



# From Birth to Young Adulthood: Dairy Nutrition Recommendations & Practical Applications

June 28, 2023

# Welcome



# Housekeeping



# From Birth to Young Adulthood: Dairy Nutrition Recommendations & Practical Applications

Release Date: June 28, 2023

Expiration Date: June 28, 2024

## Activity Overview

This activity will help to educate on dairy's nutritional role in human health and educate on practical skills and strategies to implement dairy into daily meal plans from birth to young adulthood.

## Target Audience

This activity is designed for an audience of Physicians and Registered Dietitians.

## Learning Objectives

Upon completion of the educational activity, participants should be able to:

- Outline dairy recommendations for each stage of childhood - from prenatal and birth through the teen years
- Identify dairy's unique nutrient contributions and its impact on diet quality
- Provide patients and clients with practical guidance on incorporating dairy foods in their diet to meet federal recommendations

[https://akhinc.formstack.com/forms/230143\\_e](https://akhinc.formstack.com/forms/230143_e)

**Please claim your credit by June 28, 2024**

If you have questions about this CE activity, please contact AKH Inc at [Ketrea@akhcme.com](mailto:Ketrea@akhcme.com)

## Criteria for Success

To obtain a certificate of completion, a score of 70% or better on the post-test is required. Please proceed with the activity until you have successfully completed this program, answered all test questions, completed the post-test and evaluation, and have received a digital copy of your certificate. You must participate in the entire activity to receive credit. There is no fee to participate in this activity. If you have questions about this activity, please contact AKH Inc. at [Ketrea@akhcme.com](mailto:Ketrea@akhcme.com)



**CE credit provided by AKH Inc., Advancing Knowledge in Healthcare.**




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## Commercial Support

There is no commercial support for this activity.



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**Disclaimer**

This course is designed solely to provide the healthcare professional with information to assist in his/her practice and professional development and is not to be considered a diagnostic tool to replace professional advice or treatment. The course serves as a general guide to the healthcare professional, and therefore, cannot be considered as giving legal, nursing, medical, or other professional advice in specific cases. AKH Inc. specifically disclaim responsibility for any adverse consequences resulting directly or indirectly from information in the course, for undetected error, or through participant's misunderstanding of the content.

# Learning Objectives

After this webinar, participants will be able to:

- Outline dairy recommendations for each stage of childhood – from prenatal and birth through the teen years
- Identify dairy's unique nutrient contributions and its impact on diet quality
- Provide patients and clients with practical guidance on incorporating dairy foods in their diet to meet federal recommendations

# Audience Quiz

1. How many essential nutrients does milk provide?
  - a) 17
  - b) 10
  - c) 9
  - d) 13
  
2. According to the Dietary Guidelines for Americans, children ages 6 - 23 months should *only* consume whole fat milk/dairy
  - a) True
  - b) False

# Speakers





**Candice Jones, MD, FAAP**



**Elise Compston, RD**



# Supporting Childhood Growth and Development Through Healthy Nutrition



Candice W. Jones, MD FAAP  
Midwest Dairy Webinar  
June 28, 2023

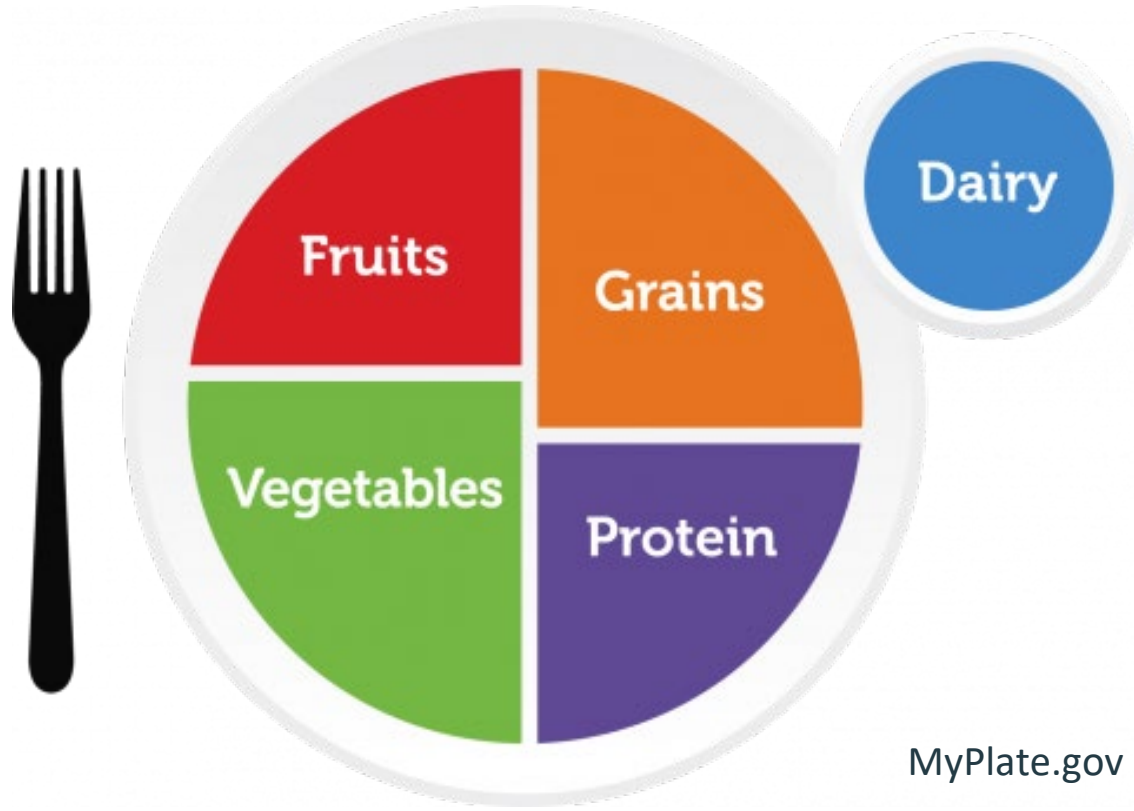
# Disclosure

I have a financial relationship in collaboration with FoodMinds and Midwest Dairy as a consultant for this presentation.

# Objectives

At the end of this presentation, the attendee will be able to

- Define components of healthy nutrition supportive of childhood growth and development
- Describe key nutrients necessary for optimal growth and development in childhood
- Implement strategies to help parents and older children incorporate these nutrients into the diet



MyPlate.gov



# Dietary Guidelines for Americans

- Birth to 23 months
  - Introduction of complementary foods
  - Establish health dietary patterns
  - Consume nutrients critical for brain development and growth (ex. Variety of pureed foods, Whole or reduced fat dairy)
  - Make every bite count (as small children eat small amounts)
- Preschool (2-5 years)
  - Healthy eating habits
  - Fostering movement
  - Picky eating

# Dietary Guidelines for Americans

- School aged (6-12 years)
  - Monitor caloric intake with appropriate food group portions
  - Reduce fast foods, sugary drinks, and unhealthy snacking
- Adolescence (13-18 years)
  - Independent in making food choice
  - Special considerations, ex. iron deficiency anemia and other nutritional deficiencies in adolescent girls due to underconsumption of meats and other protein sources

# Case Example

- 1 year old boy with picky eating
- Struggled with introduction of solids
- Drinks milk, water, and juice well
- Eats lots of snacks and some fruits
- Struggles to eat meats and vegetables
- Finger stick hemoglobin in clinic - 10.5 gm/dL
- Growth and development within normal limits





## Making Every Bite (Drink) Count

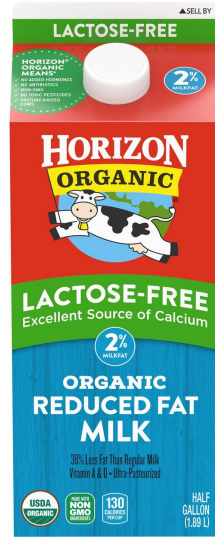
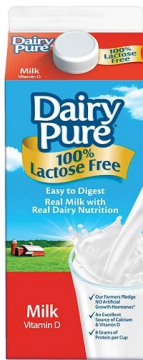


One serving of milk provides:

- 25% DV Calcium
- 15% DV Vitamin D
- 16% DV Protein
- 50% DV Vitamin B12
- 15% DV Vitamin A



# Lactose intolerance



# How do plant-based beverages compare?

NewYork-Presbyterian

## How Nutritious Is Your Non-Dairy Alternative?

Today, consumers are increasingly replacing cows milk with nut- and plant-based dairy alternatives of the almond, soy, rice, coconut, and hemp varieties. Their reasons for ditching dairy are equally diverse, including weight loss, an aversion to consuming animal products, acne control, and disease prevention.

But do these beverages provide the nutrients needed to stay healthy? The answers may surprise you.



**COW'S MILK, 2%**  
Calories 130  
Protein 8g  
Fat 5g



**ALMOND MILK**  
Calories 39  
Protein 1.5g  
Fat 2.8g  
May be fortified with  
Calcium, Vitamin D,  
Vitamin A, Vitamin E



**COCONUT MILK**  
Calories 45  
Protein 0g  
Fat 4g  
May be fortified with  
Calcium, Vitamin D,  
Vitamin A, Vitamin B12



**RICE MILK**  
Calories 113  
Protein <1 g  
Fat 2.3g  
May be fortified with  
Calcium, Vitamin D,  
Vitamin A, Vitamin B12



**SOY MILK**  
Calories 80  
Protein 7g  
Fat 4g  
May be fortified with  
Calcium, Vitamin D,  
Vitamin A, Vitamin  
B12, Riboflavin

<https://healthmatters.nyp.org/nutrition-non-dairy/>, Ask A Nutritionist: The Scoop on Non-Dairy Products

# Strategies to Improve Nutrient Intake

- Evaluate current dietary pattern
- Identify strengths and improvement areas
- Anticipate age appropriate needs, for ex. Breast fed older infant vs. 2 year old
- Customize food and beverage lists based on nutritional needs and preferences
- Suggest alternatives for restrictive diets, for ex. Supplements or fortified drinks for teen who is vegetarian
- MyPlate-Quiz, Plan, Kitchen, App, Alexa
- Encourage family participation in grocery shopping and meal preparation
- Allow for creativity and fun

[https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary\\_Guidelines\\_for\\_Americans-2020-2025.pdf](https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf)  
and MyPlate.gov



# Case

- Reintroduce a wide variety of foods from all food groups
- Eat first then drink
- Allow enough time to eat
- Flexible ways to eat
- Eat together for modeling
- Iron rich foods
- Healthy snacking
- May need vitamin supplementation
- Don't give up





Thank You!

# Practical Applications with Dairy Foods



- Recommended dairy servings & nutritional importance at each stage
- Tips and tricks to encourage intake throughout the younger years
- Sample meal plans to get started





# Infants 6-11 Months (First Foods)

**Recommended Dairy Servings (per day):** No set serving recommendations at this age.

- Texture
- Taste
- Tummy-friendly bacteria



- Donovan SM, Rao G. Health benefits of yogurt among infants and toddlers aged 4 to 24 months: A systematic review. *Nutr Rev.* 2019;77(7):478-486.doi:10.1093/nutrit/nuz009.
- U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025.* 9th Edition. December 2020. Accessed at [https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary\\_Guidelines\\_for\\_Americans\\_2020-2025.pdf](https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf).



# Infants 6-11 Months (First Foods)

## Try This:

- Melt cheese on top of strips of tortilla or bread
- Add yogurt and/or ricotta cheese into baked goods
- Mix softened fruit or creamy nut butter into yogurt and cottage cheese
- Fold cheese into scrambled eggs
- Shred or grate cheese into small pieces to make them easier to grab while pincer grasp develops and easier to swallow
- Mix yogurt or ricotta with dried herbs and spices to use as a spread or dip
- Spread ricotta cheese on top of bread or sweet potato "toasts" with cinnamon
- Chia pudding





# Infants 6-11 Months (First Foods)

- Whipped ricotta with canned peaches and cinnamon
- Cucumber spears with Dill Yogurt dip
- Yogurt with peanut butter and hemp hearts
- Cottage cheese with puréed mango
- Eggs with cheddar cheese
- Muffins made with Yogurt or Ricotta Cheese
- Broccoli and Cheddar Bites
- Naan with Tahini-Yogurt Sauce
- Sweet potatoes blended with cream cheese





# Toddlers (12-23 months)

## **Recommended Dairy Servings (per day):**

1 2/3-2 cups for those no longer consuming breastmilk or iron-fortified formula



- Donovan SM, Rao G. Health benefits of yogurt among infants and toddlers aged 4 to 24 months: A systematic review. *Nutr Rev.* 2019;77(7):478-486.doi:10.1093/nutrit/nuz009.
- U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025.* 9th Edition. December 2020. Accessed at [https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary\\_Guidelines\\_for\\_Americans\\_2020-2025.pdf](https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf).

# Toddlers (12-23 months)

## Try this:

- Start small
- Try, try again!
- Make it new
- Get everyone involved
- Remember varying appetites





# Toddlers (12-23 months)

## Breakfast:

- French Toast Sticks (**Milk**) + Nut Butter + Berries

## Snack:

- Baba Ganoush + Pita + Cucumbers

## Lunch:

- Bean, & Cheese Quesadilla (**Cheese**) + Mashed Avocado + Banana Slices

## Snack:

- **Yogurt** + Softened Berries + Ground Flaxseed

## Dinner:

- Crockpot Mango Curry + Rice + **Milk** + Roasted Broccoli + Strawberries





# Preschoolers 2-5 Years

## **Recommended Dairy Servings (per day):**

2 cups for 2-3 year olds

2 1/2 cups for 4-5 year olds

At this age, milk and water are the recommended beverages for preschoolers.



- Lott M, Callahan E, Welker Duffy E, et al. Healthy beverage consumption in early childhood: Recommendations from key national health and nutrition organizations. Healthy Eating Research. September 2019. Accessed at <https://healthyeatingresearch.org/research/consensus-statement-healthy-beverage-consumption-in-early-childhood-recommendations-from-key-national-health-and-nutrition-organizations/>.
- U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Accessed at [https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary\\_Guidelines\\_for\\_Americans\\_2020-2025.pdf](https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf).
- U.S. Department of Agriculture. MyPlate. Dairy - What foods are included in the dairy group? 2020. Accessed at <https://www.myplate.gov/eat-healthy/dairy>.



# Preschoolers 2-5 Years

## Try This!

- Get kids involved
- Model healthy behaviors with food
- Have fun with food:
  - Cheese "sprinkles"
  - Get dipping!
  - Cookie Cutter Shapes



- Lott M, Callahan E, Welker Duffy E, et al. Healthy beverage consumption in early childhood: Recommendations from key national health and nutrition organizations. Healthy Eating Research. September 2019. Accessed at <https://healthyeatingresearch.org/research/consensus-statement-healthy-beverage-consumption-in-early-childhood-recommendations-from-key-national-health-and-nutrition-organizations/>.
- U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Accessed at [https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary\\_Guidelines\\_for\\_Americans\\_2020-2025.pdf](https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf).
- U.S. Department of Agriculture. MyPlate. Dairy - What foods are included in the dairy group? 2020. Accessed at <https://www.myplate.gov/eat-healthy/dairy>.



# Preschoolers 2-5 Years

## Breakfast:

- Oats (**Milk**) + PB + Banana

## Snack:

- Turkey, hummus, and avocado roll-ups

## Lunch:

- Cheddar Broccoli Soup (**Milk, Cheese**) + Peach Slices

## Snack:

- Carrot-Orange "Creamsicle" Smoothies (**Milk**)

## Dinner:

- Lemon Chicken + Falafel + tzatziki (**Greek yogurt**) + quartered grapes





# Grade Schoolers (6-12 years)

## Recommended Dairy Servings (per day):

2 1/2 cups for 6-8 year olds

3 cups for 9-12 year olds



- U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Accessed at [https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary\\_Guidelines\\_for\\_Americans\\_2020-2025.pdf](https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf).
- U.S. Department of Agriculture. MyPlate. Dairy - What foods are included in the dairy group? 2020. Accessed at <https://www.myplate.gov/eat-healthy/dairy>.
- Yen Li Chu, Anna Farmer, Christina Fung, Stefan Kuhle, Kate E Storey, Paul J Veugelers. Involvement in home meal preparation is associated with food preference and self-efficacy among Canadian children. Public Health Nutrition, 2012; 1 DOI: [10.1017/S1368980012001218](https://doi.org/10.1017/S1368980012001218)



# Grade Schoolers (6-12 years)

## Try This!

- Plan meals and lunchboxes together
- Post-practice replenishment
- Replace water with milk when making oatmeal
- Freeze yogurt "cubes" for smoothies to make smoothies extra thick and creamy
- Use baked cheese snacks (ex. Whisps) as protein-rich dippers for salsa, guacamole, hummus, and other dips
- Kid-friendly favorites:
  - Build-your-own smoothie bowl
  - Whipped ricotta or cottage cheese dip for fruit
  - Apple rings with yogurt and chocolate chips
  - Snack kabobs, with cubed cheese, fruit, and veggies





# Grade Schoolers (6-12 years)

Breakfast:

- Veggie, Egg, & **Cheese** Breakfast Casserole + Kiwi

Snack:

- Apple "Nachos" with **Yogurt** Dip

Lunch:

- Sesame Noodle Salad + Pear Slices

Snack:

- "Pizza" Crescent Rolls (**Cheese**)

Dinner:

- Taco Pasta (**Cheese**) + Salad + Mixed Berries





# Teenagers 13-18 Years

**Recommended Dairy Servings (per day):** 3 cups

**A note on lactose:** Many with lactose intolerance can still enjoy dairy foods.

- U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Accessed at [https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary\\_Guidelines\\_for\\_Americans\\_2020-2025.pdf](https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf).
- U.S. Department of Agriculture. MyPlate. Dairy - What foods are included in the dairy group? 2020. Accessed at <https://www.myplate.gov/eat-healthy/dairy>.





# Teenagers 13-18 Years

Teens are always on the go and are beginning to make more of their own choices surrounding food. Some tips to help keep them fueled with dairy:

- Stock the fridge with grab & go snacks:
  - String cheese and ready-to-eat fruits and veggies
  - Homemade "Lunchables" with cheese, crackers, lunchmeat
  - Milk
  - Yogurt cups
  - Homemade fruit and yogurt/milk popsicles
  - Cottage Cheese and fruit cups
  - Smoothie Packs in the freezer - just add milk and blend!
- Easy breakfasts for on-the-go:
  - Overnight oats cups
  - Yogurt parfaits
  - Breakfast sandwiches with eggs and cheese
  - Sheet pan pancakes
  - Breakfast burritos with eggs, beans, and cheese





# Teenagers 13-18 Years

Breakfast:

- **Yogurt** parfait with fruit, nuts, and honey

Snack:

- Carrot sticks + Hummus + Hardboiled Egg

Lunch:

- Turkey wrap (**Cheese**) + Chips + Mandarin Oranges

Snack:

- Popcorn with Shredded **Cheese**

Dinner:

- Shakshuka with Feta (**Cheese**) + Bread + Salad + Watermelon





# Audience Quiz Answers

1. How many essential nutrients does milk provide?
2. True or false: According to the Dietary Guidelines for Americans, children ages 6 - 23 months should *only* consume whole fat milk/dairy



# Q&A





**THANK YOU!**

