

**Little Eaters,  
Big Opportunities:  
*Nutrition Considerations  
for Preschoolers***

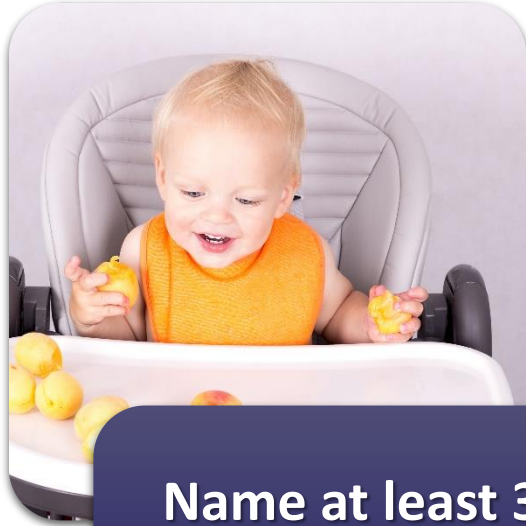


*Krystle McNeal, RD, LRD  
Lakes & Prairies Head Start*



# Objectives

---



**Name at least 3 developmental areas for 3-5 year olds that integrate with nutrition & eating habits.**



**Identify at least two settings where the eating habits of preschoolers can be shaped.**



**Identify two ways that nutrition professionals can impact preschoolers and their families.**

# Overview

---



Development



Common Nutrition and Health Concerns



Hot Topics in Nutrition and Physical Activity



Where are Preschoolers?



How to Make an Impact

# Development

---





# Key Window for Development

---

- 90% of a child's brain develops between birth and 5 years old
- Significant growth in social, cognitive, language, and emotional skills
- Rate of growth slows compared to infancy
- Growth can be erratic (i.e., no growth followed by rapid growth)
  - Impact on appetite and food intake
- Eating habits

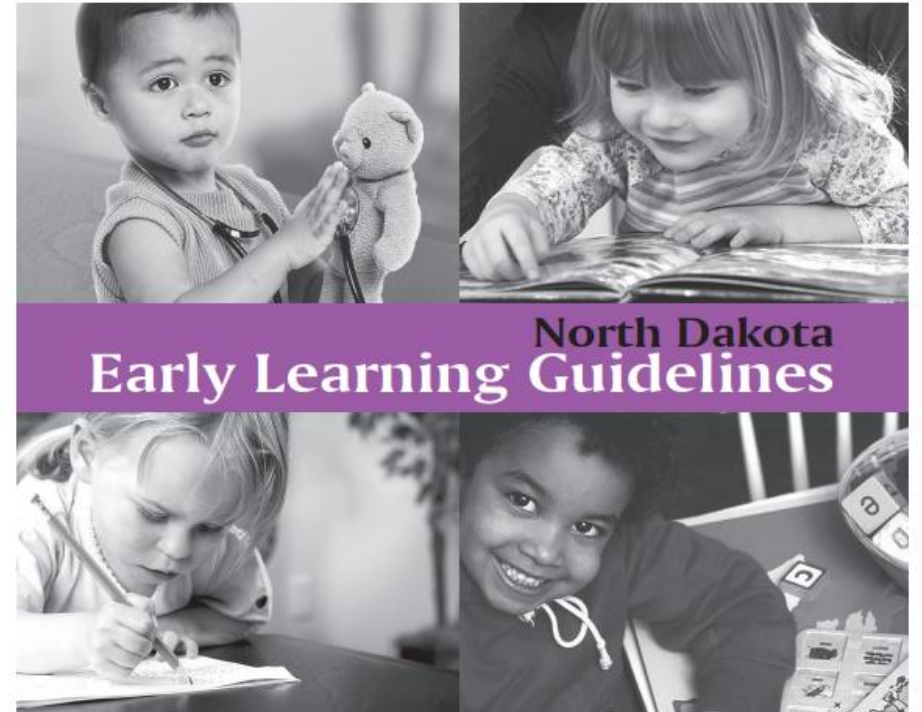
# North Dakota Early Learning Guidelines

---

- For Children Ages 3- 5 years
- Guide intends to increase “understanding for what can be expected in a child’s learning and development, taking into consideration the individual differences and unique needs of every child.”
- Available for download at:
  - [ndchildcare.org](http://ndchildcare.org)
  - [nd.gov/dhs](http://nd.gov/dhs)



Ages 3 through 5



# Eight Domains of the ND ELG

---

**Health and  
Physical  
Development**

**Social and  
Emotional  
Development**

**Approaches to  
Learning**

**Expressive Arts  
and Creative  
Thinking**

**Language and  
Literacy**

**Mathematics  
and Logical  
Thinking**

**Science and  
Problem  
Solving**

**Social Studies**

# Integration of ELG and Nutrition

---

## Health and Physical Development

- Engage in variety of small-muscle activities (i.e., self-feeding);
- Begin to differentiate between signs of hunger and fullness
- Exhibits knowledge about foods and nutrition
- Make healthy choices

## Social and Emotional Development

- Begin to take care of own physical needs (i.e., asks for food when hungry)
- Regulate feelings and emotions (...is food used for this?)
- Begins to talk about cultural traditions of others (may include foods)

## Approaches to Learning

- Show interest in discovering and learning new things (i.e., nutrition education)
- Choose to participate in a variety of familiar and new experiences (i.e., trying new foods)
- Engage in pretend play taking on various roles with real or imaginary objects (i.e, pretend play in a toy kitchen).



# Integration of ELG and Nutrition

---

**Expressive Arts and Creative Thinking**

- Music and Dance: coordinate movement with a tempo
- Apply variety of dramatic play processes (i.e, cooking)

**Language and Literacy**

- Use new vocabulary and descriptive language to describe feelings, thoughts, experiences, and observations (i.e, describing foods)

**Mathematics and Logical Thinking**

- Use familiar objects for measurement (i.e., using paperclips or blocks to measure a growing plant)
- Use appropriate comparative vocabulary (i.e, describing foods as hot/cold, heavy or light, etc.)

**Science and Problem Solving**

- Know that the physical properties of things can change (i.e., a cooking activity)
- Identify differences between living and non-living things, and know that living things go through life cycles (i.e., growing a garden)
- Use their five senses to explore materials and the environment (i.e., sensory exploration)

**Social Studies**

- Identify and appreciate own ethnicity and show interest in learning about the traditions of others (could include food/ethnic cuisine)

# Cognitive Development & Nutrition –

## *Piaget's Theory of Child Psychology and Development*

Developmental Period	Cognitive Characteristics	Relationships to Feeding & Nutrition
<b>Preoperational (2 – 7 years)</b>	<ul style="list-style-type: none"><li>• Thought processes become internalized, they are unsystematic and intuitive</li><li>• Reasoning is based on appearance and happen-stance</li><li>• The child's approach to classification is functional and unsystematic</li><li>• The child's world is viewed egocentrically</li></ul>	<ul style="list-style-type: none"><li>• Eating becomes less the center of attention and is secondary to social, language, and cognitive growth</li><li>• Food is described by color, shape, and quantity, but the child has only a limited ability to classify food into "groups"</li><li>• Foods tend to be categorized into "like" and "don't like"</li><li>• Foods can be identified as "good for you," but reasons they are healthy are unknown or mistaken</li></ul>

# Common Nutrition & Health Concerns

---



# Food Intake Tendencies

---

- Appetite changes from infancy to preschool
- Vegetable intake tends to decrease, intake of cereals, grains, and sweets often increases
- Ground beef and hot dogs may be preferred over other animal proteins due to ease of chewing
- Lifelong eating habits begin to develop, affecting:
  - Taste preferences
  - Activity preferences
  - Oral Health



# What Influences Food Intake?

---

- Family environment
  - Internal vs external hunger cues
- Meals outside of the home (restaurants, child care, etc.)
- Peer influence
- Meal service/Portion Sizes



# Key Nutrients

---

Preschoolers often consume inadequate amounts of:

- Fiber
- Calcium
- Vitamin D
- Potassium
- Iron
- Zinc
- Vitamin A



# Vitamin/Mineral Supplementation

---

- AAP does not support giving healthy children routine supplementation of any vitamins or minerals
- Children who eat a variety of foods likely do not need a supplement
- Food is the best source of nutrients
- Those who might benefit from supplementation:
  - Children living with food insecurity
  - Children with very poor eating habits or appetites
  - Children with certain chronic diseases (i.e., cystic fibrosis)
  - Vegetarian or vegan diets lacking calcium-containing foods



# Obesity Trends (2-5 year olds)

---

- Overweight: BMI between 85<sup>th</sup> – 95<sup>th</sup> percentile
- Obese: BMI over 95<sup>th</sup> percentile
- Nationwide obesity prevalence for 2-5 year olds has decreased:
  - 13.9% in 2003-2004
  - 9.4% in 2013-2014
- Prevalence tends to be higher for:
  - Hispanics
  - African Americans
  - Children from low-income families (14.5% of WIC participants in 2014)



# Obesity-related diseases

---

- Asthma, sleep apnea, bone and joint problems, type 2 diabetes, and risk factors for heart disease
- Among children 10-19 years old, prevalence of type 2 diabetes increased by 4.8% annually from 2002-2012
  - **Habits that lead to complications (such as type 2 diabetes) are usually formed in the preschool years!**

# Hot Topics in Nutrition & PA

---



# General Nutrition Recommendations

## Preschooler, 1200 kcal/day








## MyPlate Daily Checklist

### Find your Healthy Eating Style

Everything you eat and drink matters. Find your healthy eating style that reflects your preferences, culture, traditions, and budget—and maintain it for a lifetime! The right mix can help you be healthier now and into the future. The key is choosing a variety of foods and beverages from each food group—and *making sure that each choice is limited in saturated fat, sodium, and added sugars*. Start with small changes—“MyWins”—to make healthier choices you can enjoy.

#### Food Group Amounts for 1,200 Calories a Day

 Fruits	 Vegetables	 Grains	 Protein	 Dairy
<b>1 cup</b>	<b>1 1/2 cups</b>	<b>4 ounces</b>	<b>3 ounces</b>	<b>2 1/2 cups</b>
<p><b>Focus on whole fruits</b></p> <p>Focus on whole fruits that are fresh, frozen, canned, or dried.</p>	<p><b>Vary your veggies</b></p> <p>Choose a variety of colorful fresh, frozen, and canned vegetables—make sure to include dark green, red, and orange choices.</p>	<p><b>Make half your grains whole grains</b></p> <p>Find whole-grain foods by reading the Nutrition Facts label and ingredients list.</p>	<p><b>Vary your protein routine</b></p> <p>Mix up your protein foods to include seafood, beans and peas, unsalted nuts and seeds, soy products, eggs, and lean meats and poultry.</p>	<p><b>Move to low-fat or fat-free milk or yogurt</b></p> <p>Choose fat-free milk, yogurt, and soy beverages (soy milk) to cut back on your saturated fat.</p>



**Limit** Drink and eat less sodium, saturated fat, and added sugars. Limit:

- Sodium to **1,500 milligrams** a day.
- Saturated fat to **13 grams** a day.
- Added sugars to **30 grams** a day.

**Be active your way:** Children 2 to 5 years old should play actively every day.

~~The SuperTracker creates personalized plans based on your age, sex, height, weight, and physical activity level.~~

# Nutrition Trends & Hot Topics

---

- Gluten Free
  - Might lack fiber, Vitamin B12, folate, iron, zinc, and magnesium
- Dairy Free
- Carb Free
- Organic/GMOs
- Food Allergies/Intolerances – [www.foodallergy.org](http://www.foodallergy.org)
- Food affecting behavior





# “Picky Eating”

---

- Mostly “typical” during toddler/preschool years
- Parents more likely to report struggles over feeding, preparing “special meals” and consistently commenting on child’s eating during meals = stressful eating environment
- Degree varies from child to child
- Strong parental influence
- Increase familiarity with new foods
- Repeated, non-threatening exposures

# Common Approaches to Picky Eating

---

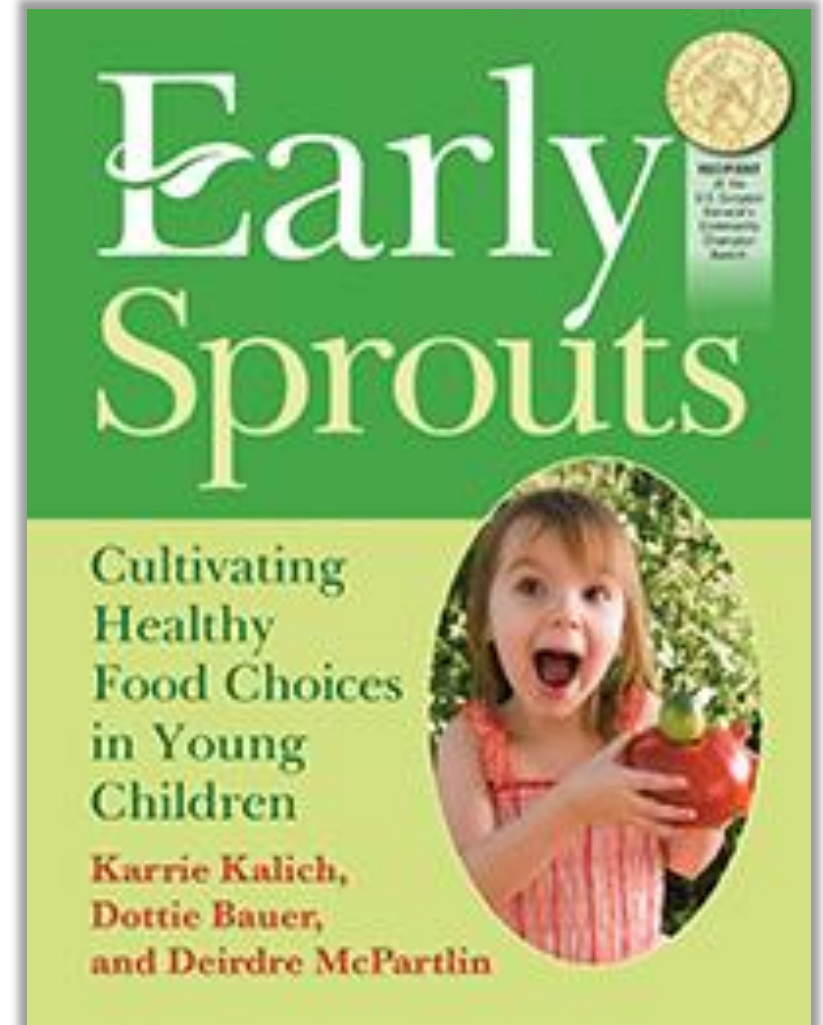
- Bribing/Bargaining
- Sneaking
- “Two-Bite” Club
- Explaining Health Benefits
- Adults Modeling
- New: Sensory Exploration



# Sensory Exploration

---

- Intentionally and actively using all of our senses to interact with and experience a food
- Gives children information about a new food
- Minimizes pressure



# Sample Sensory Exploration: Video

---

<https://www.youtube.com/watch?v=IKZDmikEAvk>



# Ellyn Satter: Division of Responsibility

---

- Caregivers responsible for *what, when* and *where* of feeding, and child is responsible for *how much* and *whether* to eat
- *Should* alleviate pressure (easier said than done)
- Specific Caregiver Responsibilities:
  - Choose and prepare food
  - Make eating times pleasant
  - Show your child by example how to behave at mealtime
  - Be considerate of your child's lack of food experience WITHOUT catering to likes and dislikes
  - No food or beverages (except water) between meal and snack times

# Pressure on Children's Eating ALWAYS Backfires

---

- Pressure can seem **POSITIVE**: Praising, reminding, bribing, rewarding, applauding, playing games, talking about nutrition, giving stickers, going on and on about how great the food is, making special food, serving vegetables first, making food fun (**to get the child to eat, not just to have fun**).
- Pressure can be **NEGATIVE**: Restricting amounts or types of food, coaxing, punishing, shaming, criticizing, begging, withholding dessert, treats, or fun activities, physically forcing, threatening.
- Pressure can **SEEM LIKE GOOD PARENTING**: Insisting on “no thank you” bites, encouraging or reminding the child to eat, taste, smell or lick, making her eat her vegetables, warning her that she will be hungry, making special food, keeping after her to use her silverware or napkin, hiding vegetables in other foods, letting her eat whenever she wants to between meals.
- Pressure can be **HARD TO DETECT**.

**Ask yourself why you are doing something with feeding. Is it to get your child to eat more, less or different food than he does on his own? If so, it is pressure.**



# “Grazing” & Juice Intake

---

- Excessive weight gain vs. poor growth
- According to AAP, 100% fruit juice should be limited to:
  - None under 1 year
  - No more than 4 oz per day for children ages 1-3
  - No more than 4-6 oz per day for children ages 4-6
- Encourage fruit instead of fruit juice
- No food between scheduled meals/snacks (except water)
- Snacks: 27% of children’s daily energy intake comes from snacks, with major sources coming from desserts and sweetened beverages



# Physical Activity

---

- Best Practice Recommendations:
  - NASPE: 60 minutes of EACH structured and unstructured physical activity
  - AHA: 60 minutes of moderate-to-vigorous physical activity
- Role of Child Care
- Influencing Factors (Strang, 2017):
  - Environmental (outdoor play, access to small portable play equipment)
  - Social (child care staff experience, training, confidence)
  - Individual (boys tend to be more active than girls)



# Where are Preschoolers?

---



# Where do we find preschoolers?

---

- Licensed child care settings
  - Family
  - Group
  - Group Facility
  - Center
  - Preschool
- Head Start
- Unlicensed child care (“self-declared” or FFN)



# Children in Child Care

2017 North Dakota Stats,  
Children 0-5 years ([www.ndchildcare.org](http://www.ndchildcare.org))

63,128 children



70.9% of children  
have parents in  
labor force



44,777 children  
likely in child care



# Children in Head Start

*2017 North Dakota Head Start Profile*

*National Head Start Association ([www.ndheadstart.com](http://www.ndheadstart.com))*

**10 Head Start Programs  
(3-5 years)**



**2,521 funded slots**

**8 Early Head Start  
Programs (0-3 years)**



**611 funded slots**

# CACFP – New Meal Patterns

---

- Updates effective October 1, 2017
- First major updates since program's inception in 1968
- Per USDA, the new meal patterns: *“include a greater variety of vegetables and fruit, more whole grains, and less added sugar and saturated fat.”*
- Better aligns with WIC



# CACFP – Food Components

- Milk (fluid)
- Meat and meat alternates (includes yogurt, cheese, tofu)
- Vegetables
- Fruits
- Grains

- **Breakfast:** Milk, Veg/Fruit, Grains (or Meat 3x/week)
- **Lunch:** All 5 components must be served
- **Snacks:** 2 of the 5 components must be served

# CACFP Meal Pattern Highlights

- Fruit and Vegetables are separate components (were previously combined), giving greater variety
- Fruit juice limited to once per day
- At least one serving of whole grain-rich foods must be served each day
- Grain-based desserts no longer count towards the grains component
- Yogurt must contain no more than 23 grams of sugar per 6 ounces
- Breakfast cereals must contain no more than 6 grams of sugar per ounce



# How to Make an Impact

---



# Get Involved!

---

- The opportunity to make an impact is GREAT!
- Support parents, recognizing their expertise in raising their children
- Volunteer to speak at child care or preschool
- Connect with local child care association or Child Care Aware of North Dakota office and consider training child care providers



# Resources

---

- Myplate Preschoolers page: <https://www.choosemyplate.gov/health-and-nutrition-information>
- Go NAP SACC (child care best practices): <https://gonapsacc.org/>
- Healthy Kids, Healthy Future (child care resources): <https://healthykidshealthyfuture.org/>
- Sesame Street Healthy Habit Toolkits: <https://www.sesamestreet.org/toolkits/healthyhabits>
- ChildcareAlive!: [www.childcarealive.org](http://www.childcarealive.org)

# Questions?

