



Snacks & the Preschool Child: Why, What & How



•

• 1

- **Why?**
 - Why is snacking important?
- **What?**
 - What foods should be offered at snack time?
- **How?**
 - How can we get preschoolers to eat healthy snacks?

Agenda



•

• 2

Learning Objectives

- At the conclusion of this module, participants will be able to:
 - State two reasons why preschoolers need between meal snacks
 - Discuss how portion size affects total caloric intake
 - List three snack items that are nutrient dense and appropriate for most healthy preschool children
 - Explain why juice should be limited to one 6-ounce serving per day
 - Describe how the USDA MyPlate can help in the planning of snacks and meals

•

• 3

Why is snacking important?

- Parents:
 - Tend to over-estimate the quality of their preschooler's diet
 - May not see the need to make changes
 - May struggle with:
 - Types of foods children need
 - How much food children need
 - How to get children to eat healthy foods



Source: Kourlaba et al., (2009). #4

Why is snacking important?

- Rate of growth for preschool children
 - About 4 to 5 pounds per year
 - About 2 to 3 inches per year
- Little tummies
 - Difficult to consume all the calories needed to support health, growth and play in just three meals per day

Physical Activity Age	Boys			Girls			
	Less than 30 minutes a day	30 to 60 minutes a day	More than 60 minutes a day	Physical Activity Age	Less than 30 minutes a day	30 to 60 minutes a day	More than 60 minutes a day
2	1000	1000	1000	2	1000	1000	1000
3	1200	1400	1400	3	1000	1200	1400
4	1200	1400	1600	4	1200	1400	1400
5	1200	1400	1600	5	1200	1400	1600

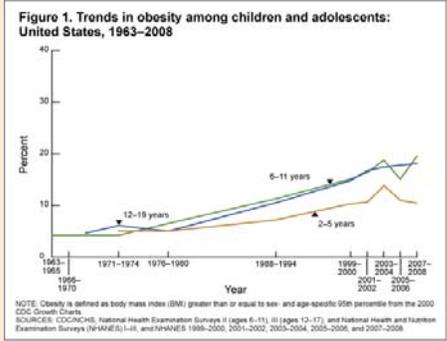
Source: ChooseMyPlate.gov #5

Eating Patterns of Preschoolers

- Milk
 - Preschoolers over the age of 24 months drink 2% milk more than any other kind of milk
- Vegetables
 - Top five vegetables consumed by children 2 - 3 years of age are: French fries, cooked green beans, cooked corn, cooked broccoli, mashed potatoes
- Fruit
 - Top five fruits consumed by children 2 - 3 years of age are: fresh apple, banana, grapes, strawberries; and canned applesauce
- Sweetened beverages
 - Top sweetened beverages consumed by children 2 - 3 years of age are: fruit-flavored drinks, carbonated beverages, sweet tea and coffee

Source: Fox et al., (2010). #6

Why is snacking important?



Source: Ogden & Carroll, (2010).

Why is snacking important?

- Major changes to eating habits in general have been noted during the same period of time as the increase in the prevalence of obesity.
- Increased are:
 - Number of snacking occasions
 - Portion sizes
 - Energy density of foods
 - Caloric intakes
 - Amounts of food eaten away from home

These changes have also been noted in the eating patterns of children.

Source: Piernas & Popkin, (2011).

- Do not allow children to 'graze'
- Often young children will eat throughout the day and then refuse to eat at mealtime because they are not hungry
- Avoid this by offering snacks and meals around the same time each day
- Offer 1 or 2 snacks per day
- Plan snack time midway between meals

Number of Snacking Occasions



Source: Piernas & Popkin, (2011).

Portion sizes

- Young children eat according to their appetites
- Children’s energy needs depends on
 - Age
 - Gender
 - Physical activity level
 - Growth rate
- External eating cues
- Overeating is more likely to occur when served large portions than when served smaller age-appropriate servings

Source: Looney & Raynor, (2011). •10

Energy Density of Foods

- Number of calories per ounce of food
 - More calories = higher energy density
- Foods high in fat tend to have a high energy density
 - Grain based desserts are often high in calories. Foods such as cookies, cakes, pies and some crackers are high in added fat and consequently relatively high in calories
 - Whole milk is higher in fat than 1% or nonfat milk
- Foods high in water tend to have a low energy density
 - Fruits and vegetables
- The energy density of a meal is increased by the use of spreads, dressings and gravies

Source: Looney & Raynor, (2011). •11

**Why is snacking important?
food eaten away from home**

- 70% of calories consumed by children 2 – 6 years are eaten at home.
 - Home calorie consumption has been declining when compared to earlier surveys conducted in 1977 (85%), 1989 (79%), 1994 (75%)
- 30% of calories are consumed away from home.
 - 17% of calories is from fast food

Parents still have control of the majority of food eaten by preschool children.

Source: Poti & Popkin, (2011). •12

What foods should be offered at snack time?

- Dietary Guidelines for Americans
 - Balancing calories to manage weight
 - The number of calories that preschool children need depends on their age, gender, physical activity level and rate of growth
 - Foods and food components to reduce
 - Solid fats, added sugars and sodium
 - Foods such as:
 - Grain based desserts
 - Sweetened beverages
 - Foods and nutrients to increase
 - Increase whole grains, vegetables & fruits, seafood
 - Increase potassium, dietary fiber, calcium, vitamin D
 - Building healthy eating patterns
- Choose MyPlate

Source: Dietary Guidelines for Americans, 2010. •13

• MyPlate

- Vegetables and fruits
 - Make half your plate fruits and vegetables
- Grain
 - Make at least half of your grains whole grains
- Protein foods
 - With protein foods variety is key: seafood, poultry, meats, eggs, beans & peas, nuts and seeds
- Dairy
 - Switch to fat-free or low-fat (1%) milk

What foods should be offered at snack time?



•14

What foods should be offered at snack time?



•15

What foods should be offered at snack time?

- MyPlate
 - Vegetables and fruits
 - Red pepper rings, carrots and celery sticks
 - Mandarin oranges, canned peaches, raisins
 - Limit juice to one 6 ounce cup per day
 - Grain
 - Whole grain cereal
 - Whole wheat crackers
 - Toast
 - Protein foods
 - Peanut butter
 - Hard boiled eggs
 - Tuna fish
 - Dairy
 - String cheese
 - Yogurt
 - Pudding made with low-fat milk
 - Cottage cheese
 - Low-fat or fat-free milk
 - Calcium fortified soy milk

When planning snacks, include foods from at least two food groups



•16

- Advice for parents
 - A child's appetite is the best indicator of how much, if any, food he/she should eat at snack or meal time
 - Offer snacks at regular times
 - Be patient with new foods
 - Caregivers may need to offer a new food 10 to 12 times before a child will accept it
 - Let little helpers help
 - Be a good role model

How can we get preschoolers to eat?



•17

How can we get preschoolers to eat?

- Advice for parents
 - Talk with your child's healthcare professional to determine if your child's weight is a concern
 - Offer the same foods to everyone in the family
 - Keep everyone in the family 'on the move'
 - Do not buy foods you do not want your child to eat
 - Have regular snack and meal times
 - Serve age-appropriate servings and allow for seconds
 - Praise good behavior with hugs and kisses, not food
 - Be a good role model

•18

How can we get preschoolers to eat?

- Advice for parents
 - Walk the talk
 - Cook together
 - Eat together
 - Demonstrate balance
 - Show respect
 - Respect the child's appetite
 - Respect the child's stage of development
 - Guide children into making positive choices
 - Plan snacks
 - Keep it simple
 - Keep it small

• 19

In conclusion –

- Improving Nutrition in Preschoolers
 - Parents choose mealtimes, not children
 - Provide a wide variety of nutrient dense foods
 - Pay attention to portion size
 - Use non-fat or low-fat dairy products
 - Limit snacking during sedentary behavior or in response to boredom
 - Restrict use of sweet/sweetened beverages as snacks
 - Allow self-regulation of total calorie intake

Source: American Academy of Pediatrics, (2006). • 20

Recommended handouts for parents of preschoolers

- Be a healthy role model for children
 - Kid-friendly veggies and fruits
 - Cut back on your kid's sweet treats
- Available at:
<http://www.choosemyplate.gov/healthy-eating-tips/ten-tips.html>

• 21

Health Resources

- Grow It, Like It, Try It https://fns-prod.azureedge.net/sites/default/files/growit_book_1.pdf
- Eat Play Grow. <http://www.eatplaygrow.org/>
- Move to Improve <https://www1.nyc.gov/assets/doh/downloads/pdf/cdp/mti-pre-k1.pdf>

• 22

References

- American Academy of Pediatrics. (2006). Dietary recommendations for children and adolescents: A guide for practitioners. *Pediatrics*, 117: 544-559.
- American Academy of Pediatrics. (2009). *Pediatric Nutrition Handbook, 6th edition*.
- Dietary Guidance for Americans, 2010. (2011). Available at: <http://health.gov/dietaryguidelines/2010.asp>
- Fox MK, Condon E, Briefel RR, & Reidy KC. (2010). Food consumption patterns of young preschoolers: Are they starting off on the right path? *Journal of the American Dietetic Association*, 110:s52-s59.
- Kourlaba G, Kondaki K, Grammatikaki E, Roma-Giannikou E, & Manios Y. (2009). Diet quality of preschool children and maternal perceptions/misperceptions: the GENESES study. *Public Health*, 123: 738-742.
- Looney SM & Raynor HA. (2011). Impact of portion size and energy density on snack intake in preschool-aged children. *Journal of the American Dietetic Association*, 111:414-418.
- MyPlate. (2011). Available at: <http://www.choosemyplate.gov/>
- Ogden C & Carroll M. (2010). Prevalence of obesity among children and adolescents: United States, trends 1963-1965 through 2007-2008. *NCHS Health E-Stats*.
- Piernas C & Popkin BM. (2011). Food portion patterns and trends among US children and the relationships to total eating occasion size, 1977-2006. *Journal of Nutrition*, 141:1159-1164.
- Poti JM & Popkin BM. (2011). Trends in energy intake among US children by eating location and food source, 1977-2006. *Journal of the American Dietetic Association*, 111:1156-1164.

• 23



Sharon Francey Robinson, PhD RD LD
 Associate Professor and
 Nutrition Specialist
 Texas A&M AgriLife Extension Service
 Texas A&M System



• 24
