

Delightfully Delicious Discoveries in the Classroom



Hawaii Child Care Nutrition Program

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Introduction

Your role as a child care provider is vital to help children *eat* and grow up healthfully by planning and serving nutritious meals and snacks. However, it is also critical to teach children about foods by providing them with the skills and knowledge they need to make healthy food choices throughout their entire lives.

The food attitudes and habits that children learn and develop during early childhood may often be carried throughout their school years and eventually into adulthood. At this stage in life, they possess a willingness to learn and propensity to adopt healthful habits. Consequently, incorporating food and nutrition activities into the classroom during preschool that allow for *delightfully delicious discoveries* can potentially lay a foundation for healthy eating habits that can last a lifetime.

You have the opportunity to teach children how important and fun it can be to eat a variety of foods and to embark on the exciting adventures of trying new foods. Incorporating different foods into various classroom activities can offer countless opportunities for learning in various subject areas, including:

- Math: counting, classifying foods, measuring, sequencing
- Science: temperature differences, origins of foods, changes of foods during cooking, nutrition awareness
- Vocabulary Enrichment: letter and word recognition, listening skills – following directions, increased vocabulary
- Social Studies: cultural traditions, learning how to work with others, concept of sharing
- Art: observing colors, shapes, molding foods, drawing pictures
- Physical Development: fine motor skills, eye-hand coordination, experience in new smells, tastes, sounds, textures

This resource will provide you with the basic pieces and helpful tips to incorporate food activities into the classroom, from general safety tips to general activities that you can adapt to your specific tastes, children and classroom setting. There are existing curriculums that provide many ideas for activities that go beyond that which is included in this particular resource. You may explore a few that are highlighted in the “Nutrition Education Resources” section on pages 84-85.

Tips on Planning Activities

- **Plan activities that match children’s developmental abilities.** Keep in mind what the children are mentally ready to learn and what they are physically capable of doing. Always set children up for successful challenges.
- **Start Simple.** Help children succeed by planning simple activities, like naming, describing or counting foods at first. Once they have mastered preliminary skills and are mentally ready to learn new concepts, eventually move on to more challenging tasks, like encouraging them to get involved in food preparation, from assisting in reading a recipe to measuring ingredients.
- **Build on what children already know.** When introducing new concepts about foods, make it personal to them by relating it to something that is already familiar to the child and relevant to their everyday experiences.
- **Involve parents.** Communicate with parents that nutrition related activities will be conducted in class, so knowledge and skills learned in school can be reinforced at home. Suggest ideas for parents to do with their children at home and invite parents to participate in classroom activities.
- **Remember to BE SAFE!** Always remember that everyone involved in the food activity should wash their hands with soap and water for 20 seconds before preparing, cooking or eating food. Always supervise children and eventually teach them the potential dangers of kitchen equipment that may be used in activities, like knives, hot pots, etc.
- **Special considerations: Allergies and Choking hazards.** Be aware of noted food allergies and potential choking hazards. Take necessary precautions to ensure that no accidents or allergic reactions occur.
- **Try to minimize extra costs.** When feasible, use foods already planned for snacks or meals and incorporate them into the food learning experience.
- **Always remember the “Division of Responsibility.”** You are the gatekeeper who decides what foods will be offered, but the child ultimately decides what and how much they will consume. Offer and encourage, but *never* force a child to eat a particular food. Research shows that children may be more willing to increase the variety in their diet if new foods are offered in a *positive* environment.
- **The “*process*,” not “*product*” matters most.** Children have great potential to learn by actively “doing” and participating in “hands-on” activities. Keep in mind, especially for cooking activities, that the *process* of the experience, including the mistakes, will teach the children the most valuable lessons.
- **Be a good role model.** Set a good example by trying new foods yourself.

Developmental Considerations

As children grow up, their fine motor skills will mature and they can increasingly help out with different tasks and assist with preparing foods. This can give them a sense of accomplishment and it may also encourage them to try the foods that they have helped to prepare.

The following developmental considerations and skills are typical, however, it is important to recognize that every child develops at different rates. Help them succeed by building on what children already know with newly learned skills and *always* supervise children. Introduce new skills one at a time. Create a positive learning environment by praising their efforts along the way.

At ~2 years old:

- Develops likes and dislikes
- Can be very messy – so anticipate clean-up time!

Food Skills include that which involve large muscles in arms:

- Can drink from a cup
- Wipe tables
- Scrub vegetables
- Rinse vegetables and fruits
- Tear lettuce
- Snap green beans
- Dipping
- Place things in trash

At ~3 years old:

- May like to imitate cooking
- May enjoy repetition

Food Skills include all that a 2 year old can do, plus that which involves use and increased coordination of muscles in their hands:

- Comfortable with using a fork and spoon
- Pour liquids and other ingredients. Note that spills are likely to occur.
- Stir, mix ingredients with clean hands and eventually kitchen tools, like spoons
- Spread soft spreads, like peanut butter or jelly
- Wrapping foods, like potatoes in foil

At ~4 years old:

- May like to imitate adults

Food Skills include all that a 3 year old can do, plus that which involves use of the smaller muscles in their fingers:

- Less spills with a spoon or cup
- Peel eggs, and some fruits, like bananas and tangerines
- Rolling

- Mashing soft foods, like bananas
- Generally knows table manners, can help to set the table
- Crack eggs

At ~5 years old:

- Generally eats with minor supervision

Food Skills include all that a 4 year old can do, plus that which builds on fine motor coordination:

- Help to measure ingredients
- Cut soft fruits or other soft foods with proper instruction for use of a dull knife. Instruct children on safety procedures when dealing with knives, like how to hold a knife or pass it to another kitchen helper.
- Use an egg beater

Be Safe!

“Playing with food” can be a fun way to engage and teach children new concepts about foods and valuable food skills, however don’t let sore stomachs, cramps or fever get in the way of having fun. Such symptoms can be signs of a foodborne illness, and indicate that food may have been handled in an unsafe manner.

Foodborne illnesses are unpleasant for anyone, but can be particularly dangerous for older adults, people with weakened immune systems, pregnant women and also infants and young children.

Fortunately, ***FOODBORNE ILLNESS IS PREVENTABLE.***

Always remember the main keys to safe food handling from taking a trip to the grocery store to putting away the leftovers:

1. Buy cold foods last, get it home fast!

Plan your shopping list ahead of time. This will help you to organize your shopping trip by picking up frozen and refrigerated foods and hot items from the deli last, just before going to the checkout counter.

Check the “sell-by” or “pull” date (how long the grocer can keep the product for sale on the shelf) and “use-by” date (how long you can keep the product at home at its best quality) date on packages before you buy.

2. Keep food safe – refrigerate!

After picking up all foods and supplies needed for your food activity, unload the perishable foods first, going directly from the car to the refrigerator or freezer. Use a cooler with coolants for cold foods if it will take you more than an hour to get them in the refrigerator.

3. Wash your hands!

Everyone, including all adults and children that will be involved in the food activity should wash their hands with soap and hot water for at least 20 seconds before handling any food.

Hands should be washed again after doing anything else, like using the bathroom, blowing one’s nose or touching a pet.

4. Keep everything clean!

Clean kitchen towels often and launder in hot water. Clean sponges and dishcloths frequently, using soap and hot water. Disinfect in a *sanitizing solution; soak for 2 minutes; rinse and air-dry. Do this once a week or more often as needed.

*Sanitizing solution: 1 tablespoon liquid bleach + 1 gallon water

If you are incorporating any raw meats or poultry in your activities, remember the following tips. Never chop produce or other ready-to-eat foods on a cutting board that was used for raw meat or poultry. You must:

- 1) Clean with hot, soapy water and rinse. Disinfect the board with a *sanitizing solution.
- 2) Leave wet for 2 minutes
- 3) Allow to air-dry

If possible, use one cutting board for fresh produce and a separate one for raw meat, poultry and seafood.

5. Thaw frozen food in the refrigerator!

If you will be using frozen foods for your activities, plan ahead by thawing perishable frozen foods in the refrigerator. Thaw foods on the lowest shelf in the refrigerator, on a plate or in a plastic bag to collect any juices and moisture.

6. Cook foods thoroughly!

If you ever cook meats or poultry products as part of your classroom activity, please be sure to cook them to the designated safe temperatures listed below:

Product	Internal, cooked temperature (°F)
Ground meat (patties or meatloaf)	160°
Ground poultry	165°
Steaks and roasts	145°
Pork and ham	160°
Fish	145°
Poultry (breast, thigh, wing)	165°
Poultry (whole bird)	165°

7. Keep hot foods hot, cold foods cold!

If perishable foods will be out for tasting demonstrations or for family style meal service, remember to keep cold foods on ice and to put hot foods over a heat source. Do not mix fresh (unserved) food with food that has already been out for serving.

8. Don't wait – refrigerate leftovers!

Refrigerate perishable foods within 2 hours after cooking or preparing.

**REMEMBER THAT UNSAFE FOOD DOES NOT ALWAYS SMELL, TASTE OR LOOK BAD.*

WHEN IN DOUBT, THROW IT OUT.

Important Considerations

Food can provide us with nourishment and pleasure. However, as with any foods served for meals or snacks, you as the provider must be mindful to keep your children safe as they “experiment” with new foods.

Food Allergies

All food allergies should be documented and appropriate accommodations should be made to ensure that allergic reactions do not occur. Try to maintain good communication with the children’s parents, especially when new foods are to be introduced with classroom activities. Note that symptoms of a food allergy can occur within a few minutes to a few days. Symptoms may be mild to severe, and may include the following:

- Hives
- Itchy skin rashes, eczema
- Swelling of the tongue and throat
- Tingling sensation in the mouth
- Difficulty breathing, wheezing
- Sneezing
- Nausea, cramps
- Vomiting
- Diarrhea
- Circulation symptoms
- Pale skin
- Light-headedness
- Loss of consciousness

Any food can cause an allergic reaction, however the following eight foods are the most common:

- 1) milk
- 2) eggs
- 3) fish
- 4) crustacean shellfish (crab, lobster, shrimp)
- 5) tree nuts (almonds, walnuts, pecans, etc.)
- 6) peanuts
- 7) wheat
- 8) soy

Refer to “The Menu Venue” available on our website at www.ctahr.hawaii.edu/new/hccnp for more information on food allergies and how to read food labels to identify which foods may present a risk to such children.

Choking Hazards

Offering young children foods of different shapes and textures exposes them to a variety of foods. However, until children learn to chew and swallow better at about 4 years of age, there is a potential risk of choking, especially when foods are hard, slippery, dry, thick and, or sticky.

Common foods that may cause choking are listed below:

- hot dogs
- nuts and seeds
- large chunks of cheese or meat
- whole grapes
- popcorn
- chunks of peanut butter
- hard, raw vegetables
- large fruit chunks
- chewing gum, hard or sticky candy

*Always supervise children during food activities. When sampling new foods, make sure children are seated and that they chew food well before swallowing. They should also finish swallowing before leaving the table.

You can take precautions by:

- cutting up food into small pieces or in long, thin slices
- blanch or steam raw, hard vegetables to make them easier to chew
- remove all seeds and pits from fruits

Refer to “The Menu Venue” available on our website at www.ctahr.hawaii.edu/new/hccnp for more information on choking hazards.

Suggested Activities

The following section includes a handful of “modules” that cover the following basic learning objectives:

- **Module 1: Hand washing with the ABC’s**
 - To make hand washing before eating a pleasurable experience and a routine habit.
- **Module 2: Variety is Vital**
 - To introduce the concept that to grow up healthy, a balance and variety of foods is needed.
- **Module 3: Sensory Overload**
 - Allow children to experience foods in different ways by engaging their senses.
- **Module 4: All Forms Count**
 - Showcase the different forms of fruits and vegetables, allowing children to experience their different tastes, textures and forms.
- **Module 5: Sources of Foods**
 - To introduce the origins of different types of common foods.
- **Module 6: Measuring Ingredients**
 - Allow children to practice measuring different ingredients, using different techniques as they get older.
- **Module 7: Delightfully Delicious Creations**
 - Allow children to participate in simple cooking activities, and subsequently learn basic food skills and sharpen their motor skills development.

Please review the tips for planning activities listed on page 2.

Each module includes various activities and supplementary handouts that you can incorporate into your classroom. Most modules also include a section with relevant children’s books that can be used to introduce or reinforce concepts. There are complementary activities included at the end of most modules for parents to do with their children at home that will help to reinforce the lessons covered in class.

Choose those activities that are most appropriate for your classroom setting and children. Get creative! The lessons are set up in a way that allows you to add your creative touch to make each session unique.

Check out other existing nutrition education curriculums listed on pages 84-85 for more inspiring educational activities that can lead the way to *delightfully delicious discoveries in the classroom!*