Children and Food

An approach to food and preschool children



Developed by Jean Alder Extension Agent, Home Economics



Cooperative Extension Service Utah State University

Children and Food

Introduction

This home study material was developed to serve as an integrated approach to food and preschool children ages 1-5. It starts with an overview of Child Nutrition and continues with sections on Preschool Development and Food, Creating Positive Food Experiences, and Food and Fun.

CHILD NUTRITION

If a nutrition educator could give only one piece of advice to people, it would be to "eat a variety of foods." About 50 nutrients are needed daily by both children and adults for body growth, maintenance and repair. No one food contains all of these nutrients in the required amounts. For this reason, a wide variety of foods from several different food categories should be consumed every day. To help people choose the right variety and amounts, food guides have been developed. The chart on page 2, designed for the one to five year old, is one such guide.

This chart can be used as a quick reference when preparing meals for children. Each food group is high-lighted, along with a list of some of the foods contained in each group. The chart recommends appropriate serving sizes according to a child's age and specifies the number of servings needed daily from each food group. An easy guide to minimum serving sizes for children is: One measuring tablespoon of cooked food for each year of child's age. You'll also find a list of the "key" nutrients for which the Food and Drug Administration has set Recommended Daily Allowances (U.S. RDA). Getting enough of the "key" nutrients usually assures that needs for the rest of the 50 nutrients will be met as well.

BE SURE TO SELECT A VARIETY OFFOODS FROM EACH FOOD GROUP DAILY!!!

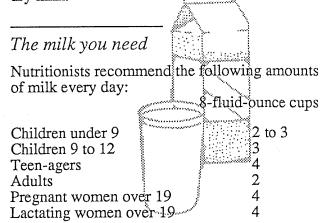
MILK

Milk is a basic food that every one in the family needs every day.

Milk is an excellent source of calcium, a mineral that helps form bones and teeth and keeps them strong. The protein in milk builds and repairs body tissues, helps the body fight infection, and supplies energy. Milk is rich in riboflavin, a B vitamin that helps keep skin healthy and vision clear. Additional vitamins and minerals, fat, and sugar, are also found in milk and milk products.

With all this, milk is moderately low in calories. One cup (8 fluid ounces) of fresh whole milk contains about 160 calories. One cup of skim milk contains about 90 calories.

The simplest way to get milk into family meals is to serve it as a beverage. You have a wide choice to suit the tastes of your family - fresh whole milk, fresh skim milk, cultured buttermilk, chocolate or flavored milk, milk made from whole or nonfat dry milk.



For a child that does not enjoy drinking milk, consider some other creative ways to include dairy products in your meals.

- * Milk based soups, combination dishes such as pizza or macaroni and cheese
- * Yogurt, cottage cheese, cheese sticks, string cheese
- * Custard, milk pudding, ice cream

BASIC FOUR FOOD GROUPS

FOOI	D
------	---

MINIMUM NUMBER OF SERVINGS

SIZE OF SERVINGS
1 - 2 YRS 3 - 5 YRS

Vegetables and fruits	4 servings		
Including:	Including:		
A. Dark green or deep yellow fruit or vegetable	A. 1 serving at least every other day	1-2 Tbs	3-5 Tbs
B. Food containing Vitamin C	B. 1 serving daily	1/4-1/2 cup	1/4-1/2 cup
C. Variety of other vegetables and fruits	C. 2-3 servings to complete the 4 needed daily	1-2 Tbs	3-5 Tbs
Grains	4 servings of whole grain or enriched cereal products	1/2 slice or 1/4 cup cooked cereal, ready-to-eat cereals	3/4 slice or 1/3 cup cooked cereal, ready-to-eat cereals
Meat	2 servings	1-2 Tbs	3-5 Tbs
Milk	3 servings	3/4 cup	3/4 cup

VEGETABLES AND FRUIT

The primary nutritional contributions to our diet from fruit and vegetables are vitamin A, vitamin C and other vitamins and minerals. Vitamins A and C are usually emphasized because if they are present, the others are likely to be also. The peels and edible seeds are also important for their fiber content. Vitamin A assists formation and maintenance of skin and mucous membranes that line body cavities and tracts, such as nasal passages and intestinal tract, thus increasing resistance to infection. It also functions in visual processes and forms visual purple, thus promoting healthy eye tissues and eye adaptation in dim light.

Good sources of vitamin A are:

- * Peaches, melons and apricots
- * Carrots, broccoli, spinach and Brussels sprouts
- * Squash, pumpkin and sweet potatoes
- * Peas, green beans, wax beans and lima beans

The major physiological function of vitamin C is that it forms cementing substances such as collagen, that hold body cells together, thus strengthening blood vessels, hastening healing of wounds and bones and increasing resistance to infection. It also aids utilization of iron.

Good sources of vitamin C are:

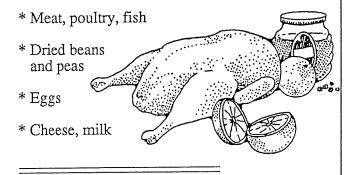
- * Oranges, grapefruit, lemons, limes
- * Cantaloupe, watermelon, strawberries
- * Broccoli, tomatoes, cabbage
- * Peppers, cauliflower, chilies

MEATS, POULTRY, FISH AND BEANS GROUP

These foods are valued for protein, phosphorus, iron, zinc, vitamin B6 and still more vitamins and minerals. It's a good idea to vary your choices in this group. Each food has a distinct nutritional advantage. Red meats are good sources of zinc. Liver and egg yolks are valuable sources of vitamin A.

These protein sources constitute part of the structure of every cell, such as muscle, blood and bone; support growth and maintain healthy body cells. Protein also constitutes part of enzymes, some hormones and body fluids, and antibodies that increase resistance to infection.

Consider all protein sources:



BREADS AND CEREALS

Whole grain and enriched breads and cereals are important sources of B vitamins, iron and protein. They are a major source of protein in vegetarian diets. Whole grain products contribute magnesium, folacin and fiber, in addition. Foods in the

bread and cereal group include all products made with enriched flour, whole grains or meal.

Breads and cereals are also high in complex carbohydrates which supply energy so protein can be used for growth and maintenance of body cells. Unrefined products supply fiber - complex carbohydrates in fruits, vegetables, and whole grains - for regular elimination. They also assist in fat utilization.

Breads and cereals offer a wide variety of choices:

- * Cereal, oatmeal, granola (dry, prepared or cooked)
- * Bread, tortilla, biscuits
- * Rice, pasta, corn and corn meal

NUTRIENT DENSITY

The Food and Nutrition Board of the National Academy of Sciences recommends 1,300 calories per day for children 1 - 3 years and 1,700 calories per day to children 4 - 6 years. This caloric intake is needed to provide energy for the growth process. Very active children or children large for their age may require extra calories daily.

Foods high in nutrients and low in calories are nutrient dense. Calorie dense foods are high in calories and low in nutrients. Some foods are nutrient dense in their natural state, but ingredients added during food preparation add calories and lower their nutrient density. For example, a plain baked potato is nutrient dense food. When that potato is fried in oil to make potato chips or French fries, it becomes calorie dense. Serve children nutrient dense foods to prevent obesity and help those with a weight control problem.

Here are some suggestions for serving foods high in nutrient density:

Choose lean meats, fish and poultry that have been broiled, roasted or baked, not fried.

Use herbs, spices, vegetables and lemon juice for flavor, rather than rich sauces and gravies.

Serve fresh, frozen or canned fruits with no added sugar.

Serve raw, steamed or stir fried vegetables using herbs and spices to enhance flavor.

Purchase milk which has not been flavored.

Select whole grain or enriched breads and whole grain or fortified cereals with a low sugar content.

Use sauces, gravies, dressings, butter, margarine and sour cream in moderation.

Serve fruit instead of sweet desserts and reserve sweets for special occasions.

ENERGY BALANCE

Parents should try to create an environment in which all family members can maintain sensible weights. This may require parents to first modify their own eating practices to set appropriate examples. Family meals may need to be changed to include fewer fried food, less gravy and dressing, and fewer rich desserts. In addition, providing appropriate portion sizes, limiting second servings, and avoiding the "clean plate" rule if a child is full before finishing, are also helpful strategies. Establishing regular patterns of physical activity, such as bicycle riding, swimming, or hiking, with the entire family, is also very helpful for weight control.

You can help an overweight child and prevent a child from becoming overweight by paying attention to energy balance. Energy balance occurs when the calories taken in from foods equal the calories spent for bodily functions and physical activity. Controlling calorie intake and encouraging physical activity are both important.

Here are some suggestions for making sure a child gets plenty of physical activity:

Don't carry a child who can walk.

Provide a safe environment for children which allows them to run and play without confinement.

Encourage children to play outdoors all year long. Good outdoor activities are: playing with balls, jumping rope, swimming and sledding. During cold weather, dress children in multiple layers.

Supervise children so they can play in sand, snow and water safely.

Walk with children instead of driving when you are going anywhere within walking distance.

Influence children's fondness for activity by playing with them whenever possible. Physical movements children enjoy include running in place, doing jumping jacks, throwing and catching balls and doing push ups and chin ups.

Encourage children to play with other youngsters. Running, skipping, jumping, dancing and marching are good group activities.

Acquire a cat or dog and make the child responsible for exercising it.

Limit the amount of television a child watches.

Action toys such as wagons, tricycles, carriages, pull toys, wheelbarrows and baskets with handles keep children busy.

Trips to the playground encourage rocking, swinging and sliding on the equipment.

PRESCHOOL DEVELOPMENT & FOOD

Preschoolers often have erratic and unpredictable eating habits and their likes and dislikes may vary from day to day. Although it is a rare parent who can eliminate these problems, you can relieve them to a great extent if you understand why children eat as they do. In this way, you can help create an environment in which your child can develop good eating habits.

GROWTH PATTERNS

The first six years of life are filled with remarkable changes. Bodies and minds are developing rapidly.

Growth is more rapid during the first 12 months than at any other time. Each infant is an individual who should not be expected to grow and develop at exactly the same rate as any other baby. You can tell when an infant is well-nourished if he or she a) steadily gains weight, b) sleeps well, is vigorous and happy, c) has firm muscles and a moderate amount of fat just under the skin, d) begins teething within five to six months and e) has normal elimination for the type of feeding.

It was once thought a fat baby was a healthy baby. Now we realize fat babies may be more likely to become overweight children and adults. It is important not to overfeed babies. It is also equally important not to underfeed children. Recently there has been an increase of underweight and small children seen in child nutrition clinics. A baby's appetite is the best guide to the amount of food to feed. Appetites fluctuate often and may greatly increase during periods of rapid growth and development. Most babies double their weight by five months and triple it by the age of one year. A baby whose birth length is 20 to 22 inches will add another 9 to 10 inches in the first year. Arms and legs grow especially fast, diminishing the appearance of an unusually large head at birth.

The rapid growth of infancy levels off after the first year. Muscle tissue increases and "baby fat" disappears. Bone strength increases as the skeleton hardens. Primary or baby teeth are usually all in by the age of 2 - 2 1/2 years. Between the first and second year, another 5 pounds in weight and 5 inches in height is added. The child grows at a rate of 4 to 5 pounds and 2 1/2 inches in height each year until the age of 5. A slow but steady growth rate is characteristic of both the toddler and preschool period. Although they are still small, toddlers and preschoolers need more nutrients per pound than adults do.

Physical Development

During the first 3 months of life, an infant's sucking reflex with its up and down tongue movement is used to obtain food. Around the age of 4 months the infant's sucking pattern becomes more mature, and the tongue moves back and forth. By 4 to 6 months, most infants can sit with support and have some head and neck control. They have hand to mouth movements and can reach and grasp objects. They are now ready for their first semi-solid foods.

By 7 to 9 months, up and down chewing movements appear. Baby can sit unsupported and even begins to pull his or herself up. As finger control develops, baby can handle soft finger foods in addition to semi-solid foods. Juice and water can be offered from a cup. By 10 to 12 months, rotary chewing movements appear, balance continues to improve, voluntary hand to mouth movements become more precise and baby begins to creep, crawl and even walk. Development of fine motor skills enables baby to gradually learn to feed himself. Spilling and messiness is a normal part of this process. By the age of 2, most children have enough elbow and wrist coordination to feed themselves by spoon with few spills. Some messiness is still to be expected. By the age of 18 to 24 months, the cup can be tilted by the fingers with fairly good accuracy.

It takes **patience** to allow small children to learn to feed themselves. But as a child practices, skills increase. Throughout the rest of the preschool period, children's ability to walk, talk, grasp, and manipulate items further improves.

Brain Growth

Brain growth begins 9 months before birth and is rapid during the prenatal period. After birth it continues into the second year. During this period there is a rapid increase in the number of brain cells. After that, mass and cell size continue to increase. It appears that each region of the brain

may have its own critical period of growth. The rapid increase in brain mass is accompanied by rapid increases in head circumference. By 24 months of age, head circumference has achieved 2/3 of its final size. It is essential for children to receive proper nourishment during the entire period of brain growth to allow for full intellectual development. Children malnourished in early life may never fully recover their intellectual potential. Adequate nutrition is necessary throughout childhood and adult life for optimum physical and mental health.

Emotional Growth

Eating is the first activity playing a major role in a child's emotional and social development. From birth, baby's first contact with another person (usually the mother), is during feeding time, be it breast feeding or bottle feeding. From then on, eating becomes more and more of a social event, a time to be shared with family and, later, friends. Thus a child's behavior patterns often show up during eating times. Use the feeding process to support the positive aspects of a child's psychological and social development.

A primary developmental task for preschoolers is developing the sense of autonomy, the sense of "T" as an independent, self-controlled person who can do things for himself. While the sense of autonomy develops, the toddler uses dawdling rituals and negativism ("no,no") to maintain some degree of security in his world. Power struggles often develop at this stage between caretaker and child, particularly when it comes to food. Positive relationships support the developing sense of autonomy, while negative relationships may result in feelings of shame and doubt, with the child feeling worthless and incompetent.

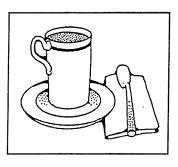
The older preschool child struggles with the development of initiative versus guilt feelings. Initiative is characterized by high levels of activity, assertiveness, learning, increasing independence and the ability to plan. Conscience is devel-

oping now as is sex identification with the parent/caregiver of the same sex. It is important to allow a preschooler to become as independent as possible while still staying close by to offer guidance and support in all activities, including eating.

Self-feeding helps the child in several ways. It allows expression of independence, fosters the development of a sense of self, and provides a means for practicing motor skills. Practicing these skills over and over helps the preschooler gain control over fine and large muscle movements.

But children's eating skills still aren't perfect, so some mess is to be expected along with the practice. If the mess is more than you can endure, you may decide to restrict self-feeding to one meal, to less messy foods, or to favorite foods. You might provide other ways for the child to practice and develop these skills (for example, playing with water in the tub, not soup in the bowl). The main thing is that children need some opportunities to practice these important skills.

Children vary in their readiness for self-feeding, but by 2 years of age they should be fairly competent with a cup and spoon and possibly a fork.



However, it is important to realize that using these tools is a complicated skill. Mastery requires time, learning, practice, and encouragement. Remember too, that growing up is a long, hard process, and in many ways the 2-

year-old is still very much a baby. So don't be surprised if the independent self-feeder occasionally tires and needs a little help from a friendly adult.

Children may also assert their independence through various eating behaviors that seem specifically designed to worry parents. Food jags, or episodes when the child will eat only one or two foods, are common at this time. Luckily, they are frequently short-lived. Eating behavior usually returns to normal fairly quickly if a variety of foods is made available, but not pushed.

Rituals frequently emerge at this time as a way for preschoolers to exert some control over their lives. Some mealtime rituals are always eating foods in a certain sequence and not allowing different foods on the plate to touch.

Food intake often varies from day to day or meal to meal and should not be a cause for alarm. Many factors can influence appetite: health, activity level, even the weather. It is not unusual for a child to feel full on one tablespoon of food one day and be ravenous the next.

Finally, most preschoolers have very definite likes and dislikes. They frequently refuse new foods as another way to assert independence and develop a sense of self.

Although these behaviors are worrisome for the parent, they probably will not hurt the child nutritionally. In fact, the more often a child is forced to eat, the more likely it is that mealtimes will turn into a battle. Keeping a relaxed attitude, knowing what to expect of the child, and offering a wide variety of foods are good ways to avoid serious feeding problems.

CREATING POSITIVE FOOD EXPERIENCES

GUIDANCE PRINCIPLES

Children thrive on regularity and routine in their daily activities. Try to serve meals at the same time each day, and before the child gets too tired or hungry.

Self-feeding is a new experience for children. Don't be surprised if at first a child is cautious and curious, plays with food, is reluctant to try new foods and rebels when forced to eat. Try to be patient and relaxed as children learn to feed themselves.

Snacks are not always bad for children. Nutritious snack foods can help children obtain required nutrients. Since children have smaller stomachs than adults, serving three small meals with a nourishing snack in between each meals may be more appropriate for children than serving large meals.

If you are worried about nutritional deficiencies in a child's diet, examine the child's food intake over a period of time. Children eat more food some days than others. By recording the food eaten over several days, you will see that deficiencies in the diet on one day are usually made up on another day.

Children's appetites may suddenly decrease around the age of 2 due to a decrease in their growth. As growth slows down, energy requirements are also reduced.

Children involved in meal preparation are more enthusiastic about eating and trying new foods. See chapter 4, Food and Fun, for tips on involving children in food preparation.

Spills and imperfect table manners stem from a child's developing capabilities and inquisitive nature; the child is not trying to be naughty.

Compliment children on their accomplishments and offer understanding and assistance when things go wrong.

Respect a child's decision when he or she refuses to eat, but make it clear that there will be nothing more until the next meal or planned snack.

Don't use food as a bribe or to discipline children. Don't allow food and eating to become an emotional issue or power struggle. These four tips are worth a lot of thought as you are working with children in the eating environment:

- 1. Tell the children how you want them to behave instead of how they shouldn't. Try "Keep the pudding on your plate or in your mouth." Not "Stop putting the pudding in your hair."
- 2. Offer children a choice only when you are prepared to accept their decisions: Try "Let's go in for juice now." Not "Is every one ready for juice?"
- 3. Change the environment instead of the behavior. Try "You can splash water in your swimming pool." Not "Don't splash your soup."
- 4. Constantly resist the temptation to use food as a bribe. Try "Are you ready to go out and play?" Not "You may not go out to play until you eat all your food."

PRESCHOOL AGE GROUP CHARACTERISTICS

1 - 2 YEAR OLDS

* Drinks out of glass

* Uses spoon and later fork

* Very independent - prefers to feed self (use bitesize, easy to pick-up foods)

* Eye-hand coordination still developing - will have frequent spills

* Likes to watch and help

* Imitates others

3 YEAR OLDS

* May have food "jags" that last for short time

* Learns to get attention by refusing to eat (give children attention before the meal, not when they don't eat)

* Begins to ask "why" - curious, ready to learn

* Capable of stirring, measuring

4 - 5 YEAR OLDS

- * Handles dishes and utensils safely
- * Can set the table
- * Influenced by television wants to have the foods he/she sees advertised
- * Likes to help and enjoys eating own "cooking" projects

CREATIVE MEAL TIPS

MILK

- * Children usually do not like milk ice cold. Try pouring it a short time before serving to take off the chill.
- * Serve milk in plastic cups with covers that fit, or unbreakable cups with weighted bottoms. Fill cups half way to make milk more difficult to spill; this will also make the task of drinking milk seem less awesome. Place a sturdy pitcher on the table for children to refill their cups.
- * Even though a straw makes it easier for a child to drink milk, you may want to encourage a child to drink directly from a glass. Drinking from a glass helps to develop eye-hand coordination.
- * Offer flavored milk only on special occasions. Children should develop a taste for plain milk, which has fewer calories than flavored.
- * If children refuse to drink milk, try to increase the amount of milk with cereal, cream soups, cottage cheese, yogurt, cheese or custard in their diets.

MEATS, POULTRY, FISH AND BEANS

* Slice frankfurters into four strips lengthwise, then crosswise, so pieces can't block the windpipe. (Choking on frankfurters is a leading cause of death in children.)

- * Cook meat at low temperature (300° 325° F) to keep it tender and juicy.
- * When children are first learning to feed themselves, cut meat into long narrow strips that can be picked up and eaten by hand. Older children who are using tableware still need to have their meat cut into bite-size pieces with fat and gristle trimmed to prevent choking.
- * Serve peanut butter with jelly, never alone by the spoonful. Plain peanut butter is hard to swallow and can cause choking.
- * Although higher in fat and sodium than fresh meat, processed meats are acceptable when served in moderation for variety. Children often find processed meats easier to chew than other meats.

Children enjoy the following foods found in the meats group:

lean beef, pork & lamb chicken & turkey mild-flavored boneless fish

scrambled eggs
hard-boiled or deviled eggs
hamburgers & cheeseburgers
peanut butter& jelly sandwiches
frankfurters & luncheon meats
meat & cheese sandwiches cut
in triangles with cookie cuter

meat or chicken soup tuna salad sandwiches pizza with meat & cheese topping spaghetti & meatballs sloppy Joes macaroni & cheese meatloaf chili

soft-shelled tacos.

VEGETABLES AND FRUIT

* Children usually enjoy brightly colored fruits and vegetables.



- * Children like vegetables slightly crunchy, not soft. Vegetables steamed in a small amount of water, microwaved or stir fried are not only crisp, but retain most of their color, flavor and nutrients better than those cooked in large amounts of water.
- * Many strong vegetables, such as cabbage, turnip, cauliflower, spinach, broccoli and asparagus, are very acceptable to children when served with grated cheese or a cheese sauce on top.
- * Peel, core and seed fruits for very young children. Fresh, dried, canned and frozen fruits and juices make nutritious snacks and desserts.
- * Many older children enjoy raw vegetables served with their own individual bowl of dip.
- * When shopping with children, encourage them to select fruits and vegetables, especially ones they have never tried before.

BREADS AND CEREALS

- * Serve whole grain, enriched, restored or fortified breads, macaroni or cereal products whenever possible.
- * Add fresh, dried, canned or frozen fruit to ready-to-eat cereals for more appealing color, better flavor and additional nutritive value.
- * Choose ready-to-eat cereals with a sugar content of 6 grams or less. Look on the side panel of the box for this information. Cereals which contain less sugar are usually less expensive.
 - * Cooked cereals are less expensive than ready-to-eat cereals.
 - * Serve toasted bread as an alternative to plain bread. Cut bread or toast into strips for

easy eating.

* Allow children to help prepare cereals and sandwiches.

SWEETS, FATS AND OILS

- * Do not offer sweets as a bribe or withhold them as punishment.
- * Since children know that sweets do exist, serving sweets occasionally may be a more sensible approach than excluding them completely. Sweets usually only add to the caloric intake and make minimal other nutritional contributions. Consider natural sweets such as fruits and juices.
- * Having sweets only at special times makes children associate sugary treats with happiness, love and attention. Later in life they may turn to sweets whenever they feel sad or lonely in an attempt to make themselves feel better.
- * Use moderation and common sense when offering high calorie-low nutrient density foods to children.
- * If you do serve children sweets, try serving breads, muffins and cakes made with dates, raisins, nuts, bran, banana, pumpkin, zucchini, berries, lemons, oranges or carrots.
- * Taste food before adding butter, margarine, dressing, jellies and jams. Since children follow the example of adults, limit your own use of fats and sugars and use only moderate amounts of these foods in meal preparation.

MEALTIME TIPS

- * Have children wash their hands and face before eating to teach good health habits as well as to create a positive meal time environment.
- * Seat children at a table for meals and snacks and discourage them from eating while walking or standing.

- * Cover the floor, directly under a child's seat, with paper, vinyl or plastic.
- * Purchase a spoon or fork with a short, straight, broad, solid handle; the spoon should have a wide mouth and the fork should have blunt



tines. Children will begin to feed themselves with a spoon and will learn to use a fork later.

- * Young children should use unbreakable, bowlshaped dishes when they first start to feed themselves.
- * Place food at the level of a child's stomach, where it is less tiring for a child to reach.
- * Encourage finger feeding by serving meat, vegetables, bread and cheese in long narrow strips or finger sandwiches, which are easy to handle.
- * Cut all foods for children except those which can easily be handled by a child.
- * Don't get discouraged when children begin to use tableware and alternate between the use of their fingers and tableware. As children get more proficient with tableware, they gradually decrease the use of their fingers.
- * Children playing with food should be allowed to leave the table rather than disturb others. This usually indicates that a child has had enough to eat.
- * Don't encourage children to clean their plates when they're no longer hungry. This may lead to overeating or the development of an aversion to food.
- * Allow children the same freedom of choice that others have at meals. Be sure to give them small servings (see recommended serving sizes

on the Food Groups Chart). Allow children enough time to eat. Try not to make young children the center of attention at meals.

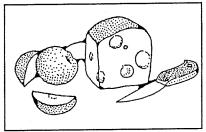
- * Allow children to eat with other family members. Since children learn by imitating others, eating with the family offers an opportunity to introduce table manners. Sometimes children behave better and enjoy mealtime more when they sit down to a meal with the family at a nicely set table.
- * Encourage children to try at least one bite of a new food. If after one bite children reject it, reintroduce the food later.
- * Start nutrition education early by explaining the function of nutrients found in common foods (e.g. milk makes your bones and teeth strong).
- * Meal preparation should not be a burden. Salads, raw vegetables, fruits and ready-to-serve meats, fish and cheese are nutritious and easy to prepare.
- * Set a good example for children by eating moderate amounts of a wide variety of foods and drink milk.
- * Breakfasts don't have to be traditional. Any nutritious combination of foods from all food groups is recommended. Incorporate leftovers when preparing breakfast.
- * Encourage children to participate in quiet activities before mealtime. It's difficult to get an excited child to settle down to eat.
- * Feed children before guests arrive. Children require a lot of attention at mealtime and it may be impossible to give it to them while entertaining guests.
- * Mealtime conversation should be positive and focus on activities of the day, family discussions and exchange of ideas.

TRAVEL TIPS

When traveling by car, bus or train with young children, consider their special needs. Pack snacks when taking a trip which will last longer than one hour. A cooler, which can be stored in a car or below the seat of a bus or train, will allow taking a variety of foods which must remain cold. Raw vegetables, fruits, cheese, crackers and yogurt are easily eaten in a car and store well.

Pack cheese, cold cuts, peanut butter, jelly and a loaf of bread to make sandwiches on an extra long

trip. Milk and fruit juices are more nutritious than soft drinks and can be stored in a cooler or thermos. Pack tableware, napkins, moist towelettes or a wash



cloth that has been moistened and stored in a plastic bag.

When traveling by plane, don't expect the airlines to cater to the needs of children, although sometimes they do. Today, many airlines are limiting meal service in order to reduce air fares. It's usually a good idea to bring along sandwiches, fruits, cheese, crackers and raw vegetables, which can be kept for a short period of time without refrigeration. Even though airlines usually provide beverages during a flight, you may want to bring a thermos of milk or cans of juice to prevent children from getting fussy.

RESTAURANT TIPS

Pay attention to the special needs of children when dining with them at restaurants. If you must wait before being seated, take children for a walk outside the restaurant to prevent them from becoming impatient.

Children can easily become restless while waiting for the meal to come in a full service restaurant. Ask for a few crackers or vegetables, which will usually keep a child occupied. A drink could also easily be served immediately.

Remember to ask about a child's menu or children's portions available from the dinner menu.

FOOD AND FUN

Children involved in meal preparation develop a more active interest in food. They can accomplish many different tasks when working one-on-one with an adult in the kitchen. A number of activities which children can do successfully at various ages are listed. Having patience and time to spend with children when involving them in meal preparation is the key to success.

FOOD PREPARATION TEACHES SKILLS TO PRE-SCHOOLERS

Food is a familiar part of the Preschoolers's world. It appeases hunger and delights the senses with a variety of tastes, textures, colors and aromas. At the same time, food offers a wealth of learning experiences for the young child.

Food preparation is a fun way for a child to practice motor coordination by pouring, stirring, and cutting and to learn social skills by working with an adult to plan and complete a cooking project. In addition, food activities provide an excellent opportunity for a child to develop good eating habits. Such activities can introduce new foods and help a child acquire a wide range of food preferences.

Learning experiences with food can encompass many tasks and subjects. For example, language skills are practiced when new words are used to describe foods and food preparation methods. Math is involved when counting out servings or measuring and manipulating quantities of ingredients. Even art comes into play when fresh vegetables are arranged in a colorful display.

Adults need to consider the child's attention span, capabilities, and independence when designing

food preparation activities. The project should be one they can accomplish without too much adult help.

The kitchen offers many exciting materials for play and exploration, but presents dangers to children as well. All poisonous substances, knives and other dangerous utensils, and appliances, especially those with dangling cords, should be stored out of reach.

When it comes to cooking with a youngster, the proper equipment will make the activity easier. A small table and chair at "toddler height" in a corner of the kitchen are great for cooking or art activities. Butter knives or plastic serrated knives are good for children to use for cutting up soft fruits and vegetables and for spreading. Plastic bowls that do not tip easily make stirring easier, and a wet cloth under bowls and cutting boards helps hold them in place. Large bowls help keep the ingredients from "splashing out" as the child stirs.

Experiences with food are most successful if they are introduced when the child is ready. For example, a 2-year-old who enjoys dumping and filling would probably enjoy dumping ingredients that you have measured into a bowl and filling a grocery bag with small canned goods.

By the age of two, most children are ready to do very simple food preparation tasks. It is best to begin with a task that incorporates only one skill, such as pouring rice from cup to pan or sorting dry beans. The child can then move on to more difficult tasks or combinations of tasks, such as pouring and stirring briefly.

A child will probably want to be involved in every aspect of food preparation — growing, planning, shopping, setting up, eating, and even cleaning up. These food experiences can be enhanced with some complementary activities such as trips to a farm stand or the supermarket and songs and stories about foods.

FOOD PREPARATION ACTIVITIES

Two and Three Years Olds

Wash vegetables

Shuck corn

Snap beans

Unload dish washer with help

Wipe table

Put toast in toaster

Tear lettuce

Shape burgers and meatballs

Peel bananas (if top is cut)

Place things in trash

Clear own place setting

Three and Four Years Olds

Break eggs into bowl

Measure and mix ingredients

Open packages

Knead and shape dough

Turn pancakes and grilled foods with help

Pour cereal, milk and water

Make sandwiches

Toss salads

"Wash" baking utensils (water play)

Five Years Old

Make cakes and cookies using baking mixes

Use blenders or hand mixers with close supervision

Make pancakes, French toast, scrambled eggs, hot cereal and rice with close supervision

Set and clear the table

Load the dish washer

CONCLUSION

Food permeates all aspects of our lives and it is important that a child's experiences are positive. Parents that increase their knowledge of preschool nutrition and child development can reinforce positive food behavior and help their child learn good food habits. Mealtime and eating should be enjoyable for both children and parents, resulting inhealthy, strong bodies and happy times together.

REFERENCES

Dusto, Hannah and Christine Olson, "Nourishing and Nurturing Two Year Olds," Cooperative Extension Service, Cornell University, Ithaca, New York, 1984.

"A Food Guide for the First Five Years," Education Department National Live Stock and Meat Board, Chicago, Illinois, 1985.

McLaurin, Barbara P., "What Should I Feed My Preschooler?" Mississippi Cooperative Extension Service, Mississippi State, Mississippi, 1984.

Harvey, Kelly M., "Food Ways to Better Health — Preschoolers," Cooperative Extension Service, The University of Georgia, Athens, Georgia, 1984.

Reviewed by Georgia Lauritzen, PhD, Nutrition Specialist, Utah State University Cooperative Extension Service; Elaine Ashcroft, M.S., Early Childhood Education Specialist, Utah State University Cooperative Extension Service.



The Utah Cooperative Extension Service, an equal opportunity employer, provides programs and services to all persons regardless of race, age, sex, color, religion, national origin or handicap.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, R. Paul Larsen, Vice President and Director, Cooperative Extension Service, Utah State University.