Savory Sensory Learning

Children are “hands-on” learners. They learn by exploring and manipulating objects in their environment using the five senses: seeing, touching, tasting, smelling, and hearing. Eating and preparing foods can be a great sensory experience for children and a fun learning opportunity.

Because of their age and fine motor skills, infants and toddlers use their fingers to eat, and meals easily become sensory activities! Especially when trying foods for the first time, they often “play” with foods – squishing food, pushing it around, licking, smelling, and finally tasting it. For preschoolers, the expectation at mealtimes is to develop social and cultural meal skills, and “playing” with food is discouraged. Yet, it’s still natural for preschoolers to enjoy the sensory properties of foods.

So how can you balance preschoolers’ sensory needs with social and cultural expectations for mealtime behavior?

Add cooking and nutrition activities to your day. By letting children learn about foods and help prepare foods, they may be more willing to try new foods. When introducing new foods to preschool children, make it a hands-on activity: try foods as finger food; touch and smell raw fruits and vegetables; mash, stir, and knead cooked foods; and wash, peel, or cut raw foods.

Preschoolers are able to understand and identify many sensory concepts: changes between raw and cooked food; types of smells and tastes (sour, sweet, bitter); and characteristics of food (colors, textures, and shapes).

Here are some tips for focusing children’s learning on using their senses:

Smell:

Have children smell foods and describe the aroma. Does it smell like any other foods that they eat?

Sight:

Let children look at foods before cooking or preparing and describe color, shape, and size. Then look at foods after cooking and preparing. Does it look different? What has changed?

Sound:

Ask children to listen as they prepare and eat food. Does the food make a sound? What is it?

Texture:

Allow children to touch foods and manipulate foods. How does it feel? Is it squishy? Is it hard?

Taste:

Encourage children to describe the taste, not just say if it tastes “good”, and to compare tastes. Is it sweet or sour? Does the grapefruit taste like a grape?
Whipping up a sensory meal

To make nutrition and cooking activities more of a sensory learning experience, use foods that have contrasting outsides and insides or that show more noticeable changes in texture, color, or aroma when cooked. As you and the children are working with the foods, focus the children’s learning using the suggestions on the other side.

Here is a sample sensory activity meal:

**Fruit salad**
Use kiwis, pineapples, watermelon, and bananas. These fruits have contrasting outside and inside textures. Let the children feel and examine the outside of the fruit. Then cut it open and give the children a piece to touch and look at. Discuss the feel, smell, color, and any sounds made when cutting it. Encourage children to taste. When you are done checking out the fruit, cut up leftovers, and mix.

**Vegetable soup**
Select potatoes, carrots, spinach, and beans. These vegetables go from very hard to very soft when cooked. Cooked carrots also taste sweeter. Have the children examine the vegetables. As able, let the children peel and cut up the potatoes and carrots. Taste the raw vegetables. Ask them to try and mash the raw vegetables. Cook the vegetables. Sample each when cooled. Let the children mash some cooked pieces. Note the changes from cooking. Mix together cooked leftovers and simmer in broth or tomato juice.

**Fish sticks**
Use fresh or frozen fish filets, thawed. Let the children examine a piece of fish. Have them help you cut up the rest of the filets into strips. Mix up a batter and dip the strips. Bake. Ask the children to tell you how the fish and batter have changed.

**Biscuits**
Talk about the feel, smell, and look of the raw ingredients. Mix the batter and then compare the mixed dough to the raw ingredients. Bake. Take a look at the biscuits and see how they’ve changed again.

**Eat and enjoy!**
Using the five senses to learn about foods is fun, it helps children develop sensory awareness and vocabulary, builds cognitive skills (such as hypothesizing, categorizing, and observation), and it gives them an appropriate way to “play” with food!

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**Choking cautions**
Young children can choke on small objects and toy parts. All items used for children under three years of age and any children who put toys in their mouths should be at least 1 ½ inch in diameter and between 1 inch and 2 ¼ inches in length. Oval balls and toys should be at least 1 ¼ inch in diameter. Toys should meet federal small parts standards. Any toys or games labeled as unsuitable for children under three should not be used.

Other items that pose a safety risk and should not be accessible to children under three include, but are not limited to: button batteries, magnets, plastic bags, styrofoam objects, coins, balloons, latex gloves, and glitter.

Be aware of choking risks and food allergies when preparing and serving meals and snacks. Think about the size, shape, and consistency when choosing foods due to the potential choking risks in children. Food cut in large chunks, small hard foods, and soft and sticky foods should be avoided. The top choking hazards for children include: hotdogs, meats, sausages, fish with bones, spoonfuls of peanut butter, popcorn, chips, pretzel nuggets, raisins, whole grapes, raw carrots, fruits and vegetables with skins, and marshmallows. Be sure that food is cut in small pieces (no larger than ½ inch), grated, or finely chopped. Be sure that children are closely supervised when they are eating.

**Dietary cautions**
Do not give honey to children under 12 months of age. Honey contains spores that can cause infant botulism.

Many children have food allergies or sensitivities to food. According to the American Academy of Pediatrics, 90% of children’s food allergies are from milk, eggs, peanuts, tree nuts (pecan/walnut), fish, shellfish, strawberries, soy, wheat, and gluten. Carefully read food labels for potential risks and be sure to ask the parents if children have a known allergy or sensitivity.

Dental health is a growing concern with young children, so it is important to keep in mind that starchy, sticky, and sugary foods can cause tooth decay. Children should brush their teeth after any meal or snack, but particularly when you serve these foods.

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