Nutrition and Physical Activity


California Childcare Health Program
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California Childcare Health Program
The mission of the California Childcare Health Program is to improve the quality of child care by initiating and strengthening linkages between the health, safety and child care communities and the families they serve.

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LEARNING OBJECTIVES

To describe the major nutrition issues affecting children and providers in early care and education (ECE) programs.

To describe the health benefits of physical activity for children in ECE programs.

To identify safe practices in food handling, cooking and storage to prevent food-borne illnesses.

To describe three ways a Child Care Health Consultant (CCHC) can assist ECE programs in meeting their nutrition and physical activity needs.

To identify the primary nutrition and physical activity resources available to assist and support ECE providers and families.

WHY ARE NUTRITION AND PHYSICAL ACTIVITY IMPORTANT?

Nutrition and physical activity are an important part of a healthy childhood. For optimal health, children need a variety of safe and nutritious foods, accompanied by daily physical activity. Balanced nutrition and physical activity have positive effects not only on physical health, but also on children’s growth, mood, quality and quantity of sleep, and ability to learn. Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs, Second Edition (CFOC) (American Academy of Pediatrics [AAP], American Public Health Association, & National Resource Center for Health and Safety in Child Care, 2002) notes that “nourishing and attractive food is the cornerstone for health, growth, and development as well as developmentally appropriate learning experiences” (AAP et al., 2002, Standard 4.001).

At home and in ECE programs, young children develop preferences and habits regarding food and activity (Birch, 1998). These early habits are likely to continue throughout their lives. Children look to adults as models for the foods they prefer (Fisher & Birch, 1995). Thus, ECE staff have an opportunity to influence children’s food preferences and experiences in ways that will promote health by offering foods that are safe, nutritious and appealing. Table 1 lists responsibilities of ECE providers (Graves, Suitor, & Holt, 1997).

<table>
<thead>
<tr>
<th>TABLE 1: RESPONSIBILITIES OF ECE PROVIDERS</th>
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<tbody>
<tr>
<td>Provide a variety of food that helps children grow and develop.</td>
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<tr>
<td>Provide food that is safe to eat.</td>
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<tr>
<td>Provide food that respects each child’s culture.</td>
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<tr>
<td>Pay attention to each child’s eating behavior—alert the child’s parent if the child is not eating enough of the right kinds of food.</td>
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<tr>
<td>Prevent injuries when preparing, handling, and eating food.</td>
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<tr>
<td>Bottlefeed infants whenever they are hungry.</td>
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<tr>
<td>Offer food every 2 to 3 hours to prevent children from feeling hungry.</td>
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WHAT THE CCHC NEEDS TO KNOW

Why Young Children Are at Risk

• Young children are dependent on adult caregivers to teach them healthy eating habits and to offer them appropriate food choices. If children observe adults eating foods of poor nutritional value, they may imitate these unhealthy habits (Fisher & Birch, 1995). Children with inadequate nutrient intake, for example, overeating foods of poor nutritional value, may become obese and have serious health problems in adolescence and adulthood.

• Children's food intake must be nutrient-rich in calcium and iron because they often eat small portions of food.

• Some parents may choose to prepare foods based on convenience rather than nutritional value. Such packaged food items tend to be high in additives and preservatives, and poor in nutrients, compared to more planned meals which take time to prepare.

• Children are targets of extensive marketing tactics by food companies. Children's television programming is often sponsored by makers of processed foods and highly sweetened snacks. Children are vulnerable to these advertisements because they do not have the knowledge or objectivity to recognize advertisements that try to persuade them to eat non-healthy foods.

What the Research Tells Us

• Increasing the proportion of infants in a community who are exclusively breastfed appears to be an effective means of reducing infant illness (Wright, Bauer, Naylor, Sutcliffe, & Clark, 1998). ECE staff can impact their community's health status by supporting the efforts of mothers to continue breast feeding after returning to work or school (see Handout: Supporting Breastfeeding Families).

• Children at or above the 95th percentile of body mass index (BMI) by sex and age are considered overweight (Crawford, Mitchell, & Ikeda, 2000). BMI measures how heavy the body is. BMI is weight (in kilograms) divided by height squared (in meters). Fifty percent of overweight children remain overweight as adults (Dietz, 1998). Being overweight, which may start in early childhood, is associated with later health problems in adulthood, including high blood pressure, Type 2 diabetes and increased risk for coronary heart disease (Freedman, Khan, Dietz, Srinivasan, & Berenson, 2001). Childhood obesity rates are increasing as a result of poor nutrition and sedentary lifestyles (Christoffel & Ariza, 1998; Mei, Scanlon, Grummer-Strawn, Freedman, Yip, & Trowbridge, 1997; Ogden, Troiano, Briefel, Kuczynski, Flegal, & Johnson, 1997).

• Children may spend a great deal of time watching television or playing video or computer games. These passive and sedentary activities are closely linked with poor nutrition and can lead to obesity (Andersen, Crespo, Bartlett, Cheskin, & Pratt, 1998; Dietz & Gortmaker, 1995; Gortmaker, Must, Sobol, Peterson, Colditz, Dietz, 1996).

Issues that Arise in ECE programs

• The daily nutritional intake of children who eat both at home and at their ECE program may not be sufficiently balanced or varied if parents and ECE staff do not communicate daily about food eaten in each setting.

• Frequent staff turnover makes education about nutrition and the importance of physical activity challenging. ECE staff may also lack sound training in basic nutritional principles and physical activity guidelines. ECE staff may not be aware of the specific nutritional issues or feeding needs of children with disabilities and other special needs.

• Food served to children must be free from disease or bacteria. Foods that is safe for children to eat are not likely to cause choking, clean and wholesome, safely prepared, served, and stored,
and right for their age and development (Graves, et al., 1997). Even a small amount of carelessly stored or prepared food can cause serious illness in a young child (see Handout: Fact Sheet for Families: Food-Borne Illness). Food-borne illness is completely preventable when those who prepare meals and snacks are educated in safe food handling practices. See Handout: Child Care Center Self-Assessment Guide: Safe Food Handling and Preparation for center-based care, and Handout: Family Child Care Homes Self-Assessment Guide: Safe Food Handling and Preparation for family-based homes.

- It is helpful to observe food storage, preparation and serving areas using a standardized tool based on the CFOC (AAP et al., 2002) such as the CCHP Health and Safety Checklist-Revised (2005).

- Food served in ECE programs must both meet children's nutritional needs and be appealing to them. Because children can ingest only small servings of food at a time, they need nutrient-dense food. The Child Care Food Program Meal Pattern described in CFOC (AAP et al., 2002, Appendix Q), and the Community Care Licensing Regulations (State of California, Health and Human Services, Department of Social Services, 2002) provide guidelines for nutritious and child-friendly meals and snacks.

- ECE programs must promote good eating habits. It is important to encourage children to try new foods, or familiar foods prepared in new ways. Children who eat a variety of foods at a young age are more likely to continue to eat broadly as they grow older, and variety in the diet is associated with better and more balanced nutrition (Dodds, Benjamin, & Walsak, 2004). This variety can be achieved when ECE programs make meal and snack times fun, interesting and participatory. (See Handout: Health and Safety Note: Healthy Snacks for Toddlers and Preschoolers.)

Challenges for Children and Families

- It is challenging for ECE providers to meet the goals of safe and healthy nutrition and regular physical activity. For example, parents may not be aware of the components of a nutritious diet and may send foods of poor nutritional value with their child to ECE programs.

- Breastfeeding mothers may find it difficult to maintain exclusive breastfeeding upon returning to the workforce or school. ECE programs can serve an important role by advocating for breastfeeding, providing a space and conducive atmosphere for mothers to breastfeed their infants, and storing breastmilk safely. If parents bring breast milk from home, the bottle or container should be clearly labeled with the child’s name and date.

- Parents and ECE providers may have different beliefs and attitudes about food. Cultural food preferences may not be appropriately observed in ECE settings and may result in feeding difficulties or ECE provider-family conflicts. ECE providers can be encouraged to provide food from various cultures in order to teach children about the world around them (American Dietetic Association (ADA), 1999).

- Young children may resist the addition of new foods to their diet, making it difficult to correct any known or emergent deficiencies. Lack of iron is the most common nutritional deficiency in the United States and a frequent cause of anemia (Dietz & Stern, 1999). To prevent iron deficiency, pediatricians often recommend iron-fortified cereals when infants start solid foods. After age two, the risk of iron deficiency decreases for children who eat a balanced diet.

- Food brought from home should be compatible with the ECE program’s nutritional philosophy, which means that ECE programs may need to discourage or even prohibit families from bringing unhealthy or unsafe food choices to the program, whether for their own child or for sharing with others for celebrations. Because food choices can be an emotionally charged
topic, staff may need support in enforcing the program's food policies in a way that is respectful and fair to all.

• ECE professionals are encouraged to serve meals family style to children (Graves et al., 1997). Some ECE providers think this is too messy, but it provides an important learning activity for children. This style of serving allows children to decide how much they will eat and prevents waste.

• An ECE provider should sit at the table with the children and eat what they are eating (Graves et al., 1997). Adults are role models for using utensils, choosing and eating foods, and behaving in socially acceptable ways at the table. ECE professionals help shape children's eating behavior. They help children trust the eating environment by making sure they are safe both physically and psychologically.

• The amount of time children spend in ECE programs per day should determine the quantity and combinations of foods that are provided (ADA, 1999). For example, if a child spends 4-7 hours in an ECE program, at least one third of the daily nutrition needs should be provided during that time. If a child spends 8 or more hours in an ECE program, at least one half to two thirds of the child's daily nutrition needs should be met.

• Changing nutritional guidelines and research findings affect what food is considered healthy and safe. Keeping up with these changing guidelines is important to the nutrition and health of young children in ECE programs.

The Dietary Guidelines recommend five servings a day of fruits and vegetables. The Dietary Guidelines encourage people to combine choices within each food group. For example, eating a wide variety of fruits rather than fruit juices is recommended. Consuming vegetables from all five vegetable subgroups (dark green, orange, legumes, starchy vegetables, and other vegetables) is also recommended. Based on a 2,000 calorie/day intake, the Guidelines recommend the following servings: 2 cups per day of fruit and 2-1/2 cups per day of vegetables. Children and adolescents should consume whole grain products to ensure adequate daily intake of dietary fiber; at least half of grains consumed should be whole grains (ADA, 1999). Children 2 to 8 years old should consume two cups per day of fat-free or low-fat milk or milk equivalent products. For children who cannot consume milk, choose lactose-free milk products or other calcium-fortified foods. A fat intake of 30 to 35 percent of calories is recommended for children 2 to 3 years of age, and 25 to 35 percent of calories for children and adolescents 4 to 18 years of age. When giving children meat, poultry, dry beans, and milk or milk products, choices that are lean, low-fat, or fat-free are healthiest. For more information, see the Dietary Guidelines for America (2005) at www.healthierus.gov/dietaryguidelines.

**Developing a Nutrition Plan**

Developing a nutrition plan is key to meeting children's nutritional needs in ECE programs. Components to include are: healthful food choices, food preparation and food storage safety, kitchen cleanliness and sanitization, appropriate infant feeding practices, and healthy menu planning to meet the nutritional needs of all children. The plan should also include developmentally appropriate nutritional activities to reinforce healthy habits, and emphasize a positive and enjoyable social atmosphere during mealtimes.

Infant/toddler feeding plans should also consider developmental readiness to progress to a variety of

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**Recommended Nutrition Guidelines**

The new Dietary Guidelines for Americans (2005) encourage the general public over 2 years of age to make wise choices from every food group, be physically active, and to get the most nutrition out of your calories. A healthy eating plan is one that:

• emphasizes fruits, vegetables, whole grains, and fat-free or low-fat milk products

• includes lean meats, poultry, fish, beans, eggs, and nuts

• is low in saturated fats, trans fats, cholesterol, salt, and added sugars

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new foods (see Handout: Sequence of Infant Development and Feeding Skills, and Handout: Feeding the Baby for the First Year). This includes understanding physical skills, e.g., being able to swallow solid food, and hunger and fullness cues and safety. Infant/toddler feeding plans can also be used to help determine when children with special needs are ready to move on to solid foods and modified table foods.

**How Do Infants and Toddlers Communicate Hunger and Fullness?**

To help prevent under-feeding or over-feeding, parents and ECE providers must be sensitive to the following hunger and fullness cues of healthy infants and young children (Butte, Cobb, Dwyer, Graney, Heird, & Rickard, 2004):

- For infants, hunger cues may include: crying, excited arm movements, smiling, cooing, and/or gazing at the caregiver during feeding indicating a desire to continue, moving forward as the spoon approaches, swiping food towards the mouth, moving head forward to reach the spoon.
- Hungry toddlers may point at, ask for, or reach for foods or beverages.
- Infants satiety (fullness) cues may include: falling asleep, becoming fussy during feeding, slowing the pace of eating, stopping sucking, spitting out the nipple, refusing the spoon, batting the spoon away, or closing the mouth as the spoon approaches.
- Toddlers may slow the pace of eating, become distracted or notice surroundings more, play with food, throw food, want to leave the table or chair, or leave food on the plate.

**Division of Responsibility in Feeding**

In some settings, ECE providers are responsible for buying, preparing, and serving food. Children are responsible for what and how much they eat. Healthy children will eat what they need and should not be forced to clean their plate (Graves et al., 1997). When children are forced to eat more than what they want, they learn to override their hunger and fullness cues. Children develop their own internal controls on how much or whether to eat. It is important to let children eat until they are full or satisfied, rather than setting limits about how much they eat. Sometimes children in groups are fed using the principle of equity. This translates to the rule that each child gets an equal amount. Fairness should be based upon letting children’s natural body cues tell them when they are full. Children can ask for more food if they are still hungry. Recent research has shown that the amount of food children are given is an important part of how much children eat (Mrdjenovic & Levitsky, 2005). Controlling children’s portion size is important.

**Risk of Choking**

Young children in their first three years of life are at great risk of choking (Graves et al., 1997). See Handout: Possible Choking and Suffocation Hazards. Do not serve children under age 4 the following foods:

- spoonfuls of peanut butter
- mini marshmallows
- large chunks of meat
- nuts, seeds, peanuts
- raw carrots (in rounds)
- fish with bones
- dried fruit
- hot dogs (whole or sliced into rounds)
- hard candy or cough drops
- popcorn
- raw peas
- whole grapes and raisins
- ice cubes
- whole olives
- pretzels, chips
Children Need Daily Physical Activity

The Dietary Guidelines for Americans (2005) and the American Heart Association (2005) recommend that children and adolescents engage in at least 60 minutes of physical activity on most, preferably all, days of the week. Despite common misconceptions that exposure to cold weather increases the risk of or exacerbates the common cold, children and adults benefit from outdoor activity in all but the most extreme conditions, and there is no evidence that playing in brisk weather causes children to catch colds (see Handout: Health and Safety Notes: Is It Safe to Play Outdoors in Winter? and Handout: Health and Safety Notes: Active Outdoor Play). AAP et al. (2002) states that “Children shall play outdoors daily when weather and air quality conditions do not pose a significant health risk.” Weather that poses a significant health risk includes wind chill at or below 15° F and heat index at or above 90° F, as identified by the National Weather Service. If children are dressed appropriately for the weather, it is safe to play outdoors in most weather conditions.

Increased physical activity has been associated with an increased life expectancy and decreased risk of cardiovascular disease (American Heart Association, 2005). Many children are at risk for health problems because of inactive lifestyles (Centers for Disease Control and Prevention, 1996). The Surgeon General’s report and Bright Futures (Patrick, Spear, Holt & Sofka, 2001) indicate that there are many health benefits of physical activity for children, including:

- increased muscle and bone strength
- reduced blood pressure
- reduced total body fat
- enhanced psychological well-being
- decreased risk of obesity

Play equipment and space. ECE programs should select indoor and outdoor equipment that is developmentally appropriate for safety; the equipment should also provide developmentally appropriate gross and fine motor experiences (AAP et al., 2002, Standard 2.016). Children should always be supervised while playing on playground equipment (AAP et al., 2002, Standard 5.085). There should be enough space in the outside play area so that children can move freely without running into one another—if an outside play area is not accessible or available, an indoor play area that is similar in size to the standard outside play area will work well (AAP et al., 2002, Standards 5.162, 5.163).

Children with Disabilities and Other Special Needs

Children with disabilities and other special needs may require additional nutritional planning and support. Children may have special needs because of food allergies, diabetes mellitus, developmental disabilities, swallowing problems, or other conditions. Individual feeding plans should be carefully developed with the input of the family to meet the needs of these children (see Handout: Nutrition and Feeding Care Plan).

Food Allergies

Children with food allergies and other dietary restrictions require careful planning and extra attention to ensure that their nutritional needs are fully and safely met. Some of the common foods that can cause allergies are eggs, peanuts, tree nuts, milk, soy milk, and shellfish. Children’s food allergies can range in severity from mild to life-threatening (see Handout: Fact Sheet for Families: Food Allergies). ECE staff will need to gather clear information from the child’s family about the nature of the food allergies, signs of allergic reaction, how to prevent accidental exposure to allergens, and safe substitute foods. This information should be kept in the child’s record, and should be shared with all ECE staff who care for the child. If children with severe allergies have a prescription for emergency medication (Epi-Pen®) to be used in case of exposure to a known allergen food, ECE staff will need education on handling the Epi-Pen® and procedures for storing it in a location that is both safe and accessible. The use of EpiPen® and EpiPen Jr.® are permitted in ECE programs. EpiPen® and EpiPen Jr.® are disposable, prefilled automatic injection devices designed to administer a single dose of epinephrine for allergic emergencies. However, EpiPen® and EpiPen Jr.® can only be administered in the event of an emergency and only to someone who has a prescription for them (Health and Safety Code Section 101226[e]). Regu-
lar and clear communication between ECE staff and families about food allergies is crucial.

It is also recommended that staff post a notice about any dietary restrictions observed by enrolled children, including food allergies, in kitchen and classroom areas. The notice should be plainly visible to the staff who prepare or serve food. Such notices should list the names of any children with dietary restrictions, and a complete list of the prohibited food or foods for each affected child. A Food Allergy Action Plan is included in the handouts and can be downloaded from www.foodallergy.org/actionplan.pdf in English and Spanish (see Handout: Food Allergy Action Plan).

Diabetes

Children with Type 1 diabetes need carefully planned and balanced meals at regular intervals throughout the day, so adherence to a feeding plan is of critical importance (Story, Holt, & Sofka, 2002). They may also need supplemental snacks or beverages in response to their blood sugar status as determined by regular testing. ECE staff will need education on the basic principles of metabolism, how diabetes interrupts these processes, and the urgent importance of maintaining an appropriate and stable blood sugar level.

Children with insulin resistance, or pre-diabetes, who are at extremely high risk for developing Type 2 diabetes later in childhood or adolescence, or those who are at increased risk for Type 2 diabetes due to overweight and/or family history, also need careful adherence to a nutrition plan, along with adequate daily exercise. ECE staff who are caring for children with or at risk for Type 2 diabetes will need to understand the condition, its possible long-term consequences, and the basic principles which support good blood sugar control and avoidance of problems (See Handout: Health and Safety Notes: Diabetes in the Child Care Setting).

Positioning Issues

Feeding children with disabilities or other special needs may require specific positioning, adaptive equipment, or more time and effort than is needed for other children. Without this special attention and care, these children may receive inadequate nutrition. CCHCs can provide training and support in any special techniques or procedures that may be necessary.

WHAT THE CCHC NEEDS TO DO

Observe Programs and Assess Practices Related to Nutrition and Physical Activity

CCHCs can visit at mealtimes to observe food safety and nutrition practices. They can observe outdoor play for physical activity practices. Look for a posted weekly menu required by Community Care Licensing regulations (State of California, 2002). It should be posted in a location that is easily accessible to parents. Determine whether the program is part of the Child and Adult Care Food Program (CACFP). CACFP is a Federal program that provides healthy meals and snacks to children and adults receiving day care. In California, CACFP is administered through the California Department of Education and is often referred to as CCFP (Child Care Food Program).

Review Existing Nutrition and Physical Activity Policies and Procedures

Determine whether the program has policies regarding nutrition and physical activity. If policies are not in place, the CCHC can work with the ECE provider to develop policies for safe food handling and storage, nutrition, and physical activity using CFOC (AAP et al., 2002). If policies are in place, review them and assess whether the policies and procedures are being implemented. The CCHC can review daily schedules to see if children are getting enough physical activity. See Table 2 for ideas for physical activities that can be included in the child’s day. The CCHC can help plan menus and evaluate the nutritional value. When reviewing nutrition policies, CCHCs should make sure the policies provide guidance for a variety of situations, and that they are effectively communicated to families:

- If parents send food for their child from home, they need clear guidelines from the ECE program about both nutritive content and food
safety. Such policies are best communicated at the time of enrollment in writing. For example, an ECE program may have a written policy prohibiting children from bringing non-nutritive foods such as candy or soda from home.

- Food preparation activities are creative ways to build children’s interest in healthy food. However, it is important not to exclude children who have allergies or other food restrictions from such activities. When planning activities, program staff or parents who are volunteering should choose foods that are acceptable and safe for all participants.

- Children whose families request a vegetarian diet for their children or make other specific food requests deserve consideration and respect. The Dietary Guidelines for Americans (2005) states that vegetarians can achieve recommended nutrient intakes through careful selection of foods. If avoiding milk products, these children can be offered other sources of protein, iron, and vitamin B12, as well as calcium and vitamin D. In addition, vegetarians could select only nuts, seeds, and legumes from the meat and beans group, or they could include eggs if so desired (Dietary Guidelines for Americans, 2005). Remember that substitutions to menus, which accommodate such individual preferences must be nutritionally equivalent (see Handout: Health and Safety Notes: Types of Vegetarian Diets). In other words, bread is not an acceptable substitution for meat, but another protein food is acceptable.

- For a child with lactose intolerance, a nutritionally equivalent substitute beverage should be given, not juice. Some families may avoid milk products because of allergies, cultural practices, taste, or other reasons. Those who avoid all milk products need to choose rich sources of the nutrients provided by milk, including potassium, vitamin A, and magnesium in addition to calcium and vitamin D (Dietary Guidelines for Americans, 2005).

- CCHCs can offer support by providing ideas about cooking activities, community gardens or new fitness activities for young children, or assist in the establishment of a committee that consists of both parents and staff for creative healthful menu planning.

<table>
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<tr>
<th>Age</th>
<th>Physical Activity</th>
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| Birth to 3 years old | • Crawling through tunnels or under tables.  
• Climbing.  
• Dancing.  
• Walking.  
• Having a parade around the playground.  
• Kicking a ball.  
• Throwing a ball or balloon.  
• Stacking toys.  
• Rolling over.  
• Active games such as pat-a-cake, duck-duck-goose and hide-and-seek.  |
| 3 to 5 years old    | • Dancing.  
• Gymnastics.  
• Jumping on a mini trampoline.  
• Skipping.  
• Galloping.  
• Playing on ride-on toys.  
• Swinging.  
• Running.  
• Taking a walk.  
• Flying a kite.  
• Hopping.  
• Jumping.  
• Throwing a ball.  
• Catching a ball.  
• Playing “Simon Says.”  
• Playing “Follow the Leader.”  |

**TABLE 2: PHYSICAL ACTIVITY IDEAS FOR YOUNG CHILDREN**
Teach Staff and Children When and How to Wash Hands

One of the best ways to prevent the spread of germs is by washing hands. It is important for children and ECE staff to know how to wash hands properly as well as when to wash hands. See below for more information (Dodds, Benjamin & Walsak, 2005).

How to Wash Hands: Six Easy Steps (AAP et al., 2002, Standard 3.021)
1. Remove all jewelry and roll up your sleeves.
2. Wet your hands with warm, running water, and apply liquid* soap.
3. Scrub all surfaces of your hands for at least 10 seconds, including backs of hands, thumbs, between fingers, under and around fingernails, and wrists. Hands should be washed for 20 seconds when handling meat and poultry (U.S. Department of Agriculture [USDA] Food Safety Inspection Services, 1998).
4. Rinse thoroughly, with fingertips pointed down.
5. Turn off the water faucet with a paper towel and discard it.
6. Dry your hands with a fresh, disposable paper towel.

*It is the physical action of hand washing that removes soil, not the type of soap. However, it is advisable for children to use liquid soap because they do not have the dexterity to handle bar soap. Soap does not have to be antibacterial, and bar soap does not transmit bacteria.

When to Wash Hands: Staff and Children
Hands should be washed in the following situations:
- upon arrival
- before any food service activity (food preparation, handling, serving or setting the table)
- before and after handling raw meat, poultry, fish or raw eggs
- before and after eating meals or snacks
- after changing or checking diapers
- after using the toilet or helping a child with toilet use
- after handling pets or other animals
- after contact with any items or persons soiled with body fluids, such as vomit, saliva or blood
- after wiping a child’s or your own nose
- after using gloves
- after playing outside
- before and after using water tables or moist items

Where to Wash Hands
The child care center kitchen should be equipped with two sinks: one for hand washing and one for food preparation (AAP et al., 2002, Standard 4.045). (Family child care homes are not required to have two sinks.) To prevent food from being contaminated, the hand washing sink should have an 8-inch splash guard or be 18 inches from the food preparation sink (AAP et al., 2002, Standards 4.045, 4.046). The following practices should be observed:
- Never wash hands in a sink where food is prepared.
- If there is only one sink, wash your hands first. Then clean the sink thoroughly before preparing food.
- Make sure the sink faucet, liquid soap and paper towels are easily accessible for children.

Educate Staff about Nutrition and Physical Activity
It is important for CCHCs to provide education and leadership about best practices. CCHCs can survey ECE staff to determine their level of knowledge about healthy nutritional principles and developmentally appropriate physical activity guidelines.

CCHCs can ensure that there is a system for open communication that enables information-sharing between the families and ECE staff (including kitchen personnel).
CCHCs can educate ECE staff about food allergies and safe substitutions. CCHCs can also provide ECE staff with alternative ideas for celebrating special occasions, which do not emphasize sweet desserts and drinks or other processed snack foods. CCHCs can mediate differences between parents and staff related to feeding plans for children. (See Handout: Fact Sheet for Families: Food Allergies.)

Promote Physical Activity for Young Children

In 2002, the National Association for Sport and Physical Education [NASPE] released the first physical activity guidelines specifically designed to meet the developmental needs of infants and toddlers (NASPE, 2002). The guidelines (see below) address the kinds of physical activity recommended for infant, toddler and preschool age groups, the activity environment, and the role of the adult facilitator in children's physical activity.

Physical Activity Guidelines
(Adapted from NASPE, 2002)

**Infants**
- Daily physical activities should promote the development of movement skills and the exploration of the environment.
- Infants should be placed in safe settings that facilitate physical activity and do not restrict movement for prolonged periods of time.
- Infants should have access to a safe environment that promotes large muscle activities.
- Parents and caregivers should be aware of the importance of physical activity and should facilitate movement.

**Toddlers**
- Toddlers should accumulate at least 30 minutes daily of structured physical activity (such as a dance class).
- Toddlers should engage in at least 60 minutes (and up to several hours) daily of unstructured physical activity (such as playing on the playground), and they should not be sedentary for more than 60 minutes at a time except when sleeping.
- Toddlers should develop movement skills that are building blocks for more complex movement tasks.
- Toddlers should have access to safe indoor and outdoor areas that promote gross motor activities.
- Parents and caregivers should be aware of the importance of physical activity and should facilitate movement skills.

**Preschoolers**
- Preschoolers should accumulate at least 60 minutes daily of structured physical activity.
- Preschoolers should engage in at least 60 minutes (and up to several hours) daily of unstructured physical activity, and they should not be sedentary for more than 60 minutes at a time except when sleeping.
- Preschoolers should develop competence in movement skills that are building blocks for more complex movement tasks.
- Preschoolers should have access to safe indoor and outdoor areas that promote gross motor activities.
- Parents and caregivers should be aware of the importance of physical activity and should facilitate movement skills.

Help ECE Staff Set Priorities

A good approach is to emphasize safety issues first, such as prevention of food-borne illness or management of allergies, followed by more general health issues such as balanced nutrition, avoidance of highly processed foods or foods of poor nutritional value, food policies which promote fresh and nutritious foods in combination with regular physical activity, best inclusive practices for meeting the needs of children with disabilities or other special needs, and ongoing communication with families.
Train Staff in Tracking and Monitoring Nutrition and Food Safety Procedures

CCHCs can help develop tracking and monitoring systems for staff members to ensure that they comply with the program’s nutrition policies each day. CCHCs can train staff in monitoring systems. Such systems might include checking and recording refrigerator temperatures daily, labeling and dating leftovers, rotating supplies by a first in/first out system, proper hand washing, use of gloves by food-handlers, communication about any food restrictions for children, etc. CCHCs can also assist ECE staff in setting up logs and recording systems that permit these efforts to be monitored and evaluated routinely. Using the CCHP Health and Safety Checklist-Revised can provide consistency (CCHP, 2005).

Assist Staff in Educating Children

CCHCs can help ECE staff to educate children about food, food sources, and the link between nutrition and physical activity and health. Providing ECE programs with a list of developmentally appropriate books and posters on these topics would also be beneficial.

Provide Educational Materials

Distribute examples of successful nutrition plans from other ECE programs. Offer educational posters for children and parents about healthy food choices and physical activity and encourage ECE providers to display them in multiple and prominent locations. Provide a list of books, videotapes, and Web sites to help educate staff, parents and children about nutrition and physical activity. See Handout: How to Help Your Child Have Healthy Weight for more information. Provide resources that are culturally sensitive to the populations being served in the ECE programs.

Link ECE Programs with Resources

Linking ECE programs with dietetic professionals in the community can help in menu planning. The CCHC can also provide ECE programs with brochures and literature on food banks, farmer’s markets, food buying clubs, USDA programs such as WIC, the Child Care Food Program (CCFP), and summer lunch programs, as available. In California, all licensed centers and unlicensed child care homes are eligible for the CCFP. If the ECE program is participating in the CCFP, evaluate whether the program is in compliance with CCFP regulations. ECE programs that are not part of the CCFP may have little or no guidance regarding nutrition or health and safe food handling and preparation practices. Introduce guidelines such as Nutrition Standards for Child Care Programs (ADA, 1999) and the Dietary Guidelines for Americans (2005). Ensure that ECE providers are aware of nutrition assessment resources (California Department of Health Services, 2004) and financial aid for families such as food stamps and WIC.

Advocate for Nutrition and Physical Activity Policies

CCHCs can advocate for quality nutrition programs for infants and children in ECE programs. For example, campaign for the elimination of junk food and soda vending machines on school sites. Prohibit sugary snacks and offer suggestions for healthy alternatives for parents.
WAYS TO WORK WITH CCHAs

CCHCs can supervise Child Care Health Advocates (CCHAs) in their role as peer instructors on nutrition and physical activity topics for ECE staff, families and children. CCHAs can be responsible for the following tasks:

- Monitor the temperature of food, water and refrigerators on a daily basis, identify problems, and work on solutions to remediate problems.

- Utilize the CCHP Health and Safety Checklist-Revised at least monthly and facilitate corrective actions if needed (CCHP, 2005).

- Monitor food deliveries and temperatures of food served to children and staff, and follow up with delivery agencies.

- Observe best practices such as labeling and storing food safely, and sanitizing surfaces used for preparing or eating food.

- Track height and weight of children and follow up when indicated.

- Develop and update community resource guides for parents related to nutrition.

- Monitor the hand washing practices of children and staff before and after meals.

- Review menus for nutritional content.

- Review daily schedules for adequate amounts of physical activity.

- Keep staff notification of children with allergies accurate and up-to-date.

- Work with children to improve their knowledge of nutritional principles and their enjoyment of healthy food.

- Support children to engage in active play and regular exercise.

- Be a role model for the positive effects of nutritious food and regular exercise.
ACTIVITY: BUILDING HEALTHY EATING HABITS

1. Identify the problems in the following five scenarios.

2. In small groups, discuss suggestions for improvements.

3. Note educational and any other supportive steps you might take in these situations.

4. Which national standards (AAP et al., 2002) are relevant?

Scenario 1
An ECE provider tells you she is having trouble getting the children to sit down and eat. She tells you that she has the television turned to the children’s favorite show so they will sit quietly and watch TV while they are eating. She also tells you that she tries to have the meals right after the children come in from playing since they will probably be tired out and ready to sit down and eat. She is too busy to sit down with the children since she is dishing out each child’s plate in the kitchen. She cannot figure out what to do to get the children to sit at the table and eat their meals. What can you suggest to her?

Scenario 2
On a site visit to an infant care center, you observe a caregiver feeding apple juice to a 12-week-old infant. You ask the provider why she is giving juice to the baby, and point out (per American Academy of Pediatrics recommendations) that juice is not appropriate for children under 6 months of age, as it is nutrient-poor compared to formula or breast milk. She replies that the baby’s mother has told her to give him juice at this time of day just as the mother is doing at home on weekends.

Scenario 3
An ECE provider tells you she is really annoyed with a parent who wants her child treated differently because she is a vegetarian. The provider wanted the parent to bring in the vegetarian meals because it’s so much work to cook special dishes every day. The provider just found out that the Child Care Food Program Guidelines require that a family’s religious, cultural, or medical nutritional needs must be respected.

Scenario 4
An ECE provider wants information and advice on how to deal with a parent who is very angry because she feels her child is not eating enough food while in the ECE program.

Scenario 5 (from Dodds, Benjamin, & Walsak, 2004)
Upon entering an ECE facility, you notice that there are two television sets (one at each end of the facility); and both sets are on. Additionally, you observe two infants in a crib at the far end of the room with no supervision. As you walk through the indoor play area, you note that space is limited, and the three children engaged in that area are beginning to “argue” about play space. When you walk outside, you take a deep breath of fresh air and look up at a mostly blue sky. There are no children outside. Before you leave, you spot half empty paint cans from repair work lying by the playground sandbox.
NATIONAL STANDARDS


1.009 Preservice and Ongoing Staff Training
1.023 Initial Orientation of All Staff
1.029 Continuing Education for Directors and Caregivers in Centers and Large Family Child Care Homes
1.030 Continuing Education for Small Family Child Care Home Providers
1.031 Training of Staff Who Handle Food
1.038 Orientation of Substitutes for Centers and Large Family Child Care Homes
1.039 Orientation for Substitutes for Small Family Child Care Homes
1.041 Knowledge and Skills of Child Care Health Consultants
2.011 Interactions with Infants and Toddlers
2.021 Health, Nutrition and Safety Awareness for 3- to 5-Year-Olds
2.047 Parent Conferences
2.048 Designated Staff for Parent Contact
2.060 Health Education Activities
4.005 Juice
4.006 Availability of Drinking Water
4.007 Dietary Modifications
4.008 Written Menus, Introduction of New Foods
4.009 Feeding Plans
4.010 Care for Children with Food Allergies
4.011 General Plan for Feeding Infants
4.012 Introduction of Solid Foods to Infants
4.013 Feeding Infants on Demand with Feeding by a Consistent Caregiver
4.014 Techniques for Bottle Feeding
4.015 Feeding Human Milk
4.016 Preparing Infant Formula
4.017 Preparation and Handling of Bottle Feeding
4.018 Warming Bottles and Infant Foods
4.019 Cleaning and Sanitizing Equipment Used for Bottle Feeding
4.020 Feeding Cow’s Milk
4.021 Feeding Solid Foods to Infants
4.022 Meal and Snack Patterns
4.023 Portions for Toddlers and Preschoolers
4.024 Encouraging Self-Feeding by Toddlers
4.025 Meal and Snack Patterns for School-Age Children
4.026 Food Service Staff by Type of Facility and Food Service
4.027 Child Care Nutrition Specialist
4.028 Developmentally Appropriate Seating and Utensils for Meals
4.029 Tableware and Feeding Utensils
4.030 Activities that Are Incompatible with Eating
4.031 Socialization During Meals
4.032 Participation of older children and staff in mealtime activities
4.033 Experience with Familiar and New Foods
4.034 Hot Liquids and Foods
4.035 Numbers of Children Fed Simultaneously by One Adult
4.036 Location of the Adult Supervising Children Feeding Themselves
4.037 Food that Are Choking Hazards
4.038 Progression of Experiences with Food Textures
4.039 Prohibited Uses of Food
4.040 Selection and Preparation of Food Brought from Home
4.041 Nutritional Quality of Food Brought from Home
4.042 Food Preparation Area
4.043 Design of Food Service Equipment
4.044 Maintenance of Food Service Surfaces and Equipment
4.045 Food Preparation Sinks
4.046 Handwashing Sink Separate from Food Zones
4.047 Maintaining Safe Food Temperatures
4.048 Ventilation Over Cooking Surfaces
4.049 Microwave Ovens
4.050 Compliance with USDA Food Sanitation Standards, State and Local rules
4.051 Staff Restricted from Food Handling
4.052 Precautions for a safe food supply
4.053 Leftovers
4.054 Preparation for and Storage of Food in the Refrigerator
4.055 Maintenance of Clean Refrigerators and Freezers
4.056 Storage of Foods not Requiring Refrigeration
4.057 Storage of Dry Bulk Foods
4.058 Supply of Food and Water for Disasters
4.059 Storage of Cleaning Agents Separate from Food
4.060 Cleaning of Food Areas and Equipment
4.061 Cutting Boards
4.062 Approved Off-Site Food Services
4.063 Food Safety During Transport
4.064 Holding of Food Prepared at Off-Site Food Service Facilities
4.065 Nutrition Learning Experiences for Children
4.066 Nutrition Education for Parents
8.004 Content of Policies
8.005 Initial Provision of Written Information to Parents and Caregivers
8.034 Sanitation Policies and Procedures
8.035 Food and Nutrition Service Policies and Plans
8.036 Infant Feeding Policies
8.041 Health Consultant’s Review of Health Policies
8.042 Plan for Program Activities
8.048 Contents of Child’s Health Report
8.074 Records of Nutrition Services
8.075 Community Resource Information
8.077 Public Posting of Documents
9.033 Support for Consultants to Provide Technical Assistance to Facilities
9.034 Development of List of Providers of Services to Facilities

CALIFORNIA REGULATIONS

From Manual of Policies and Procedures for Community Care Licensing Division

101227 Food Service
101230 Activities
101238.2 Outdoor Activities
101239.2 Drinking Water
101419.3 Infant Needs and Services Plan
101427 Infant Care Food Service
101527 School Age Food Service
101538.2 Outdoor Activity Space for School-Age Children
<table>
<thead>
<tr>
<th>Organization and Contact Information</th>
<th>Description of Resources</th>
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| American Academy of Allergy Asthma & Immunology  
www.aaaai.org | Food Allergy Tips to Remember  
www.aaaai.org/patients/publicedmat/tips/foodallergy.stm |
| American Dietetic Association  
120 South Riverside Plaza #2000  
Chicago, IL 60606-6995  
(800) 877-1600  
www.eatright.org | American Dietetic Association (ADA), the nation’s largest organization of food and nutrition professionals, provides reliable, objective food and nutrition information that includes resources to help achieve a healthy lifestyle and answer food and nutrition questions.  
National Center for Nutrition and Dietetics (NCND) Consumer Information Line (800-366-1655) offers the public direct access to objective, credible food and nutrition information from the experts—registered dietitians. ADA’s Consumer Nutrition Information Line provides recorded messages with timely, practical nutrition information as well as referrals to registered dietitians. Messages are available 24 hours daily. Messages and accompanying Nutrition Fact Sheets (in English and Spanish) change monthly and offer practical, creative ways to balance food choices for a healthful eating style. Funding for this toll-free service is provided by educational grants to the American Dietetic Association Foundation.  
Healthy Habits for Healthy Kids: A Nutrition and Activity Guide for Parents www.eatright.org/Public/Files/wellpoint.pdf  
Nutrition Fact Sheets www.eatright.org/Public/NutritionInformation/92_11722.cfm  
| Bright Futures  
www.brightfutures.org/index.html | Based at Georgetown University and sponsored by National Center for Education in Maternal and Child Health Bureau, this Web site offers resources for health professionals and families to assist them in fostering overall health among youth. Nutrition and physical activity practice guides, training tools, and family materials are available to help promote healthful weight management. |
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<th>Organization and Contact Information</th>
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<tr>
<td><strong>California Childcare Health Program (CCHP)</strong>&lt;br&gt;1333 Broadway, Suite 1010&lt;br&gt;Oakland, CA 94612-1926&lt;br&gt;Healthline: (800) 333-3212&lt;br&gt;www.ucsfchildcarehealth.org</td>
<td>Program of the University of California, San Francisco, School of Nursing. Provides staff training, parent educational materials, telephone and on-line support to California ECE providers. Many documents available to download from the Web site related to nutrition and physical activity; available in English and Spanish.</td>
</tr>
</tbody>
</table>
| **California Department of Education**<br>P.O. Box 944272<br>Sacramento, CA 94244-2720<br>www.cde.ca.gov | California Department of Education, Nutrition Division provides information and resources on menu planning, preparation documentation, meal patterns, and other materials needed for proper administration of the federal CACFP subsidized food program child care centers and family day care homes. Retrieved October 11, 2004, from www.cde.ca.gov/ls/nu/cc/  
Publications:  
1. Ingredients for a Good Start: Shaping Healthy Food Choices in Child Care and Development Programs  
2. Simplified Buying Guide  
3. Today's Special: A Fresh Approach to Meals for Preschoolers  
Meal planning for older children  
www.cde.ca.gov/ls/nu/he/documents/oldchmlpat.rtf |
| **California Department of Health Services, Women Infants and Children (WIC) Supplemental Nutrition Program**<br>www.wicworks.ca.gov | Provides nutrition and fitness lesson plans for children. Local Agency Section helps locate WIC offices in every community. Nutrition Lesson Plans  
www.wicworks.ca.gov/education/nutrition/lessonPlans/lessonPlansIndex.htm. |
| **Centers for Disease Control and Prevention**<br>www.cdc.gov | CDC Growth Chart Training Modules and Resources.  
www.cdc.gov/growthcharts |
| **Center for Weight and Health College of Natural Resources**<br>University of California<br>101 Giannini Hall #3100<br>Berkeley, CA 94720-3100<br>http://nature.berkeley.edu/cwh/resources/childrenandweight.shtml | Children and Weight: What Health Professionals Can Do About It  
This kit contains everything needed to conduct inservice training for physicians, nurses, dietitians and other health professionals on diagnosing, assessing, and treating pediatric obesity. The kit includes a videotape that addresses body image, medical risks to screen for with an overweight child, and assessment and care planning for overweight patients. Also included are five unit lesson plans complete with educational objectives, teaching activities, overhead masters, and handout masters. Other materials: an extensive resource list, a teaching flip chart for use with low-income families, samples of pamphlets for parents, a review of recent scientific research on pediatric obesity, and an evaluation instrument.  
Order from:  
Agriculture & Natural Resources  
UC Communication Services  
Phone: (510) 642-2431 • E-mail: anrcatalog@ucdavis.edu  
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| Department of Health and Human Services (HHS) and the Department of Agriculture (USDA) | Dietary Guidelines for America 2005  
www.healthierus.gov/dietaryguidelines/  |
| Ellyn Satter Associates  
www.ellynsatter.com | Feeding policy for child care facilities.  |
| Food Allergy & Anaphylaxis Network  
11781 Lee Jackson Hwy, Suite 160  
Fairfax, VA 22033-3309  
(800) 929-4040  faan@foodallergy.org  
Childcare and Preschool Guide to Managing Food Allergies (1994). This comprehensive program, endorsed by the American Academy of Allergy Asthma & Immunology and the American Academy of Pediatrics, is designed to educate caregivers of children under age 5. Included are two videos, It Only Takes One Bite and Alexander the Elephant Who Couldn’t Eat Peanuts, a binder filled with vital information, an EpiPen® trainer, a laminated sheet of “How to Read a Label: cards, and a food allergy awareness poster.  |
| Healthy Child Publications  
P.O. Box 624  
Harbor Springs, MI 49740  
info@healthychild.net,  
www.healthychild.net/articles/na23assess.html  |
| National Network for Child Care  
www.nncc.org/Health/fc43_exercise.html  |
| President’s Council on Physical Fitness  
www.fitness.gov | Fit ‘n active kids.  
www.fitness.gov/funfit/funfit.html  |
| United States Department of Agriculture (USDA)  
1400 Independence Ave., S.W.  
Washington, DC 20250 | USDA Child Care Food Program sets standards for healthy and safe food service in child care settings. Their materials include evidence-based recommendations on meal patterns, content, and frequency starting from infancy onward.  
www.fns.usda.gov/cnd/care/cacfp/cacfphome.htm  
USDA Child Care Nutrition Resource System provides recipes and information on preparing nutritious meals and food safety for child care programs.  
www.nal.usda.gov/childcare/index.html  
USDA Food Safety and Inspection Service  
www.fns.usda.gov/tn/Resources/feeding_infants.html |
Publications

Davis, K., & Christoffel, K. (1994). Obesity in preschool and school-age children: Treatment early and often may be best. *Archives of Pediatric and Adolescent Medicine, 148*, 1257-1261.


Audio/Visual

*Alexander, The Elephant Who Couldn't Eat Peanuts*
Food Allergy Network
www.foodallergy.org
Date produced: 1994 Cost: $15
This video combines the animated story of an elephant who is allergic to peanuts with interviews of children who have food allergies. It’s designed to show children that they aren’t alone, and to discuss the feelings that go along with having food allergies.
NAL Call No. Videocassette no. 2065.
REFERENCES


Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; President’s Council on Physical Fitness and Sports (1996). *Physical activity and health: A report of the surgeon general.* Washington D. C.: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; President’s Council on Physical Fitness and Sports.


HANDOUTS FOR NUTRITION AND PHYSICAL ACTIVITY MODULE

Handouts from California Childcare Health Program (CCHP), Oakland, CA

Page   Handout Title

25     Fact Sheets for Families: Food-Borne Illness
26     Possible Choking and Suffocation Hazards. From Health and Safety in the Child Care Setting: Prevention of Injuries – A Curriculum for the Training of Child Care Providers.
27     Health and Safety Notes: Active Outdoor Play
28     Health and Safety Notes: Is it Safe to Play Outdoors in Winter?
29     Forms: Nutrition and Feeding Care Plan
30     Fact Sheet for Families: Food Allergies
31     Health and Safety Notes: Diabetes in the Child Care Setting
32     Health and Safety Notes: Healthy Snacks for Toddler and Preschoolers
33     Health and Safety Notes: Types of Vegetarian Diets

Handouts from Other Sources

Page   Handout Title

57     How to Help Your Child Have Healthy Weight. First 5 California.
Food-borne illnesses are wide-spread and making headlines. Because a small dose of infectious or toxic materials can lead to serious illnesses among children, food safety is an increasingly important issue for parents and caregivers, particularly those looking after young children.

What is a food-borne illness?
Food-borne illness is a disease caused by ingesting food or drink contaminated by microbes, chemicals or toxins. Every person is at risk of food-borne illness, but young children, pregnant women, elderly people, persons with liver disease, and those with weakened immune systems are at a higher risk.

How does food become contaminated?
We live in a microbial world with many opportunities for food to become contaminated as it is produced, processed, stored and prepared. Bacteria may already be present on products such as raw meat, poultry, seafood and eggs when you purchase them. Even safely cooked foods can become cross-contaminated with raw products, meat juices or other contaminated products.

Common food handling practices that contribute to food-borne illnesses include improper cooling, a lapse of 12 or more hours between preparation and eating, handling of foods by infected persons, inadequate reheating, contaminated raw food or ingredients, food from unsafe sources, improper cleaning of equipment and utensils, and inadequate cooking.

What causes food-borne illnesses?
While a good number of more than 250 different recognized food-borne diseases are caused by a variety of bacteria, viruses and parasites, others are caused by harmful toxins or chemicals that have contaminated the food. Foods most often implicated in food-borne illness outbreaks include meat and poultry, eggs and egg products, milk and milk products (including pastries with cream or custard filling), and home-canned and low-acid foods such as vegetables and meats.

What are the symptoms?
It may take from hours to days to develop symptoms of illness after a person has consumed contaminated food or drinks. This period is called the incubation period. Nausea, vomiting, abdominal cramps and diarrhea are usually the first symptoms in many food-borne diseases. However, symptoms will vary according to the type and amount of microbes and may include fever, headache, severe exhaustion and sometimes blood and pus in the stools. Symptoms usually last a day or two, but in some cases can continue for a week to 10 days. Different kinds of food-borne diseases may require different treatment depending on the symptoms they cause. Many food-borne illnesses will improve in two to three days without any medicine, and illnesses caused by viruses do not require antibiotics.

When should you seek medical help?
Seek medical help if:
• Diarrhea lasts more than three days.
• Vomiting lasts longer than 12 hours.
• There is blood in the stool.
• High fever (temperature that is over 101.5º F measured orally) is present.
• Vomiting and diarrhea are causing severe abdominal cramps.
• Signs of dehydration (such as dry mouth, decrease in urination, and feeling dizzy when standing up) are present.

How can I avoid food-borne illnesses?
Food safety involves proper food purchasing, food storage, handling and cooking. A few simple precautions can prevent food from spreading illnesses:
• Clean. Wash hands and surfaces often.
• Separate. Do not cross-contaminate.
• Chill. Refrigerate promptly.
• Cook. Cook to proper temperatures.

Remember that bacteria multiply rapidly between 40º F and 140º F. To be safe, keep cold food cold and hot food hot.

References
Foodborn Infections, Division of Bacterial and Mycotic Diseases, CDC.
Consumer Fact Sheet, FDA Center for Food Safety and Applied Nutrition.
Food Safety for Child Care Facilities, University of Nebraska, Institute of Agriculture and Natural Resources.
Child Care Centers Fight Bacteria, USDA, Food and Nutrition Services.

by Rahman Zamani, MD, MPH (03/03)
Possible Choking and Suffocation Hazards

Foods
- Big chunks of meat
- Whole grapes and raisins
- Gum
- Hard candy and cough drops
- Hot dogs and sausages cut in rounds
- Lollipops
- Whole olives
- Peanuts, nuts
- Popcorn
- Raw vegetables (carrots, etc.)
- Watermelon seeds
- Spoonfuls of peanut butter
- Dried fruit

Toys
- Balloons
- Game pieces
- Game tokens
- Jacks
- Marbles
- Plastic bags
- Play jewelry
- Small objects
- Small toys (less than 1 1/2"
- Toy chests with no air holes

Objects
- Pins and nails
- Toothpicks
- Pencils and pens
- Crayons
- Staples
- Coins
- Jewelry

Can you think of any more?
Nutrition and Physical Activity  ▪  California Training Institute  ▪  California Childcare Health Program

Active Outdoor Play

Studies show that regular physical activity helps children be fit and healthy, improves self-esteem and decreases the risk of serious illnesses such as heart disease and stroke later in life. Active outdoor play enhances children’s senses of smell, touch and taste, and the sense of motion through space, which are powerful ways of learning. Children’s perceptual abilities may suffer when they experience the world mainly through television, computers and books. Their social abilities to cooperate, help, share and solve problems with other children are fostered when playing together outdoors. And when they have access to the outdoors, they gain the ability to navigate their immediate environment safely, and lay the foundation for the courage that will enable them eventually to lead their own lives.

Ideas for active play

Infants count on you to set up a safe space away from more mobile children where they can explore with their senses, practice using their muscles and move freely. A large blanket on the floor with some colorful toys or objects of different sizes, shapes and textures will keep them active and interested. Try to take infants outdoors each day, even for a short walk in the yard.

Toddlers explore and learn about the world through unstructured play time. Running, climbing and playing in a sandbox are all fun and offer opportunities to develop and practice new skills. You can lead movement activities such as jumping with two feet, skipping and running. Explore the crunchy leaves, bare tree limbs and what can float in puddles.

Preschool-age children can enjoy simple games, such as Simon Says. They can roll large balls, play catch and ride wheel toys, dance, sing or move to music. Unstructured time allows them to learn important skills, use their imaginations, and offers time to wind down. Gardening or simple science activities can encourage their enjoyment of the outdoors while using all their senses.

School-age children are ready for new learning experiences and both team and individual sports. Children who prefer not to participate in organized teams need regular exercise, such as running, walking, skating, bicycling, dance and nonviolent martial arts.

Children with chronic health conditions and disabilities should be included in outdoor play activities; they receive the same positive benefits from exercise and exploration. Some activities may need to be modified or adapted.

Outdoor play in winter

Winter brings many wonderful opportunities for children to delight in seasonal changes while playing outdoors. But all too often cold or rainy days mean that many young children spend their day indoors engaged in quiet activities. Keep the following in mind:

• Playing outdoors in cold weather doesn’t cause colds—germs do. Playing outdoors will reduce the amount of time children and adults are exposed to germs while cooped up inside.
• Dress in layers and keep extra dry clothing for children who get wet or muddy.
• Open a window and let in the fresh air periodically. overheated rooms can be a health hazard. Change your furnace and air filters regularly and watch for mold.
• Use sunscreen to prevent sunburn and decrease the risk of developing skin cancer at a later age whenever your child is playing outdoors. Unless it’s actually raining, sun damage can occur whether it’s sunny or cloudy.
• The American Academy of Pediatrics recommends that all trampolines be avoided due to the high number of injuries at all ages.
• Prevent slips and falls by wiping down wet outdoor equipment. Check for adequate cushioning under climbing equipment, as sand and bark may compact when wet.
• Never let toddlers play around water without constant supervision. It takes very little time and only a few inches of water for a puddle to become a drowning hazard.

And remember—have fun outdoors with your children. Even when the weather is less than perfect, it’s good for you too!

Resources


by Cheryl Oku, Infant-Toddler Specialist (rev. 06/04)
Fresh air is healthy
Studies have shown that contrary to the common belief that “exposure to cold air causes a cold,” fresh air is good and healthy. When children and adults spend a long time together in indoor spaces that are small, overheated and poorly ventilated, germs and illnesses pass easily from one person to another. In fresh, outdoor air, children do not have to rebreathe the germs of the group, and the chance for spreading infection is reduced.

Outdoor play is healthy even in winter
Children of all ages enjoy and benefit from playing outdoors in all except the most extreme weather. Daily outdoor play is healthy and burns energy. It gives children an opportunity for a change of environment, a balance in play and routine, large muscle activities (gross-motor development). Even children who are mildly ill but active should go outside if the weather is not severe. Staff and children alike will feel refreshed when fresh air is part of the daily routine. Taking children outdoors daily, even in winter, can be a healthy part of their schedule, and is safe when clothing is appropriate.

Avoid cold-related injuries
The way we feel about cold, wet or snowy weather and indoor temperatures may be affected by where we live and what we are used to. Temperatures above 40 and below 80 degrees Fahrenheit are generally suitable for routine outdoor play.

Improve indoor air quality
Germs causing disease multiply in warm, dark, damp environments, so it is important to keep the environment clean and dry. Adequate ventilation, humidity and temperature control help us resist illness and increase our ability to get well after sickness.

The following measures will improve the indoor air quality in your child care setting:

- Keep the air temperature between 65° and 75° Fahrenheit, if possible.
- Open the windows in every room for a few minutes every day to circulate fresh air, even in winter. Windows must be screened to prevent insects from entering, and should be opened no more than 6 inches (or be protected with guards) to prevent children from falling out.
- Do not allow smoking in any space that children will use.
- Properly vent heating and cooking equipment.
- Avoid strong odors. Some people (including children) are allergic to smoke, perfumes and room deodorants.
- Reduce the use of toxic pesticides and cleaners and other household chemicals.
- Control dampness and dust.
- Colds, sore throats and other infections of the respiratory system are common in cold weather and are usually caused by viruses. Child care providers have the potential to improve the health of children in their care by opening up windows to improve ventilation, and having children play for extended periods outdoors in the fresh air. They can provide instruction and programs that promote enjoyable, lifelong physical activity.

Handwashing is the single most effective way to reduce the spread of infection in a child care setting.

Resources
Keeping Kids Healthy: Preventing and Managing Communicable Disease in Child Care, California Department of Education, 1994.
Well Beings, the Canadian Paediatric Society, Volume 1, 1992.

By Rahman Zamani, MPH (8/25/98)
Nutrition and Feeding Care Plan

The nutrition and feeding care plan defines all members of the care team, communication guidelines (how, when, and how often), and all information on a child’s diet and feeding needs for this child while in child care.

Name of Child: ____________________________________________ Date: ______________________

Facility Name: ____________________________________________

Team Member Names and Titles (parents of the child are to be included)

Care Coordinator (responsible for developing and administering Nutrition and Feeding Care Plan): ________________________________

If training is necessary, then all team members will be trained.

☐ Individualized Family Service Plan (IFSP) attached ☐ Individualized Education Plan (IEP) attached

Communication

What is the team’s communication goal and how will it be achieved (notes, communication log, phone calls, meetings, etc.):

________________________________________________________________________________________

How often will team communication occur:  ☐ Daily  ☐ Weekly  ☐ Monthly  ☐ Bi-monthly  ☐ Other ________________

Date and time specifics: _________________________________________________________

Specific Diet Information

☐ Medical documentation provided and attached:  ☐ Yes  ☐ No  ☐ Not Needed

Specific nutrition/feeding-related needs and any safety issues: ________________________________

________________________________________________________________________________________

☐ Foods to avoid (allergies and/or intolerances): ________________________________

Planned strategies to support the child’s needs: ____________________________________________

________________________________________________________________________________________

Plan for absences of personnel trained and responsible for nutrition/feeding-related procedure(s): __________________________________________________________________

________________________________________________________________________________________

☐ Food texture/consistency needs: _______________________________________________________

☐ Special dietary needs: _________________________________________________________________

☐ Other: _____________________________________________________________________________

Eating Equipment/Positioning

☐ Physical Therapist (PT) and/or Occupational Therapist (OT) consult provided  ☐ Yes  ☐ No  ☐ Not Needed

Special equipment needed: _____________________________________________________________

Specific body positioning for feeding (attach additional documentation as necessary): __________________________________________________________________
Nutrition and Physical Activity
Child Care Health Consultation in the Early Care and Education Setting

Food Allergies

Fact Sheets for Families

Children with food allergies can pose challenges for parents and child care providers alike. Allergies of all kinds are the most frequent chronic disease found in child care. The Food Allergy Network reports that approximately 2 percent of the general population suffers from food allergies. That means 6 to 7 million Americans suffer some type of reaction to the foods they eat.

**Which foods are the most common allergens?**
Eight foods account for the majority of allergic reactions:
- peanuts
- milk
- fish
- soy
- shellfish
- wheat
- eggs
- tree nuts (walnuts, pecans, etc.)

**What happens during an allergic reaction?**
During an allergic reaction, the immune system releases large amounts of chemicals called histamines to protect the body from the offending allergic substance. These chemicals trigger a chain of allergic symptoms that can affect the respiratory system, gastrointestinal tract (involving the stomach or intestines), skin or cardiovascular system (involving the heart and blood vessels).

**What are the symptoms?**
Symptoms can include a tingling sensation in the mouth, swelling of the throat and tongue, difficulty breathing, hives, vomiting, abdominal cramps, diarrhea and a drop in blood pressure. Symptoms typically occur within minutes to two hours after the person has eaten the food to which he is allergic. A serious, often life-threatening allergic reaction characterized by low blood pressure, shock and difficulty breathing is called an anaphylactic reaction.

**What emergency treatment is available?**
Avoidance is the most important aspect in the management of life-threatening allergies. If a child does eat something to which she is severely allergic, medical treatment needs to be immediate. The treatment of choice is epinephrine, administered by injection. Other medications such as antihistamines, asthma medications or steroids may be given, but only as a second line of defense. Consult with your health care provider about a prescription for an epinephrine administration kit (usually Epi-Pen Jr. for children). These kits deliver a pre-mixed epinephrine solution through a shot that anyone can administer. The use of Epi-Pen is considered life-saving first aid and therefore is not prohibited in child care. Take a kit to your child care program and provide instructions in its use. Check the expiration date periodically on each kit to make sure the contents have not expired.

**What should I tell my child care provider?**
You or your child’s health care provider should tell any one who cares for your child about your child’s specific allergies and what to do in an emergency. Be sure to include the following:
- What foods your child is allergic to.
- What symptoms your child typically has.
- The treatment of choice for your child.
- How the child care provider can contact you in an emergency.
- The side effects and possible negative effects of the treatment of choice.
- How to use an Epi-Pen Jr., if that is the emergency treatment your child will need (you can practice with a demonstration Epi-Pen Jr. that does not contain medication).
- If an injection of epinephrine appears necessary, the child care provider should call 911 to have your child transported to the hospital. Under no circumstances should the child care provider attempt to drive your child to the hospital.

**Working with your child care provider**
Developing a plan of action with your child care provider can be a critical factor in saving your child’s life. Ask for your provider’s support in reducing or eliminating potential allergens from the child care home or center. With specific allergies such as peanut allergies, total elimination of the food is recommended. Everyone need to read food labels carefully. Ask your provider to communicate with other parents, so when treats are brought from home (birthdays, holidays, etc.), they are aware of any special food needs.

by Terry Holybee, RN
What is it?

Diabetes is a serious illness in which the body is unable to properly change sugar from food into energy. A simple sugar called glucose is the main source of energy for our body. Insulin, a hormone produced by the pancreas—a large gland behind the stomach—helps the body to use the glucose for energy.

Diabetes happens when the body does not produce enough insulin (Type 1 or insulin-dependent), or use it properly (Type 2 or non-insulin-dependent). As a result glucose begins to builds up in the blood, creating high sugar levels in the body.

Children with diabetes usually have Type 1 diabetes, in which the body does not make insulin. They therefore need daily injections of insulin.

Who gets it and how?

Approximately 127,000 American children, including 15,000 in California, have Type 1 diabetes. At some time, child care providers are likely to have a child with diabetes in their care.

Diabetes is not contagious. People cannot catch it from each other. At present, scientists do not know exactly what causes diabetes, but they believe that both genetic factors and viruses are involved. Diabetes can run in families.

What are the symptoms?

Two kinds of problems occur when the body does not make insulin:

1. **Hyperglycemia, or high blood sugar,** occurs with both types of diabetes when the body does not have enough insulin. Symptoms include frequent urination, excessive thirst, extreme hunger, unusual weight loss, irritability and poor sleep, nausea and vomiting, and weakness and blurred vision.

2. **Hypoglycemia, or low blood sugar,** is more common in people with Type 1 diabetes. It is also sometimes called “insulin reaction” or “insulin shock.” Symptoms may include hunger, pale skin, weakness, dizziness, headache, shakiness, changes in mood or behavior (irritability, crying, poor coordination), sweating, and rapid pulse. Treatment commonly involves quickly restoring glucose levels to normal with a sugary food or drink such as cola, orange juice, candy, or glucose tablets.

If not treated properly, it can result in loss of consciousness and life-threatening coma.

What factors affect blood glucose level?

The amount of blood sugar changes and can be affected by many factors such as diet, exercise, emotional stress, illness, and medicine.

Exercise helps to lower blood sugar. Regular exercise is important because of the need to balance the effect of exercise with food and insulin. If possible, the child should test blood glucose levels before taking part in a game or sport to determine when to eat a snack and how much food to eat.

Types, amount, and frequency of meals and snacks have different effects on blood sugar. Children with diabetes need special diets in reasonable amounts, and on regular schedules. Crackers with peanut butter or cheese, pretzels, apples, and juice make ideal snacks.

A child with diabetes may need to eat a snack before, during, or after energetic exercise.

Stress from a cold, sore throat, or other illness may increase the level of blood glucose.
The law and diabetes

The Americans with Disabilities Act, a federal law, considers diabetes a disability, forbids discrimination against the disabled, and puts legal responsibility on child care providers to care for the special needs of children with diabetes.

Effective January 1, 1998, child care providers in California are allowed to perform a blood-glucose test (using a finger-stick test) on a child in their care. However, they are not required to give an insulin injection to any child in a child care facility.

Blood glucose testing

Regular testing of blood glucose levels is a very important part of diabetes care. Testing is done by taking a drop of blood, usually from a finger, and placing it on a special test strip in a glucose meter. Glucose meters are easy to use, and most children quickly learn how to do their own blood glucose tests. A normal blood glucose level is between 70 and 120 mg/dl. Keeping blood glucose levels within this range is rarely possible in children with diabetes. A health care provider will often identify a target range for blood glucose levels – for example, 80 to 180 mg/dl.

How is it managed?

Care for diabetes is more flexible than it used to be. It requires self care or assistance with care if the child is very young. Children with diabetes can participate in all child care activities. Except for paying attention to their special care plan, you do not need to treat them differently just because they have diabetes.

The goals for treatment of diabetes in children are to:

(a) Maintain normal growth and development
(b) Keep blood glucose levels within a target range (not too high, not too low)
(c) Promote healthy emotional well being.

Child care providers in coordination with parents and health care providers can prepare a special care plan to meet the special needs of children with diabetes, and help them lead healthy, active, and fulfilled lives without having to change their regular program. A written, special care plan should include:

- When to test blood glucose and take insulin
- Regular meal and snack times
- Preferred snacks and party foods
- Usual symptoms of hypoglycemia and preferred treatments
- When and how to notify the child’s parents of problems
- When and how to contact the child’s health care provider
- Who will give insulin injections when needed

Preschool-age children with diabetes often need frequent blood glucose tests because they have not yet learned to recognize the symptoms of low blood sugar, can’t tell what they feel, or may try to avoid or delay finger-prick and insulin injections. They may also drink and urinate a lot, so make sure they can go to the bathroom as often as they need.

Providers considering or already performing the finger-stick test must follow “universal precautions” at all times. For more information on diabetes, please call our toll-free Healthline at 1-800-333-3212 or American Diabetes Association 1-800-DIABETES.

References

American Diabetes Association
Assembly Bill (AB) 221 Chapter 550, Statutes of 1997, Section 1596.797 of the Health and Safety Code.

By A. Rahman Zamani, MPH (2/27/98)
Growing children need more food energy than they can consume during a single meal. Therefore, nutritious, well-planned snacks are an important and necessary part of a child’s diet. Snacks can account for up to 20 percent of children’s nutrient needs, and help maintain their energy between meals. Offering snacks at regular intervals between meals encourages children to not eat on demand all day or refuse a meal because they know a snack is soon to follow. It is helpful to think of snack time as a planned mini-meal and not a spur of the moment indulgence. Remember that snacks should not replace a meal, but rather provide a valuable supplement.

With a little planning it is easy to choose and prepare snacks that have child appeal and are nutritious. Textures should be chewy, soft or crisp, not tough. Flavors should be mild, and neither too salty or too spicy. Temperatures should not be too cold or too hot. Colors should be bright and (when possible) shapes should be fun and interesting. Serving portions should fit the child’s needs depending upon his or her age and size. When preparing snacks for young children, the emphasis should be on healthy food choices, and avoiding foods a child is allergic or intolerant of and those that might be choking hazards.

If you are participating in the Child Care Food Program (CCFP), be sure you choose foods that are reimbursable and that you serve the appropriate portion size based on the child’s age. For additional resources or information on the Child Care Food Program call your local resource and referral agency or the Women, Infants and Children (WIC) program in your area.

Important

1. **Choking Hazards**: Young children can easily choke on nuts, seeds, popcorn, raw vegetables, grapes, peanut butter, meat sticks and hot dogs. Do not give these foods to infants. Cut foods into small, easily chewed finger food for toddlers and preschoolers who are still learning to bite and chew. Watch children of all ages closely whenever they are eating.

2. **Food Allergy**: An offending food triggers an allergic reaction by the immune system. Foods that are common allergens include peanuts, tree nuts (walnuts, pecans, etc.), shellfish, fish, milk, soy, wheat and eggs. If a child in your care has a nut allergy, you must have an Epi-pen available at all times. A care plan from the child’s health provider, plus training on how to use the Epi-pen from a public health nurse, the child’s health provider, or the parent is also required. For more information regarding allergies, visit www.foodallergynetwork.org or call the Healthline at (800) 333-3212 for a sample care plan.

3. **Food Intolerance**: An adverse physical reaction to a food or food additive that does not involve one’s immune system.

**Healthy Snack Ideas**

**Fruit-type Snacks**

- Canned fruit packed in light syrup or water is also acceptable.
  - choose small, whole fruits in season to reduce cost and waste
  - cut in slices or halves for variety, and serve plain or with cottage cheese, ricotta cheese, or yogurt (dairy or soy)
  - raisins and other dried fruits
  - apple ring sandwiches (creamy peanut butter* on apple rings)
  - frozen fruit cups (freeze pureed or crushed fruit and allow to soften slightly in the fridge before serving)
homemade popsicles (freeze any 100 percent fresh fruit juice, except pineapple juice which does not freeze well, and pour it into small paper cups or ice cube trays, insert popsicle sticks, and freeze until solid; then remove popsicle from cup by running under hot water for about 10 seconds. Blending yogurt with the fruit juice is another option)

**Fresh Vegetable-type Snacks**
(frozen or canned vegetables without added sodium are also acceptable)
- soft-cooked vegetables—carrots, asparagus, green beans, pea pods, sweet potato strips, broccoli or cauliflower served with a cottage cheese, hummus, or yogurt (dairy or soy) dip
- green pepper slices, tomato wedges or zucchini strips served with creamy peanut butter, cream cheese or cottage cheese
- grilled cheese and tomato sandwiches, or cheese and veggie quesadillas.

* Avoid “chunky” peanut butter, raw celery and carrots because they are a choking hazard.

**Dairy-type Snacks**
- yogurt with applesauce or pureed fruit
- flavored or plain yogurt (dairy or soy) or cottage cheeses combined with fruit
- pudding
- slices of cheese or “string” cheese (dairy or soy)
- homemade frozen “juice pops” with calcium-fortified juices (combine yogurt—dairy or soy—with 100 percent fruit juice, and add pureed or very soft fruit)
- fruit shake (blend together cow’s milk or soy/rice milk with fruit and add a dash of cinnamon and nutmeg)

Use low-fat products only for children over 5 years old.

**Bread-type Snacks**
- mini flavored rice or corn cakes
- pumpkin, zucchini, banana, or cranberry bread
- bran, corn, apple, banana, or blueberry muffins
- homemade soft pretzels or bread sticks
- non-sugared cereals

- whole grain crackers, breads or bagels with various soft cream cheese spreads, creamy peanut butter, jelly, cottage cheese or hummous

**Meat-type Snacks**
- hard cooked eggs (wedges or slices)
- kabobs made with any combination of cheese, fruit, vegetables and sliced or cubed cooked meat or tofu (remove the toothpicks before serving!)
- pita pocket filled with lean sliced meat, tuna, hummous, tofu, cheese (dairy or soy), lettuce and/or tomato
- English muffins or pita bread topped with tomato sauce, grated cheese (soy or dairy) and lean cuts of meats or tofu, baked, and cut into quarters
- pita bread, flour or corn tortillas with beans or canned chili, sprinkled with grated cheese (soy or dairy), and topped with plain yogurt or sour cream if desired

**Notes to Remember**
- If using dairy, soy products or citrus fruits, be sure children are not allergic or intolerant to them before serving.
- Limit liquids as snacks. Avoid juice drinks, sodas, or soft drinks, in particular those with caffeine. Use only juices that are 100 percent juice. And always encourage children to drink plenty of water.
- Avoid offering high-sugar cookies, doughnuts, brownies and similar other baked goods (such as Oreos, Hostess Cupcakes, etc.). Avoid snack foods that will stick to the children’s teeth and the roof of their mouths, which may cause gagging and can contribute to dental decay.
- Don’t be swayed by advertising, as many prepared foods (such as Lunchables) are marketed as kid-friendly, but are actually poor in nutrition.

**Resources**
The Child Care Nutrition Resource System. Provides recipes, resources and information on preparing nutritious meals and food safety. www.nal.usda.gov/childcare

by Vella Black-Roberts, RD, MPH (08/98)
Revised by Susan Jensen, RN, MSN, PNP and Mardi Lucich, MAEd (12/03)
The food preferences of the children and families you care for will vary. To assist you in providing nutritious meals for the children and to help educate families, we have prepared the chart below that highlights the different types of vegetarian diets. We have included helpful explanations and additional information that will assist you in promoting good nutrition and healthy options for those that choose vegetarian diets. A vegetarian diet can provide all the nutrients necessary for a child’s growth and development, but careful planning is key when food groups are excluded. Like all children, those on a vegetarian diet need enough food variety and energy—in the form of calories—to fuel their rapid growth and provide for their high nutrient needs.

Appropriately planned vegan diets can satisfy nutrient needs for young children and promote normal growth. If a child is on a vegan diet it is recommended that the family works closely with their health care provider and a pediatric nutrition specialist to ensure adequate nutrient intake.

Children who are vegetarian need foods high in concentrated sources of calories, iron, protein, vitamins and minerals, so you should therefore include foods such as cooked legumes (beans, peas, and lentils), whole grain breads and pastas, enriched cereals, nuts, seeds, soy and/or dairy products, dried fruit and eggs. Many common foods such as rice, greens, potatoes and corn also add to protein intake.

Children on vegetarian diets that exclude eggs and dairy products may be lacking in essential vitamins and minerals, such as calcium, protein, iron, zinc, vitamins D and B12, essential fatty acids (EFA) and riboflavin. The family needs to work closely with their health care provider and a pediatric nutrition specialist as vitamin and mineral supplementation may be recommended for young children whose diets may not provide adequate nutrients.

Low-fat diets are not suitable for young children, as a diet low in fat may not provide adequate energy intake. For children 5 years and older there should be a gradual reduction in fat, particularly saturated fat.

Macrobiotic diets are NOT recommended for young children.

Note: Children who are vegetarian may require more frequent meals and planned snacks than the Child Care Food Program (CCFP) meal schedule recommends.

Meal planning tips for vegetarian children
- Satisfy children’s sweet tooth naturally with ripe bananas, sweet potatoes, winter squash and dried fruit. Try offering a fruit ambrosia salad made with sliced bananas, cubed steamed sweet potatoes and a sprinkling of chopped dates or dried apricots.

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<tr>
<th>Types of Vegetarian Diets</th>
<th>Beef &amp; Pork</th>
<th>Fish &amp; Chicken</th>
<th>Milk &amp; Milk Products</th>
<th>Eggs</th>
<th>Vegetables, Fruit, Breads, Cereals &amp; Nuts</th>
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<td>Vegan (only food from plant sources)</td>
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</table>
• Calcium, Vitamin D, and Vitamin B12 are very important for growing bones and teeth. To help children obtain these nutrients, use dairy products (cheese, yogurt, milk), soy or rice milks (be sure non-dairy milk alternatives are fortified with calcium and vitamins D and B12), calcium-fortified fruit juices and tofu. Dark leafy greens such as kale, bok choy and collard/mustard greens are also good sources of calcium.

• To ensure satisfactory iron intake offer good sources of vitamin C, such as tomatoes, broccoli, melons and citrus fruits.

• Good meat substitutes are beans, tofu, nuts, smooth nut and seed butters and eggs.

• Combining legumes, seeds and/or nuts with grains provides “complete” proteins. For example:
  - Pinto, red or black beans and rice
  - Peanut butter on whole wheat bread
  - Chili beans and cornbread
  - Soybean and rice casserole

• Butter, cheese, avocados and olive oil in moderation will provide additional fat in the diet.

• Set a good example and participate in the mealtime with the children. Let them see you eating healthy foods and modeling appropriate mealtime behavior.

• Involve children in food preparation. Even young toddlers can tear lettuce and help put cut-up vegetables into a pot.

• Some children may prefer eating single foods in separate bowls rather than a mixture of foods such as a casserole.

Children may be allergic to nuts and nut butters, so watch them carefully for signs of an allergic reaction. Nut butters should only be given to children over 1 year of age, and only with supervision. Whole nuts are a choking hazard and should never be given to a child under 3 years of age.

Additional mealtime tips

• Offer choices of foods. Letting children make their own decisions can increase acceptance of different foods.

• Offer a variety of foods repeatedly because children’s food preferences often change—the food they refuse today may become tomorrow’s favorite. Studies show that a new food can be offered up to 15 to 20 times before a child will try it.

• Keep mealtime a pleasant time. Do not force a child to eat or use food as a reward and try to remain low-key about food refusals.

It can be fun and interesting to work with parents on meeting their child’s nutritional needs. With proper planning, it isn’t difficult to provide a child with a nutritious, well-balanced vegetarian diet. The healthy habits developed at a young age about foods and eating can last a lifetime. For more information call the Healthline at (800) 333-3212 or visit our Web site at www.ucsfchildcarehealth.org.

References

Accommodating the Vegetarian Child in CACFP, Katie O’Neill, MPH, RD.

Healthy Young Children, National Association for the Education of Young Children, 1991.


By Vella Black-Roberts, RD, MPH, 8/98
Revised by Susan Jensen, RN, MSN, PNP and Mardi Lucich, MEd 10/02
CHILD CARE CENTER
SELF ASSESSMENT GUIDE

SAFE FOOD HANDLING AND PREPARATION
LICENSING REQUIREMENTS AND BEST PRACTICES

COMMUNITY CARE LICENSING DIVISION
“Promoting Healthy, Safe and
SAFE FOOD HANDLING AND PREPARATION
LICENSING REQUIREMENTS AND BEST PRACTICES

Safe practices in food handling, cooking, and storage are essential to prevent food borne illness and for providing healthy food for children. This guide identifies licensing requirements for food handling and provides some “best practices” to help prevent food from spreading illness to you, your staff and the children in care. We encourage you to use the guide to periodically assess the practices used in your center to ensure safe food handling and preparation.

Food safety practices that are required by the Child Care Center Home regulations are noted with the regulation section in parentheses. Child care facilities are exempt from the requirements of the California Uniform Retail Food Facilities Law (Health and Safety Code, Division 104, Part 7, Chapter 4).

At the back of the guide, we have attached charts on food cooking temperatures and food cold storage that can help you ensure safe cooking and storage of food in your child care center.

SAFE SHOPPING

- Do not buy or use meat, poultry and meat products unless they have been inspected. (Section 101227)
- Do not use or buy home canned food from outside sources, food from dented, rusted, bulging, or leaking cans, or food from cans without labels. (Section 101227)
- Do not buy or use raw or non-pasteurized milk or milk products, or non-pasteurized juices. (Section 101227)
- Place frozen food and perishables such as meat, poultry or fish in plastic bags and put them in the shopping cart last.
- Do not buy torn or leaking packages.
- Do not buy foods past “sell-by” or expiration dates.

SAFE STORAGE OF FOODS

- Keep your refrigerator and freezer clean and in safe condition. (Section 101227)
• Store soaps, detergents, cleaning compounds or similar substances away from food supplies to prevent accidental poisoning, potential leakage problems, and contamination. Always keep these substances away from children. (Section 101227)

• Do not store pesticides and other similar toxic substances where you store, cook or prepare food, or where you store kitchen equipment or utensils. Always keep these substances away from children. (Section 101227)

• Unpack perishable foods from the car first and put them in the refrigerator right away.

• Keep the refrigerator temperature at 40°F or less, and the freezer at 0°F, to slow the growth of most bacteria and keep them from multiplying.

• Check the temperature of your refrigerator and freezer daily with an appliance thermometer.

• Keep all food stored in the refrigerator and freezer covered, wrapped, stored in airtight containers, or otherwise protected from contamination.

• Wrap raw meat, poultry, and seafood securely to prevent raw juices from contaminating other foods. Store them in the meat drawer or coldest section of the refrigerator or freezer.

• Do not store perishable foods, such as eggs, in the refrigerator door. The temperature of storage bins in the door fluctuates more than the temperature in the cabinet.

• Cook or freeze fresh poultry, fish, ground meat, and mixed meats within 2 days after you buy them. Cook or freeze other beef, veal, lamb or pork within 3 to 5 days.

• Store food that does not need refrigeration in a way to keep insects and rodents from entering the food. For example, keep storage containers off the floor.

• Store dry, bulk foods that are not in their original, unopened containers off the floor in clean metal, glass, or food grade plastic containers with tight fitting covers. Label and date the containers.

• Keep storerooms clean, dry, well ventilated, and cool (about 60°F).

**FOOD BROUGHT FROM HOME**

• Label breast milk with the infant’s name and date, and refrigerate or freeze it right away. (Section 101427)

• Label food brought by parents with the child’s name and date, and store it in the refrigerator when needed.
• Do not give food brought from one child’s home to another child.

• Never give breast milk intended for one infant to another infant.

• Do not store breast milk, unless already frozen, overnight. Always send unused breast milk home with the infant.

• Do not store defrosted breast milk for more than 12 hours. Never refreeze breast milk.

• Throw away bottles of formula or breast milk that are not finished after a feeding. Do not refrigerate, reheat or serve them again.

SAFE FOOD PREPARATION

• Keep all kitchen equipment, dishes, and utensils clean and in safe condition. (Section 101227)

• Wash dishes and eating and serving utensils in a dishwasher (reach a temperature of 165°F during the washing or drying cycle) or by hand with a sanitizing agent. (Section 101227)

• Keep the food preparation area separate from the eating, napping, play, toilet and bathroom areas, and from areas where animals are kept. Never use the food preparation area as a passageway while food is being prepared. (Section 101227)

• Make sure that all staff wash their hands before preparing food, serving and eating meals and snacks, and after toileting, diapering and outdoor activities. The best way to combat the spread of communicable disease or germs is by careful handwashing with liquid soap, rinsing under running water, and drying with paper towels.

• Do not wash hands in food preparation sinks to prevent contamination of food.

• Keep all surfaces that come in contact with food (including tables and countertops), floors, and shelving in good repair. Use smooth and nonporous materials that are easily cleaned and sanitized.

• Use cutting boards that can be disinfected (such as glass, Formica, or plastic). Always clean them with soap and hot water after each use.

• Do not use cutting boards with crevices and cuts because they can hide food material that can grow bacteria and contaminate the next food cut on the surface.

• Always clean and sanitize cutting boards, knives and other utensils after they come in contact with raw meat, poultry and seafood. Use one cutting board for raw meat products and another for salads and ready-to-eat foods to prevent cross contamination of bacteria from one food to another.
• Air-dry hand washed dishes to eliminate recontamination from hands or towels.
• Use dishes with smooth, hard-glazed surfaces that do not have cracks or chips.
• Clean and sanitize table surfaces before and after use.
• Sanitize kitchen dishcloths and sponges often because these materials can hide bacteria and promote their growth.
• Wash kitchen towels and cloths often in hot water in the washing machine.
• Clean the can opener blade after each use.
• Keep garbage in a covered container, away from children. Empty the garbage every day to reduce odors, control insects and rodents, and protect children and the child care center from contamination.
• Occasionally sanitize the kitchen sink, drain, disposal and connecting pipe by pouring a solution of one teaspoon of chlorine bleach in one quart of water or a commercial cleaning solution down the drain.
• Wash fresh fruits and vegetables with water, and soap and scrub brush when needed, to reduce or eliminate any pesticides or residues.
• Do not allow infants and toddlers in the food preparation area to protect them from kitchen hazards.

THAWING FOOD SAFELY

• Do not thaw meat, poultry, and fish products on the counter or sink because harmful bacteria can grow at room temperature.
• Thaw food in the refrigerator or microwave oven.
• Immediately cook food thawed in the microwave.
• Use defrosted food (cooked or frozen) within 1 to 2 days.

SAFE COOKING

• Cook ground meats to 160° F; ground poultry to 165° F; beef, veal and lamb steaks, roasts, and chops up to 145° F; all cuts of fresh pork to 160° F; whole poultry to 180° F in the thigh; and breasts up to 170° F. Use a meat thermometer to determine the temperature in the thickest part of the meat.
• Never serve raw or slightly cooked eggs. Cook eggs until the white is firm and the yolk begins to harden. Substitute pasteurized eggs for raw eggs if sampling homemade dough, cake batter, or eating other foods made with raw eggs such as ice cream, mayonnaise and eggnog.
SERVING FOOD SAFELY

- Keep hot foods hot (over 140° F) and cold food cold (under 40° F) until they are eaten or cooked.
- Carry perishable picnic food in a cooler with a cold pack or ice. Store the cooler in the shade and open it as little as possible.
- Do not leave cooked, perishable foods, including hot foods such as soups or sauces, out for more than two hours after cooking (one hour in temperatures over 90° F). The bacteria that cause food borne illness grow rapidly at room temperature.
- Never offer foods that are round, hard, small, thick and sticky, smooth, or slippery to children under four years of age because they can cause choking. Hot dogs (sliced into rounds), whole grapes, hard candy, nuts, seeds, raw peas, dried fruit, pretzels, chips, peanuts, popcorn, marshmallows, spoonfuls of peanut butter, and chunks of meat, which are larger than can be swallowed whole are examples of foods that can cause choking.
- Cut food into small pieces for infants (¼ inch) and toddlers (½ inch).
- Do not use microwave ovens for warming infant bottles and infant food because the microwave can heat liquids or food unevenly and to scalding temperatures. The milk or formula in a microwaved bottle may reach a higher temperature than the outside of the bottle.

HANDLING LEFTOVERS SAFELY

- Divide large amounts of leftovers (for example, large cuts of meat or poultry) into smaller portions and place them in shallow containers before refrigerating for faster cooling.
- Use refrigerated leftovers within three to four days or discard them.
- Bring sauces, soups, and gravy to a boil when reheating. Heat other leftovers to 165° F.
### COOKING TEMPERATURE CHART

The following is a listing of the minimum temperatures that foods must reach to be considered safe and done, no matter how you prepare them.

<table>
<thead>
<tr>
<th>Food Product</th>
<th>Internal Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh Ground beef, veal, lamb and pork:</td>
<td>160° F</td>
</tr>
<tr>
<td>Beef, veal, lamb (roasts, steaks, chops)</td>
<td></td>
</tr>
<tr>
<td>• Medium rare</td>
<td>145° F</td>
</tr>
<tr>
<td>• Medium</td>
<td>160° F</td>
</tr>
<tr>
<td>• Well done</td>
<td>170° F</td>
</tr>
<tr>
<td>Fresh Pork (roasts, steaks, chops)</td>
<td></td>
</tr>
<tr>
<td>• Medium</td>
<td>160° F</td>
</tr>
<tr>
<td>• Well done</td>
<td>170° F</td>
</tr>
<tr>
<td>Ham, cook before eating:</td>
<td>160° F</td>
</tr>
<tr>
<td>Ham, reheat fully cooked:</td>
<td>140° F</td>
</tr>
<tr>
<td>Poultry</td>
<td></td>
</tr>
<tr>
<td>• Ground chicken, turkey</td>
<td>165° F</td>
</tr>
<tr>
<td>• Whole chicken, turkey</td>
<td>180° F</td>
</tr>
<tr>
<td>• Breasts, roasts</td>
<td>170° F</td>
</tr>
<tr>
<td>Stuffing, alone or in bird:</td>
<td>165° F</td>
</tr>
<tr>
<td>Egg dishes, casseroles</td>
<td>160° F</td>
</tr>
<tr>
<td>Leftovers, to reheat</td>
<td>165° F</td>
</tr>
</tbody>
</table>

Source: Food Safety and Inspection Service, United States Department of Agriculture
COLD STORAGE CHART

Since product dates aren’t a guide for safe use of a product, consult this chart and follow these tips. These short but safe time limits will help keep refrigerated food (40°F) from spoiling or becoming dangerous.

- Purchase the product before “sell-by” or expiration dates.
- Follow handling recommendations on product.
- Keep meat and poultry in its package until just before using.
- If freezing meat and poultry in its original package longer than 2 months, overwrap these packages with airtight heavy-duty foil, plastic wrap, or freezer paper, or place the package inside a plastic bag.

Because freezing (0°F) keeps food safe indefinitely, recommended storage times are for quality only.

<table>
<thead>
<tr>
<th>Product</th>
<th>Refrigerator</th>
<th>Freezer</th>
<th>Product</th>
<th>Refrigerator</th>
<th>Freezer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eggs</strong></td>
<td></td>
<td></td>
<td><strong>Hot Dogs &amp; Lunch Meats</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh, in shell</td>
<td>3 weeks</td>
<td>Don’t freeze</td>
<td>Hot dogs, opened package</td>
<td>1 week</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>Raw yolks, whites</td>
<td>2 to 4 days</td>
<td>1 year</td>
<td>unopened package</td>
<td>2 weeks</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>Hard cooked</td>
<td>1 week</td>
<td>Don’t freeze well</td>
<td>Lunch meats, opened package</td>
<td>3 to 5 days</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>Liquid pasteurized eggs</td>
<td></td>
<td></td>
<td>unopened package</td>
<td>2 weeks</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>or egg substitutes, opened</td>
<td>3 days</td>
<td>Don’t freeze</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unopened</td>
<td>10 days</td>
<td>1 year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mayonnaise, commercial</strong></td>
<td></td>
<td></td>
<td><strong>Bacon &amp; Sausage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigerate after opening</td>
<td>2 months</td>
<td>Don’t freeze</td>
<td>Bacon</td>
<td>7 days</td>
<td>1 month</td>
</tr>
<tr>
<td>TV Dinners, Frozen Casseroles</td>
<td>Keep frozen until ready to eat</td>
<td>3 to 4 months</td>
<td>Sausage, raw from pork, beef,</td>
<td>1 to 2 days</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>chicken or turkey</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Deli &amp; Vacuum-Packed Products</strong></td>
<td></td>
<td></td>
<td>Smoked breakfast links, patties</td>
<td>7 days</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>Store-prepared (or homemade)</td>
<td>3 to 5 days</td>
<td>Don’t freeze well</td>
<td>Summer sausage labeled</td>
<td>3 months</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>egg, chicken, tuna, ham,</td>
<td></td>
<td></td>
<td></td>
<td>3 weeks</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>macaroni salads</td>
<td></td>
<td></td>
<td>“Keep Refrigerated,” unopened</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-stuffed pork &amp; lamb chops,</td>
<td>1 day</td>
<td>Don’t freeze well</td>
<td>opened</td>
<td></td>
<td></td>
</tr>
<tr>
<td>chicken breasts stuffed w/ dressing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store-cooked convenience meals</td>
<td>3 to 4 days</td>
<td>Don’t freeze well</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial brand vacuum-packed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dinners w/ USDA seal, unopened</td>
<td>2 weeks</td>
<td>Don’t freeze well</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Raw Hamburger, Ground &amp; Stew Meat</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hamburger &amp; stew meats</td>
<td>1 to 2 days</td>
<td>3 to 4 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground turkey, veal, pork, lamb</td>
<td>1 to 2 days</td>
<td>3 to 4 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; mixtures of them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ham, Corned Beef</strong></td>
<td></td>
<td></td>
<td><strong>Fresh Poultry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corned beef in pouch</td>
<td>5 to 7 days</td>
<td>Drained, 1 month</td>
<td>Chicken or turkey, whole</td>
<td>1 to 2 days</td>
<td>1 year</td>
</tr>
<tr>
<td>with pickling juices</td>
<td></td>
<td></td>
<td>Chicken or turkey, parts</td>
<td>1 to 2 days</td>
<td>9 months</td>
</tr>
<tr>
<td>Ham, canned, labeled</td>
<td></td>
<td></td>
<td>Giblets</td>
<td>1 to 2 days</td>
<td>3 to 4 months</td>
</tr>
<tr>
<td>“Keep Refrigerated,” unopened</td>
<td>6 to 9 months</td>
<td>Don’t freeze</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>opened</td>
<td>3 to 5 days</td>
<td>1 to 2 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ham, fully cooked, whole</td>
<td>7 days</td>
<td>1 to 2 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ham, fully cooked, half</td>
<td>3 to 5 days</td>
<td>1 to 2 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ham, fully cooked, slices</td>
<td>3 to 4 days</td>
<td>1 to 2 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Soups &amp; Stews</strong></td>
<td></td>
<td></td>
<td><strong>Cooked Poultry, Leftover</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable or meat-added</td>
<td>3 to 4 days</td>
<td>2 to 3 months</td>
<td>Fried chicken</td>
<td>3 to 4 days</td>
<td>4 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cooked poultry dishes</td>
<td>3 to 4 days</td>
<td>4 to 6 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pieces, plain</td>
<td>3 to 4 days</td>
<td>4 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pieces covered with broth, gravy</td>
<td>1 to 2 days</td>
<td>6 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chicken nuggets, patties</td>
<td>1 to 2 days</td>
<td>1 to 3 months</td>
</tr>
</tbody>
</table>

Source: Food Safety and Inspection Service, United States Department of Agriculture
FAMILY CHILD CARE HOMES
SELF ASSESSMENT GUIDE

SAFE FOOD HANDLING AND PREPARATION
LICENSING REQUIREMENTS AND BEST PRACTICES

COMMUNITY CARE LICENSING DIVISION
“Promoting Healthy, Safe and Supportive Community Care”
Safe practices in food handling, cooking, and storage are essential to prevent food borne illness and for providing healthy food for children. This guide identifies licensing requirements for food handling and provides some “best practices” to help prevent food from spreading illness to you and the children in care. We encourage you to use the guide to periodically assess the practices used in your home to ensure safe food handling and preparation.

Food safety practices that are required by the Family Child Care Home regulations are noted with the regulation section in parentheses. Child care facilities are exempt from the requirements of the California Uniform Retail Food Facilities Law (Health and Safety Code, Division 104, Part 7, Chapter 4).

At the back of the guide, we have attached charts on food cooking temperatures and food cold storage that can help you ensure safe cooking and storage of food in your home.

**SAFE SHOPPING**

- Place frozen food and perishables such as meat, poultry or fish in plastic bags and put them in the shopping cart last.
- Do not buy torn or leaking packages.
- Do not buy foods past “sell-by” or expiration dates.
- Do not buy or use meat, poultry and meat products unless they have been inspected.
- Do not use or buy home canned food from outside sources, food from dented, rusted, bulging, or leaking cans, or food from cans without labels.
- Do not buy or use raw or non-pasteurized milk or milk products, or non-pasteurized juices.

**SAFE STORAGE OF FOODS**

- Unpack perishable foods from the car first and put them in the refrigerator right away.
- Keep the refrigerator temperature at 40°F or less, and the freezer at 0°F, to slow the growth of most bacteria and keep them from multiplying.
Check the temperature of your refrigerator and freezer daily with an appliance thermometer.

Keep your refrigerator and freezer clean and in safe condition.

Keep all food stored in the refrigerator and freezer covered, wrapped, stored in airtight containers, or otherwise protected from contamination.

Wrap raw meat, poultry, and seafood securely to prevent raw juices from contaminating other foods. Store them in the meat drawer or coldest section of the refrigerator or freezer.

Do not store perishable foods, such as eggs, in the refrigerator door. The temperature of storage bins in the door fluctuates more than the temperature in the cabinet.

Cook or freeze fresh poultry, fish, ground meat, and mixed meats within 2 days after you buy them. Cook or freeze other beef, veal, lamb or pork within 3 to 5 days.

Store food that does not need refrigeration in a way to keep insects and rodents from entering the food. For example, keep storage containers off the floor.

Store dry, bulk foods that are not in their original, unopened containers off the floor in clean metal, glass, or food grade plastic containers with tight fitting covers. Label and date the containers.

Keep storerooms clean, dry, well ventilated, and cool (about 60°F).

Store soaps, detergents, cleaning compounds or similar substances away from food supplies to prevent accidental poisoning, potential leakage problems, and contamination. Always keep these substances away from children.

Do not store pesticides and other similar toxic substances where you store, cook or prepare food, or where you store kitchen equipment or utensils. Always keep these substances away from children.

**FOOD BROUGHT FROM HOME**

Label food brought by parents with the child’s name and date, and store it in the refrigerator when needed. (102417)

Do not give food brought from one child’s home to another child.

Label breast milk with the infant’s name and date, and refrigerate or freeze it right away.

Never give breast milk intended for one infant to another infant.
- Do not store breast milk, unless already frozen, overnight. Always send unused breast milk home with the infant.

- Do not store defrosted breast milk for more than 12 hours. Never refreeze breast milk.

- Throw away bottles of formula or breast milk that are not finished after a feeding. Do not refrigerate, reheat or serve them again.

**SAFE FOOD PREPARATION**

- Wash your hands before preparing food, serving and eating meals and snacks, and after toileting, diapering and outdoor activities. The best way to combat the spread of communicable disease or germs is by careful handwashing with liquid soap, rinsing under running water, and drying with paper towels.

- Wash and sanitize sinks before preparing food to prevent contamination of food.

- Keep all kitchen equipment, dishes, and utensils clean and in safe condition.

- Keep all surfaces that come in contact with food (including tables and countertops), floors, and shelving in good repair. Use smooth and nonporous materials that are easily cleaned and sanitized.

- Use cutting boards that can be disinfected (such as glass, Formica, or plastic). Always clean them with soap and hot water after each use.

- Do not use cutting boards with crevices and cuts because they can hide food material that can grow bacteria and contaminate the next food cut on the surface.

- Always clean and sanitize cutting boards, knives and other utensils after they come in contact with raw meat, poultry and seafood. Use one cutting board for raw meat products and another for salads and ready-to-eat foods to prevent cross contamination of bacteria from one food to another.

- Wash dishes and eating and serving utensils in a dishwasher (reach a temperature of 165°F during the washing or drying cycle) or by hand with a sanitizing agent.

- Air-dry hand washed dishes to eliminate recontamination from hands or towels.

- Use dishes with smooth, hard-glazed surfaces that do not have cracks or chips.

- Clean and sanitize table surfaces before and after use.

- Sanitize kitchen dishcloths and sponges often because these materials can hide bacteria and promote their growth.

- Wash kitchen towels and cloths often in hot water in the washing machine.
Clean the can opener blade after each use.

Keep garbage in a covered container, away from children. Empty the garbage every day to reduce odors, control insects and rodents, and protect children and the home from contamination.

Occasionally sanitize the kitchen sink, drain, disposal and connecting pipe by pouring a solution of one teaspoon of chlorine bleach in one quart of water or a commercial cleaning solution down the drain.

Wash fresh fruits and vegetables with water, and soap and scrub brush when needed, to reduce or eliminate any pesticides or residues.

Keep the food preparation area of the kitchen separate from the eating, napping, play, toilet and bathroom areas, and from areas where animals are kept. Never use the food preparation area as a passageway while food is being prepared.

Do not allow infants and toddlers in the food preparation area to protect them from kitchen hazards.

**THAWING FOOD SAFELY**

- Do not thaw meat, poultry, and fish products on the counter or sink because harmful bacteria can grow at room temperature.
- Thaw food in the refrigerator or microwave oven.
- Immediately cook food thawed in the microwave.
- Use defrosted food (cooked or frozen) within 1 to 2 days.

**SAFE COOKING**

- Cook ground meats to 160° F; ground poultry to 165° F; beef, veal and lamb steaks, roasts, and chops up to 145° F; all cuts of fresh pork to 160° F; whole poultry to 180° F in the thigh; and breasts up to 170° F. Use a meat thermometer to determine the temperature in the thickest part of the meat.
- Never serve raw or slightly cooked eggs. Cook eggs until the white is firm and the yolk begins to harden. Substitute pasteurized eggs for raw eggs if sampling homemade dough, cake batter, or eating other foods made with raw eggs such as ice cream, mayonnaise and eggnog.

**SERVING FOOD SAFELY**

- Keep hot foods hot (over 140° F) and cold food cold (under 40° F) until they are eaten or cooked.
- Always carry perishable picnic food in a cooler with a cold pack or ice. Store the cooler in the shade and open it as little as possible.

- Do not leave cooked, perishable foods, including hot foods such as soups or sauces, out for more than two hours (one hour in temperatures over 90°F). The bacteria that cause food borne illness grow rapidly at room temperature.

- Never offer foods that are round, hard, small, thick and sticky, smooth, or slippery to children under four years of age because they can cause choking. Hot dogs (sliced into rounds), whole grapes, hard candy, nuts, seeds, raw peas, dried fruit, pretzels, chips, peanuts, popcorn, marshmallows, spoonfuls of peanut butter, and chunks of meat, which are larger than can be swallowed whole are examples of foods that can cause choking.

- Cut food into small pieces for infants (¼ inch) and toddlers (½ inch).

- Do not use the microwave oven for warming infant bottles and infant food because the microwave can heat liquids or food unevenly and to scalding temperatures. The milk or formula in a microwaved bottle may reach a higher temperature than the outside of the bottle.

### HANDLING LEFTOVERS SAFELY

- Divide large amounts of leftovers (for example, large cuts of meat or poultry) into smaller portions and place them in shallow containers before refrigerating for faster cooling.

- Use refrigerated leftovers within three to four days or discard them.

- Bring sauces, soups, and gravy to a boil when reheating. Heat other leftovers to 165°F.
# COOKING TEMPERATURE CHART

The following is a listing of the minimum temperatures that foods must reach to be considered safe and done, no matter how you prepare them.

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</tr>
</thead>
<tbody>
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</tr>
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<td></td>
</tr>
<tr>
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</tr>
<tr>
<td>- Medium</td>
<td>160° F</td>
</tr>
<tr>
<td>- Well done</td>
<td>170° F</td>
</tr>
<tr>
<td>Fresh Pork (roasts, steaks, chops)</td>
<td></td>
</tr>
<tr>
<td>- Medium</td>
<td>160° F</td>
</tr>
<tr>
<td>- Well done</td>
<td>170° F</td>
</tr>
<tr>
<td>Ham, cook before eating:</td>
<td>160° F</td>
</tr>
<tr>
<td>Ham, reheat fully cooked:</td>
<td>140° F</td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
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</tr>
<tr>
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<td>170° F</td>
</tr>
<tr>
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<td>165° F</td>
</tr>
<tr>
<td>Egg dishes, casseroles</td>
<td>160° F</td>
</tr>
<tr>
<td>Leftovers, to reheat</td>
<td>165° F</td>
</tr>
</tbody>
</table>

Source: Food Safety and Inspection Service, United States Department of Agriculture
Since product dates aren’t a guide for safe use of a product, consult this chart and follow these tips. These short but safe time limits will help keep refrigerated food (40° F) from spoiling or becoming dangerous.

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- Follow handling recommendations on product.
- Keep meat and poultry in its package until just before using.
- If freezing meat and poultry in its original package longer than 2 months, overwrap these packages with airtight heavy-duty foil, plastic wrap, or freezer paper, or place the package inside a plastic bag.

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<tr>
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<th>Refrigerator</th>
<th>Freezer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eggs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh, in shell</td>
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</tr>
<tr>
<td>Raw yolks, whites</td>
<td>2 to 4 days</td>
<td>1 year</td>
</tr>
<tr>
<td>Hard cooked</td>
<td>1 week</td>
<td>Don’t freeze well</td>
</tr>
<tr>
<td>Liquid pasteurized eggs</td>
<td>3 days</td>
<td>Don’t freeze</td>
</tr>
<tr>
<td>or egg substitutes, opened</td>
<td>10 days</td>
<td>1 year</td>
</tr>
<tr>
<td>Unopened</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Source: Food Safety and Inspection Service, United States Department of Agriculture |
### Sequence of Infant Development and Feeding Skills in Normal, Healthy Full-Term Infants*

#### DEVELOPMENTAL SKILLS

<table>
<thead>
<tr>
<th>Baby's Approx. Age</th>
<th>Mouth Patterns</th>
<th>Hand and Body Skills</th>
<th>Feeding Skills or Abilities</th>
</tr>
</thead>
</table>
| **Birth through 5 months** | • Suck/swallow reflex  
• Tongue thrust reflex  
• Rooting reflex  
• Gag reflex | • Poor control of head, neck, trunk  
• Brings hands to mouth around 3 months | • Swallows liquids but pushes most solid objects from the mouth |
| **4 months through 6 months** | • Draws in upper or lower lip as spoon is removed from mouth  
• Up-and-down munching movement  
• Can transfer food from front to back of tongue to swallow  
• Tongue thrust and rooting reflexes begin to disappear  
• Gag reflex diminishes  
• Opens mouth when sees spoon approaching | • Sits with support  
• Good head control  
• Uses whole hand to grasp objects (palmer grasp) | • Takes in a spoonful of pureed or strained food and swallows it without choking  
• Drinks small amounts from cup when held by another person, with spilling |
| **5 months through 9 months** | • Begins to control the position of food in the mouth  
• Up-and-down munching movement  
• Positions food between jaws for chewing | • Begins to sit alone unsupported  
• Follows food with eyes  
• Begins to use thumb and index finger to pick up objects (pincer grasp) | • Begins to eat mashed foods  
• Eats from a spoon easily  
• Drinks from a cup with some spilling  
• Begins to feed self with hands |
| **8 months through 11 months** | • Moves food from side-to-side in mouth  
• Begins to curve lips around rim of cup  
• Begins to chew in rotary pattern (diagonal movement of the jaw as food is moved to the side or center of the mouth) | • Sits alone easily  
• Transfers objects from hand to mouth | • Begins to eat ground or finely chopped food and small pieces of soft food  
• Begins to experiment with spoon but prefers to feed self with hands  
• Drinks from a cup with less spilling |
| **10 months through 12 months** | • Rotary chewing (diagonal movement of the jaw as food is moved to the side or center of the mouth) | • Begins to put spoon in mouth  
• Begins to hold cup  
• Good eye-hand-mouth coordination | • Eats chopped food and small pieces of soft, cooked table food  
• Begins self-spoon feeding with help |

*Developmental stages may vary with individual babies.*
**Feeding the Baby For the First Year**

Babies grow quickly during the first year of life and make many changes in the types of foods and textures of foods they are able to eat. As babies grow and develop, watch for the following signs which will tell you when they are ready for a new food.

<table>
<thead>
<tr>
<th>BABIES AGE:</th>
<th>WHEN BABIES CAN:</th>
<th>SERVE:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Birth through 3 Months</strong></td>
<td>• Only suck and swallow</td>
<td>LIQUIDS ONLY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Breastmilk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Infant formula with iron</td>
</tr>
<tr>
<td></td>
<td>• Draw in upper or lower lip as spoon is removed from mouth</td>
<td>ADD SEMISOLID FOODS</td>
</tr>
<tr>
<td></td>
<td>• Move tongue up and down</td>
<td>• Infant cereal with iron</td>
</tr>
<tr>
<td></td>
<td>• Sit up with support</td>
<td>• Strained vegetables*</td>
</tr>
<tr>
<td></td>
<td>• Swallow semisolid foods without choking</td>
<td>• Strained fruit*</td>
</tr>
<tr>
<td></td>
<td>• Open the mouth when they see food</td>
<td>*may be started later in the age range</td>
</tr>
<tr>
<td></td>
<td>• Drink from a cup with help, with spilling</td>
<td></td>
</tr>
<tr>
<td><strong>4 months through 7 months</strong></td>
<td>• Move tongue from side to side</td>
<td>ADD MODIFIED TABLE FOODS</td>
</tr>
<tr>
<td></td>
<td>• Begin spoon feeding themselves with help</td>
<td>• Mashed or diced soft fruit</td>
</tr>
<tr>
<td></td>
<td>• Begin to chew and have some teeth</td>
<td>• Mashed or soft cooked vegetables</td>
</tr>
<tr>
<td></td>
<td>• Begin to hold food and use their fingers to feed themselves</td>
<td>• Mashed egg yolk</td>
</tr>
<tr>
<td></td>
<td>• Drink from a cup with help, with less spilling</td>
<td>• Strained meat/poultry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mashed cooked beans or peas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cottage cheese, yogurt, or cheese strips</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Pieces of soft bread</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Crackers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Breastmilk, iron-fortified formula, or fruit juice in a cup</td>
</tr>
</tbody>
</table>
Food Allergy Action Plan

Student’s Name: ___________________________ D.O.B: ____________ Teacher: ___________________________

ALLERGY TO: _________________________________________________________________

Asthmatic Yes*  [ ] No  [ ]  *Higher risk for severe reaction

◆ STEP 1: TREATMENT ◆

** Give Checked Medication**:

***(To be determined by physician authorizing treatment)***

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Epinephrine</th>
<th>Antihistamine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouth</td>
<td>EpiPen®</td>
<td>EpiPen® Jr.</td>
</tr>
<tr>
<td>Skin</td>
<td>Twinject™ 0.3 mg</td>
<td>Twinject™ 0.15 mg</td>
</tr>
<tr>
<td>Gut</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throat†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lung†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other†</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The severity of symptoms can quickly change. †Potentially life-threatening.

DOSAGE

** Epinephrine:** inject intramuscularly (circle one) EpiPen® EpiPen® Jr. Twinject™ 0.3 mg Twinject™ 0.15 mg (see reverse side for instructions)

** Antihistamine:** give ____________________________ medication/dose/route

** Other:** give ____________________________ medication/dose/route

IMPORTANT: Asthma inhalers and/or antihistamines cannot be depended on to replace epinephrine in anaphylaxis.

◆ STEP 2: EMERGENCY CALLS ◆

1. Call 911 (or Rescue Squad: __________________________ ) . State that an allergic reaction has been treated, and additional epinephrine may be needed.

2. Dr. __________________________ at __________________________

3. Emergency contacts:  
   Name/Relationship __________________________ Phone Number(s)  
   a. __________________________ 1.) __________________________ 2.) __________________________
   b. __________________________ 1.) __________________________ 2.) __________________________
   c. __________________________ 1.) __________________________ 2.) __________________________

EVEN IF PARENT/GUARDIAN CANNOT BE REACHED, DO NOT HESITATE TO MEDICATE OR TAKE CHILD TO MEDICAL FACILITY!

Parent/Guardian Signature __________________________ Date _________________

Doctor’s Signature __________________________ (Required) Date _________________
Once EpiPen® or Twinject™ is used, call the Rescue Squad. Take the used unit with you to the Emergency Room. Plan to stay for observation at the Emergency Room for at least 4 hours.

For children with multiple food allergies, consider providing separate Action Plans for different foods.

**Medication checklist adapted from the Authorization of Emergency Treatment form developed by the Mount Sinai School of Medicine. Used with permission.**
How to Help Your Child Have Healthy Weight

Childhood obesity is at an all-time high. The number of children who are overweight has tripled in the past 25 years, raising their risk for many health problems. Type 2 diabetes, once a disease seen only in adults, is now found in children as young as age 4. High blood pressure and cholesterol levels are also showing up earlier.

The earlier you take action to help your child have a healthy weight, the better. Good nutrition and physical activity make a huge difference. Taking action early means a healthier and happier child now and in the years to come.

First Year Feeding Tips:

**Breastfeed your baby.** Breast milk is the healthiest food you can give your baby.

**Don’t rush to start feeding your baby solid foods.** Wait until he or she is about 6 months old. Babies younger than 6 months only need breast milk or formula.

**Watch for your baby’s signals.** Your baby will let you know when he or she is hungry or full. Stop feeding when your baby closes his or her lips, turns away or loses interest in eating. Don’t force your baby to finish a bottle or food. If you are worried that your baby is eating too much or too little, talk to the baby’s doctor or a nutritionist.

**Use a cup.** Start teaching your baby to drink from a cup around 6 months old. By age 1, your baby should be drinking just from a cup, not a baby bottle.

**Limit juice.** Babies don’t need to drink juice. If you do give your baby juice, wait until your baby is 6 to 8 months old, and give no more than 2 ounces a day, mixed with water, in a cup.
Nutrition and Physical Activity

Child Care Health Consultation in the Early Care and Education Setting

**Feeding Tips for Toddlers and Preschoolers:**

*Stick to a regular meal schedule.* Offer three meals and two or three snacks daily. Don’t let your child snack all day long.

*Keep portion sizes small.* Serve age-appropriate amounts for young children. A good rule is to start with 1 tablespoon of each food for each year of age. For example, if your child is 3 years old, start with offering 3 tablespoons of carrots and 3 tablespoons of rice. Let him or her ask for more.

*Make fruits and vegetables a priority.* It is recommended that young children eat five or more servings of fruits and vegetables every day. Include at least one fruit or vegetable with every meal and snack.

*Offer your child a variety of healthy food choices.* Children may need to try a new food about 10 times or more before they learn to like it. If your child doesn’t want to eat something, try again another time. Don’t force your child to eat anything.

*Limit high sugar and high fat foods.* Limit “junk foods,” fast foods, flavored drinks and soft drinks. Use food for nourishment and not as a treat or a reward.

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**Active Children, Healthy Children**

Making smart food choices is only one part of helping your child have a healthy weight. Being active as a family is also important.

*Help your child be active.* Give your baby a lot of time for active play and plenty of room to move around and practice rolling and crawling skills. Let your toddler walk instead of riding in the stroller whenever you can. Give your child push-and-pull toys. Dance to music, play follow-the-leader and take pretend walks through the snow, the jungle or other fun places.

*Limit TV time.* Studies show that children who watch less than two hours of television per day are much less likely to be overweight. Children under 2 years of age should not watch TV at all.

*Enjoy the outdoors.* Play tag, ride a tricycle or throw a ball. Take a trip to a park or playground. Play with the dog, work in the garden, wash the car or take a walk. These activities help your child learn to enjoy movement.

*Be active as a family.* Be a role model for your child. He or she will watch you and want to be like you.

*Your healthy choices shape their chances!*

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First 5 California thanks the California Department of Health Services for their expert assistance in developing this tip sheet.

For additional information about First 5 California, please contact:
Phone: (916) 323-0056 or (800) KIDS-025 www.ccfc.ca.gov

For more information on childhood nutrition and physical activity, visit:
• California WIC Supplemental Nutrition Program www.wicworks.ca.gov
• The 5 a Day Campaign www.ca5aday.com/powerplay and www.5aday.com