices

**Cocoa:**
1 lb = 4 cups, ground

**Corn meal:**
1 lb = 3 cups

**Cracker crumbs:**
23 soda crackers = 1 cup  
15 graham crackers = 1 cup  
1 lb medium fine = 5 to 6 cups

**Egg:**
1 large = 4 Tbsp liquid  
4 to 5 whole = 1 cup  
7 to 9 whites = 1 cup  
12 to 14 yolks = 1 cup  
12 (1 dozen) = 2 1/2 cups

**Flour:**
1 lb all-purpose = 4 cups  
1 lb cake = 4 1/4 cups  
1 lb graham (whole wheat) = 3 3/4 cups  
1 lb rye = 5 cups

**Lemons, juice:**
1 lb = 4 to 5 lemons or 3/4 cup juice  
1 medium = 2 to 3 Tbsp  
5 to 8 medium = 1 cup

**Lemons, rind:**
1 lemon = 3 Tbsp, grated

**Milk, dry, nonfat solids:**
1 lb = 4 cups

**Oranges, juice:**
1 medium = 6 to 8 Tbsp  
3 to 4 medium = 1 cup

**Oranges, rind:**
1 rind = 2 Tbsp grated

**Gelatin:**
3 1/4 oz package, flavored = 1/2 cup  
1/4 oz package, unflavored = 1 Tbsp

**Rolled oats:**
1 lb = 4 1/2 cups

**Shortening:**
1 lb = 2 1/4 cups

**Sugar:**
1 lb brown, solid packed = 2 cups  
1 lb = 96 cubes  
1 lb granulated = 2 cups  
1 lb confectioners, sifted = 3 cups
Appendix M

What Is the Child Nutrition Labeling Program?
The Child Nutrition (CN) Labeling Program is a voluntary Federal labeling program for the Child Nutrition Programs.

Who runs the program?
The CN Labeling Program is run by the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA) in cooperation with the following agencies:
- Food Safety and Inspection Service
- Agricultural Marketing Service
- National Marine Fisheries Service
The program is operated by FNS directly with commercial food processing firms.

How does the program work?
The program requires an evaluation of a product’s formulation by FNS to determine its contribution toward meal pattern requirements. It allows manufacturers to state this contribution on their labels. The program provides a warranty against audit claims for purchasers of CN-labeled products.

What products are eligible for CN labels?
- Main dish products which contribute to the Meat/Meat Alternate component of the meal pattern requirements. Examples of these products include beef patties, cheese or meat pizzas, meat or cheese and bean burritos, egg rolls, and breaded fish portions.
- Juice and juice drink products which contain at least 50 percent full-strength juice by volume. This includes such products as grape drink, fruit punch, and juice drink bars.

To carry CN labels, eligible products must:
- Be produced under Federal Inspection by USDA or U.S. Display Consortium.
- Have the contribution of Meat/Meat Alternate products determined using yields in the USDA Food Buying Guide.

Are manufacturers required to CN label products?
There is no Federal requirement that anyone makes or purchase CN-labeled products. Purchasing decisions are left to the local level. If a CN-labeled product is desired, this must be clearly stated in purchasing specifications.

What are the advantages of using CN labels?
- A CN label statement clearly identifies the contribution of a product toward the meal pattern requirements; it protects you from exaggerated claims about a product.
- A CN label provides a warranty against audit claims, if used according to the manufacturer’s directions.

Do CN-labeled products cost more?
They should not. Cost comparison between two meat products should be based on the cost per ounce or pound that contributes to the meal pattern requirements, not on the product cost per ounce or pound.
How do I identify a CN label?
A CN label will always contain the following:
- The CN logo, which is a distinct border;
- A 6-digit product identification number;
- USDA/FNS authorization; and
- The month and year of approval.

For more information:
For additional information about the CN Labeling Program, contact:
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