



COOKING WITH YOUNG CHILDREN IN THE CLASSROOM: IT'S EASY AND FUN!

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OBJECTIVES

- Explain the role of childcare providers in the development of healthy eating habits among children
- Identify the barriers to healthy eating in the early childhood classroom
- Examine the regulatory guidelines related to cooking in the classroom
- Analyze methods for teaching healthy eating through hands on cooking activities
- Develop strategies for your own environment to include cooking in the classroom



- Obesity prevention begins when a child begins to eat solid foods.
- *It is believed that we begin to develop our eating habits in infancy as we begin to try foods for the very first time.*



Fox MK, Condon E, Briefel RR, et al. Food Consumption Patterns of Young Preschoolers: Are They Starting Off on the Right Path? *J Am Diet Assoc.* 2010; 110(12): S52-S59.

HEALTHY EATING HABITS ARE A KEY PART OF OBESITY PREVENTION.

- A healthy diet is one that includes a variety of foods, including fruits, vegetables, whole grains, and dairy.



THE RESEARCH

- Research has shown that healthy eating habits are a result of **early and repeated** exposure to a variety of foods in childhood.



Cooke L. The importance of exposure for healthy eating in childhood: a review. *J Hum Nutr Diet.* 2007; 20: 294-301.



WHY DOES IT MATTER?

**AS KIDS GET OLDER DON'T THEY LEARN
TO LIKE MORE FOODS?**

Dietary variety and intake in the first two years of life has been linked to the development of life-long eating habits in children and often predicts the intake of school-aged children.



DID YOU KNOW ??

- That willingness to try new foods declines after the first two years of life, reaching **low levels** by age four?
- That the strongest predictor of the foods that eight year-olds liked were the foods they liked at age four?

Cashdan, E. A sensitive period for learning about food. *Human Nature*. 1994;5(3):279-291.

Skinner JD, Carruth BR, Wendy B, Ziegler PJ. Children's food preferences: a longitudinal analysis. *J Am Diet Assoc*. 2002; 102(11):1638-47.



- *We know that eating behaviors at home, including parents' preferences, financial restrictions, and home environment affect what children learn to eat.*
- With 82% of children enrolled in some child-care outside of the home, **centers** may be replacing the family table as the learning environment for eating habits.
- **As child-care providers, YOU play a very important role in teaching children to eat a healthy diet.**
- We have a very unique opportunity!



MODELING BEHAVIOR

- We know that children are more likely to eat the foods their parents, peers, and teachers are eating.
- If they see us eat it, they'll be more likely to try it.



Birch, L. Effects of Peer Models' Food Choices and Eating Behaviors on Preschooler's Food Preferences. *Child Development*. 1980; 51:489-496.



- Portion sizes-
- Ensure size appropriate plates, bowls, and cups can help both children and caregivers recognize appropriate portion sizes, and decrease risk of overeating.



THE ENVIRONMENT

- Mealtime is an opportunity for sharing food and culture with others. The eating environment should be warm and inviting, foods beautiful, fresh and appealing. Meals should be relaxing, enjoyed. As children, we begin to build our life-long eating habits.

○



THE FOOD WE SHARE

- We know that when children engage in activities around nutrition, including the growth, preparation and service of foods, they are much more likely to try new foods.
- And THAT is the goal!



Gardening

- Eat local fruits and vegetables.
- Gardening on school grounds can increase discussions about the role of farming in communities.
- Developing a nutrition education program including gardening in this setting may be one of the most effective ways to improve the eating habits of our children.





Gardening increases a child's knowledge about nutrition by providing them with hands-on experience through the growing and harvesting of foods.

This allows students to gain complete ownership in the process of selecting the foods they eat.

They will observe that foods come in a variety of textures and colors.



- As children plant, tend to, touch and feel new foods, they are more likely to taste and even eat those new foods.
- The research is clear: Gardening has been proven to improve fruit and vegetable intake in children, and promote a healthier diet.



Morris, JL, Briggs, M, Zidenberg-Cherr. School-based gardens can teach kids healthier eating habits. California Agriculture. 2000;55(1): 40-46.



HEALTHY FOOD COOKING



- Select recipes that incorporate seasonal, fresh vegetables and fruits promotes healthy food choices in children.
- Recipes should connect with classroom projects. (think of watching seeds grow- planting- tending- harvesting, cooking, and finally eating foods)
- Incorporate books of interest to the children, increasing opportunities for discussion



YOU DON'T NEED MUCH TO COOK WITH YOUR STUDENTS! *JUST A FEW PAPER PLATES AND PLASTIC KNIVES CAN MAKE A CLASSROOM A KITCHEN!*



COOKING IN THE CLASSROOM PROMOTES LEARNING AND DEVELOPMENT :

○ **Physical development**

- Mixing, chopping, and spreading develop muscle control, eye-hand coordination
- Kneading, pounding and stirring can be exercise!!

○ **Social-emotional development**

- Pride and confidence in skills and abilities
- Following directions, problem solving, social engagement
- Connection to community



COOKING LEADS TO POSITIVE DEVELOPMENT

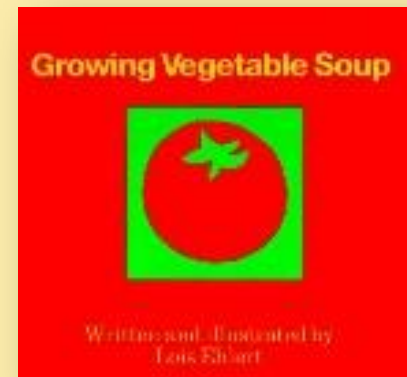
○ Cognitive development

- Curiosity, thinking, problem solving
- Opportunities for prediction and observation
- Math skills- measure, count, follow recipes, organize, follow a series of directions

○ Language development

- Cooking has a unique vocabulary.
- Discussion, using recipe cards, asking questions based on new experiences
- Children's literature related to activities.





SNACKS



- This is a great time to introduce new recipes and of course new foods
- Crockpot cooking is effective, because you can have a morning activity, and by afternoon snack, you have a great option.
- Kids will smell the food as the day goes on 😊 encouraging them to try it!



SNACKS

Snacks are an important part of ensuring a child meets their daily nutrient needs.

They should be nutrient dense, and reflect the dietary guidelines.

Snacks *should* provide vegetables as often as fruits and grains.

Caution: snacks can be a source of empty calories! It is easy to add hundreds of extra calories each day with high-sugar and high-fat treats.

How do you involve your kids in snack preparation?



MAKING FRUIT “SUSHI”





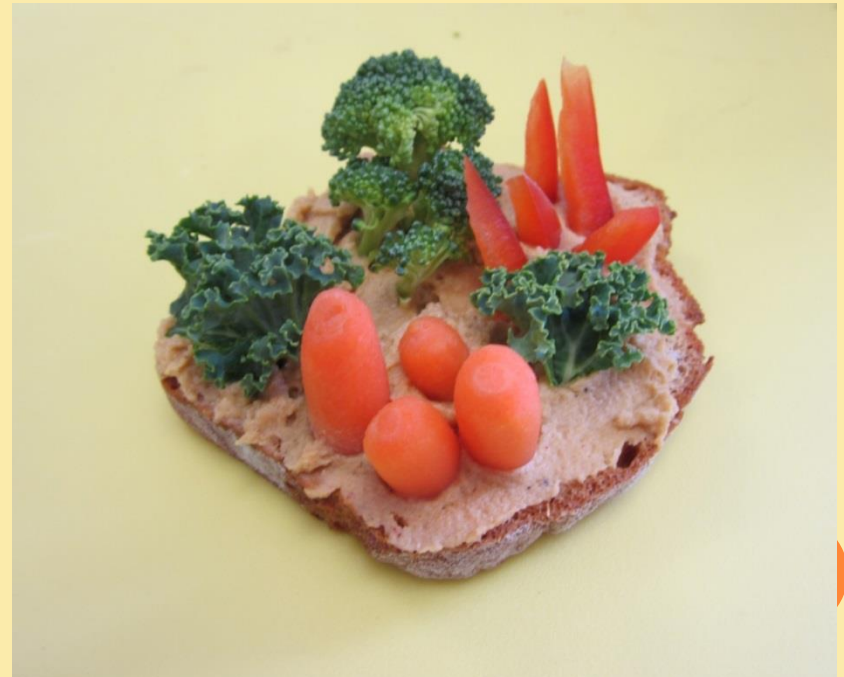
GARDEN PLOT CRACKERS

and skills brainstorm

Create your own Garden Plot Cracker with:

- Local carrots
- Local broccoli
- Local Red Peppers
- Local Turnips
- Local Radishes
- Hummus or cream cheese
- Cracker or bread

Read The Carrot Seed, Up Down, Around, or Tops and Bottoms



Spinach Smoothies

Create your own Strawberry Smoothies with:

- Local spinach
- Strawberries
- Yogurt
- Apple Juice
- Bananas



HOW CAN THEY HELP???

LET'S BRAINSTORM

TWO-YEAR-OLDS

- **Learning to use large muscles in arms**
 - Scrubbing veggies and fruits
 - Carrying items to the table
 - Shaking liquids in closed containers
 - Dipping foods
 - Washing and tearing lettuce and salad greens
 - Breaking bread into pieces



THREE-YEAR-OLDS

- **Learning to use their hands**
 - Pouring liquids into batter (you measure first)
 - Mixing batter or other dry and wet ingredients together
 - Shaking a drink in a closed container
 - Spreading butters or spreads
 - Kneading dough
 - Washing veggies and fruit
 - Serving foods
 - Putting things in the trash after cooking/eating



FOUR AND FIVE-YEAR-OLDS

- **Learning to control small muscles in their fingers**
 - Juicing oranges, limes, citrus
 - Peeling some fruits and veggies
 - Mashing soft fruits and veggies
 - Scrubbing vegetables
 - Cutting soft foods with a plastic knife
 - Pressing cookie cutters
 - Measuring dry ingredients
 - Cracking open/breaking eggs
 - Beating eggs with an egg beater or whisk
 - Setting table
 - Cleaning and wiping up



COOKING

- When introducing recipes to young children:
 - You may want to rewrite recipes, add illustrations of each step
 - Read recipe aloud, and discuss as you complete steps
 - Prep any necessary items ahead of time, but...
 - Introduce children to raw ingredients (ex: dough, pumpkin)
 - Have all equipment and tools on hand
 - Introduce children to utensils
 - Establish rules and procedures
 - Include all children in activities, including clean up



COOKING

- Messy cooking can be more fun!
 - Tip- treat it like (sanitized) painting- provide smocks, have lots of paper towels on hand
 - Like family style, it is important to have back-ups of dishes and utensils
 - There are more than one way to get a delicious result. Select recipes that allow for alterations, without too much stress (pasta salads, soups and sauces that allow variation).
 - Try to select recipes that are appropriate for developmental age.
 - Tip: cook small amounts of firm veggies if called for in a recipe (like carrots), and let children cut theirs while the larger, raw ones go into the recipe



MAKING FOOD IN THE CLASSROOM- THE REGULATIONS

- Have a specific area in mind for food preparation
- The surface of the table should be non-absorbent and sanitized prior to contact.
- It's a good idea to have multiple utensils for preparation. Plastic utensils may be the best option.
- Have a metal stem thermometer on hand.
- Food preparation must utilize a sink separate from the hand washing sink.
- Foods must be prepared and eaten on the same day.
- Consider food allergies, and special food needs.
- All other food related regulations apply, including food storage, and sanitation of materials and equipment.



WHAT TO KEEP IN MIND (A FEW NO'S)

- You can use cans, but no “canned” food items from home.
- No raw eggs should be consumed (no licking the spoon)...use pasteurized egg products when you can
- Keep cold foods cold, hot foods hot! < 40 or > 140 degrees F (danger zone)
- Store other food items in a safe spot (out of reach) in the classroom, in a sealed container, apart from risk of contamination until you are ready to use them.
- Keep all electrical appliances and cords out of reach of children.



Let's Brainstorm!

What activities can you do in your classroom?

What are they learning?





FOOD + SAFETY

Cover All Four Bases To Avoid Foodborne Illness



CLEAN

Your hands, tools, and food preparation area should all be clean before you cook.

SEPARATE

Steer clear of cross-contamination by keeping raw meat, poultry, seafood & eggs separate from all other foods.



COOK

Cook to proper temperature and serve hot: Don't stay in the danger zone!

Cook your food completely and make sure it reaches the proper temperature before eating. Use 165° for leftover reheating. Avoid the danger zone between 40° and 140°F. See foodsafety.gov for the USDA safe meat temperature guide.

Chill quickly: Don't be in the danger zone! **CHILL**

Chill leftovers quickly or within 1-2 hours. Defrost food in the refrigerator or under cold running water. Serve and store cold food cold below 40°F.



Good rules of thumb:

Handwashing!

Avoid use of raw meats in the classroom if possible.

Cook it to temp!!

Take leftovers home- don't reuse at school.



THANK YOU!! ANY QUESTIONS?

