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## Nutrition $G$ uidance for $C$ hild $C$ are H omes

Making
Nutrition Count
for Children

YOU PLAY A KEY ROLE IN CHILDREN'S LIVES!

HOW CHILDREN GROW AND DEVELOP

NUTRIENTS NEEDED FOR GROWTH AND DEVELOPMENT10

DIETARY GUIDELINES
FOR AM ERICANS

HELPING CHILDREN LEARN ABOUT FOOD AND EATING

KEEPING PARENTS INFORMED 39
CHOKING PREVENTION

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## Y ou play a key role in children's lives!

As a child care provider, you play a key role in children's lives. The meals and snacks you serve help them to grow and be healthy. The food-related experiences they have while in your care help them to learn about food and eating, and influence their attitudes about their world. Research has shown that there are crucial relationships among nutrition, health, and learning. You are in a special position to show children what it means to eat for good health, including the importance of eating a variety of foods. This booklet will help you learn more about foods and the nutritional needs of children and how to help children learn to make healthful food choices.

This booklet provides basic information:

- How children grow and develop
- Nutrients needed for growth and development
- Dietary Guidelines for Americans
- The USDA Food Guide Pyramid for Young Children
- Helping children learn about food and eating

The booklet also includes:

- Sample letters to parents
- Choking prevention information

Use this booklet and the companion booklet, M enu M agic for Children - M enu Planning Guide for Child Care Homes, as tools to plan nutritious meals for children and help them learn to enjoy a healthy way of eating.


## How Children Grow and Develop

# U nderstanding how children grow and develop will help you plan and serve appropriate foods. Y ou 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:

- Infants develop at their own rate, so their child care providers must listen to each baby's needs. Holding and cuddling are very important during this time. There is no way to "spoil" an infant.
- Infants grow fast and will double their birthweight in their first 4 to 5 months.
- An infant's eyesight is blurry at birth, but the sense of smell develops quickly. They can tell the difference between people by smell.
- Infants can hear tones, but they do not understand words. Speak in a calm, pleasant voice.


## 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 the foods they eat.
- Physical growth is tremendous at this stage. By the end of the first year, an infant may have tripled in weight and may have doubled in length since birth.
- Babies learn to crawl, squat down and stand up, carry objects in their hands, and walk.
- Children are fascinated by new things. They love to look at and feel different sizes, shapes, and textures (soft, hard, smooth, rough, spongy, furry).
- They recognize familiar voices and faces from far away. They also babble constantly, especially when someone talks to them.


## $E$ ating and $F$ ood $B$ ehaviors of I nfants

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:
$\sqrt{ }$ W hether to serve breast milk or formula
$\checkmark$ If serving formula, what kind
$\sqrt{ }$ When to introduce solid foods
$\sqrt{ }$ W hat solid foods to introduce
3. Talk with the infant'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.
4. O Ider 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 may ease their teething pains.


Tips:

- Avoid giving infants foods that you do not want them to love when they get older. O ccasionally feeding infants fast foods 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 meals 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 45 minutes or longer. The more relaxed and cheerful the atmosphere, the more quickly foods will get eaten. O ffer small portions, use a soft baby spoon, and wait until the child finishes each mouthful before offering more. Do not overfill the spoon to try and speed things up.


## How Children Grow and Develop

(continued)

## TODDLERS

## At 1 year old:

- Teething is a source of irritation and pain. All of their front teeth and one set of molars come in by their 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. Provide child-safe toys appropriate for the age.
- O ne-year-olds use and understand the words "me," "mine," and "no." They recognize their own name and can make two- to threeword sentences.


## At 2 years old:

- Two-year-olds have a high energy level and are developing many skills including walking, running, and eye-hand coordination.
- They are curious and want to do things for themselves. M ake your schedule flexible and their play area safe to explore.
- They learn by imitating what they see and hear.
- While 2-year-olds are no longer drinking from a bottle, they still use sucking, mouthing, and tasting to explore their world.
- At this age, children are learning many new words and phrases. They can speak in two- to five-word sentences, showing their developing mental abilities.



## E ating and F ood B ehaviors of Toddlers

- Physical growth begins to slow down a bit, and the child's appetite may 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.

- 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.
- Definite food preferences begin to be established. Toddlers prefer lukewarm foods to hot or cold foods. They usually do not like highly seasoned foods, but enjoy sweets.
- 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:
$\sqrt{ }$ Offer new foods frequently since toddlers may need to see a new food offered 6 to 12 times before they will decide to like it. O nce children have accepted a food, continue to offer it so the food will remain familiar.
$\sqrt{ }$ 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.
- 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.

## Tips:

- Don't serve large amounts of juice. 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. W hat children cannot see, they probably will not ask for.


## How Children Grow and Develop

(continued)

## PRESCHOOLERS

## At 3 years old:

- Preschoolers enjoy activities that allow them to express themselves - art, pretend and dramatic play, and music.
- They are likely to play alone, although they occasionally share their toys.
- Children of this age use a fork or spoon.
- Their vocabulary increases tremendously. They know their first and last names, age, and some parts of their address.
- Average weight, 30 pounds; average height, 36 inches.


## At 4 years old:

- Sharing and playing together occur more often.
- Children want more freedom and independence to explore abilities.
- They are more able to control their arms and legs. They can draw clearer pictures, cut with safe scissors, throw a ball, pump on a swing, and dress themselves.
- Mental skills are advancing. They understand numbers and letters, size and weight differences, distance and time, and colors.
- Average weight - 36 pounds; average height 40 inches.


## At 5 years old:

- As children get older, they become more independent. Five-year-olds enjoy helping and having responsibilities that they can successfully complete.
- They ask more questions and can carry on a lengthy discussion.
- With better control of their hands and fingers, they can copy designs, shapes, figures, letters, and numbers.
- Their attention span continues to grow. A handson group activity or a sit-and-listen activity is now possible.
- Average weight, 43 pounds; average height, 44 inches.


## E ating and F ood B ehaviors of P recchoolers

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:
$\sqrt{ }$ Discuss different foods with the children.
$\sqrt{ }$ M ix nutrition information in with reading, story telling, and other activities.
$\checkmark$ Allow the children to have input on what is served.
$\checkmark$ With proper supervision, let the children help prepare food items for a meal.
$\sqrt{ }$ Select books and videos for the children that send good nutrition messages about food.


## A C loser L ook at E ating H abits

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


## I ntroducing N ew F oods

## 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.

- Display a positive attitude when introducing a new food. Children will pick up on adult 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 child has already tried and liked it.
- Serve a new food with a familiar food. Point out the similarities betw een 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. Toddlers may need to be offered a new food 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 or served.
- If children accept a new food, serve it again soon so they become accustomed to it.


## E ncouraging F avorable F ood A titudes and G ood E ating H abits

## Be sensitive to children's needs.

- Try to understand each child's personality and reactions to food.
- Serve age-appropriate portions.
- Use child-sized tables, chairs, 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:
$\sqrt{ }$ Coloring or drawing
$\sqrt{ }$ Listening to soft music
$\checkmark$ Reading a story
$\sqrt{ }$ Have the children wash their hands.


## Get children interested and involved.

- Encourage children to participate in mealtime. With your careful supervision, invite them to help with:
$\sqrt{ }$ Setting the table,
$\sqrt{ }$ Bringing food to the table,
$\sqrt{ }$ 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 important steps toward growth.
- Initiate nutrition education activities.


M aking 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 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 and 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.


## Nutrients Needed For Growth and Development

Nutrition is the process by which our bodies take in and use food. M any different nutrients are needed for good health, including carbohydrates, fat, protein, vitamins, minerals, and water. M ost foods contain more than one nutrient, and some foods provide more nutrients than others.

The best way to ensure good nutrition is to choose a variety of foods. 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. Here are some facts about major nutrients, including what they contribute to good health and in what foods they are found.


## C arbohydrates

- Supply energy (4 calories per gram)
- Provide fiber if whole grain
- M ade up of two different types - complex carbohydrates and simple carbohydrates.

Food sources: 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 fruits.

## $P$ roteins

- 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.

## F ats

- Supply the most concentrated source of energy (9 calories per gram)
- Carry fat-soluble vitamins A, D, E, and K
- Provide a 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.

## Tips about Fat:

- Whole milk should be served to toddlers between the ages of 1 and 2 .
- Serve reduced- or low-fat (not nonfat, skim, or fat-free) milk to preschoolers (ages 2 years and older).
- Do not restrict all fats in children's diets. Children need a variety of foods with choices. Limit the service of fried foods and foods high in fat, such as margarine, sour cream, mayonnaise, and salad dressings.


## V itamins

- Needed by the body in very small amounts
- Help release energy from carbohydrates, fats, and proteins

Fat soluble vitamins include: vitamins A, D, E, and K. W ater soluble vitamins include: vitamin $C$ and $B$ complex vitamins (thiamin, riboflavin, niacin, folate, biotin, pantothenic acid, B6, and B12).

## M inerals

- Needed by the body in small amounts
- Help in making strong bones and teeth, hemoglobin in red blood cells
- M aintain body fluids and chemical reactions

M inerals include: calcium, phosphorus, magnesium, sodium, chloride, potassium, iron, zinc, copper, manganese, selenium, chromium, iodine, and fluoride.

## W ater

- 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.

## Child Nutrition Meal Components and Their Nutrient Contributions

The foods in the M eal Components column are sources of the identified nutrients. However, the amount of specific nutrients in individual foods varies. Foods also contain nutrients that are not listed.


## V egetables and Fruits

$\left.\begin{array}{lll}\begin{array}{l}\text { Meal } \\ \text { Components }\end{array} & \text { Nutrients } & \text { Examples } \\ \hline \begin{array}{l}\text { Citrus fruits, } \\ \text { melon, berries }\end{array} & \begin{array}{l}\text { Source of } \\ \text { carbohydrate and } \\ \text { dietary fiber; } \\ \text { potassium, folate } \\ \text { and vitamin C; deep } \\ \text { yellow fruit source } \\ \text { of vitamin A }\end{array} & \begin{array}{l}\text { O range, grapefruit, } \\ \text { citrus juices, } \\ \text { cantaloupe, }\end{array} \\ \text { watermelon, } \\ \text { strawberries }\end{array}\right]$

| Other fruit | Source of | Apple, apricot, banana, |
| :--- | :--- | :--- |
| carbohydrate and | cherries, fruit juice, |  |
| dietary fiber; | grapes, peach, pear, |  |
|  | potassium and | pineapple, plum, |
|  | vitamin C; deep | prunes, raisins |
|  | yellow fruit source |  |
|  | of vitamin A |  |


| Dark green, <br> deep yellow <br> vegetables | Source of dietary <br> fiber; iron, <br> magnesium, <br> potassium, folate, <br> riboflavin, and <br> vitamins A and C | Broccoli, carrots, collard <br> greens, green pepper, <br> kale, pumpkin, spinach, <br> sweet potatoes, winter <br> squash |
| :--- | :--- | :--- |
| Starchy   <br> vegetables Source of complex <br> carbohydrate (starch <br> and dietary fiber); <br> iron, magnesium, Black-eyed peas, corn, <br> lima beans, green peas, <br> potatoes <br> potassium, folate,   <br> and vitamin C   |  |  |
|  |  |  |


| Dry beans and <br> peas (can also <br> count as a meat <br> alternate, but <br> not in the same <br> meal) | Source of protein <br> and complex <br> carbohydrate (starch <br> and dietary fiber); <br> iron, magnesium, <br> phosphorus, <br> potassium, folate | Black beans, chickpeas, <br> kidney beans, lentils, <br> navy beans, peas, pinto <br> beans, soy beans |
| :--- | :--- | :--- |
| 0 ther   <br> vegetables Source of dietary <br> fiber; magnesium, <br> potassium, folate, <br> and vitamin C Cabbage, cauliflower, <br> celery, cucumbers, <br> green beans, lettuce, <br> okra, onions, summer <br> squash, tomatoes, <br> vegetable juice, <br>   zucchini |  |  |
|  |  |  |

## $G$ rains and $B$ remds

| Meal <br> Components | Nutrients | Examples |
| :--- | :--- | :--- |
| Enriched <br> breads, cereals, <br> pasta | Source of complex <br> carbohydrate <br> (starch); thiamin, <br> riboflavin, niacin, <br> iron; some contain <br> added fat | Bagels, cornbread, <br> grits, crackers, pasta, <br> corn muffins, noodles, <br> pita bread, <br> ready-to-eat cereal, <br> white bread, rolls |
| Whole grain <br> breads, cereals, <br> pasta | Source of complex <br> carbohydrate (starch <br> and dietary fiber); <br> copper, iron, <br> magnesium, <br> phosphorus, <br> thiamin, riboflavin, <br> niacin; some contain <br> added fat | Brown rice, corn <br> tortillas, oatmeal, <br> whole grain rye bread, <br> whole grain <br> ready-to-eat cereal, <br> whole-wheat pasta, <br> crackers, bread, rolls |
|  |  |  |

## M ilk

Meal

| Components | Nutrients | Examples |
| :--- | :--- | :--- |
| Milk | Source of protein <br> and carbohydrate; | Lowfat milk, lowfat <br> flavored milk, skim <br> calcium, |
|  | phosphorus, | milk, buttermilk, |
| potassium; | whole milk |  |
| riboflavin, vitamins |  |  |
|  | B-12 and A and, if |  |
| fortified, vitamin D; |  |  |
|  | most contain fat, |  |
|  | saturated fat, and |  |
|  | cholesterol |  |

## $M$ ent and $M$ eat A Iternates

| Meal Components | Nutrients | Examples |
| :---: | :---: | :---: |
| Meal, fish, poultry, and eggs | Source of protein; iron, phosphorus, potassium, zinc, niacin, riboflavin, thiamin, vitamins B6 and B-12; contain fat, saturated fat, and cholesterol | Beef, chicken, fish, ham, pork, turkey, lunch meats, sausages. |
| Nuts and seeds | Source of protein and dietary fiber; copper, magnesium, phosphorus, niacin, vitamin E ; contain fat | Peanut butter, nut butters, almonds, walnuts, peanuts, seeds, other nuts |
| Dry beans and peas (can also count as a vegetable, but not in the same meal) | Source of protein and complex carbohydrate (starch and dietary fiber); iron, magnesium, phosphorus, potassium, and folate | Black beans, chickpeas, kidney beans, lentils, navy beans, peas, pinto beans, soy beans |
| Cheese | Source of protein; calcium, phosphorus, vitamins A and B12; contain fat, saturated fat, and cholesterol | American cheese, cottage cheese, cheddar, part-skim mozzarella, ricotta, Swiss, other cheese |
| Yogurt | Source of protein and carbohydrate; calcium, phosphorus, potassium, and vitamin A | Commercially produced yogurt, plain or flavored, unsweetened or sweetened |
| Altemate Protein Product (APP) | Source of protein; other nutrients vary depending on the type of APP used | APP is mixed or made into such food items as ground beef patties, meatloaf, tuna salad, chicken nuggets, etc. |

