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**Dairy Foods Help People  
Thrive Across the Lifespan**



The 2020-2025 Dietary Guidelines for Americans recognizes that dairy foods play an important role in healthy eating patterns from infancy through older adulthood. As a trusted health and wellness professional, you are key to helping people achieve their health and wellness goals.

This booklet will take you on a journey through how dairy foods can benefit each life stage. You will find key information and special topics of interest for each stage, including:

- ✓ Dairy’s unique nutrient contributions
- ✓ Special considerations
- ✓ Recommended dairy servings
- ✓ What counts as a serving for milk, cheese and yogurt

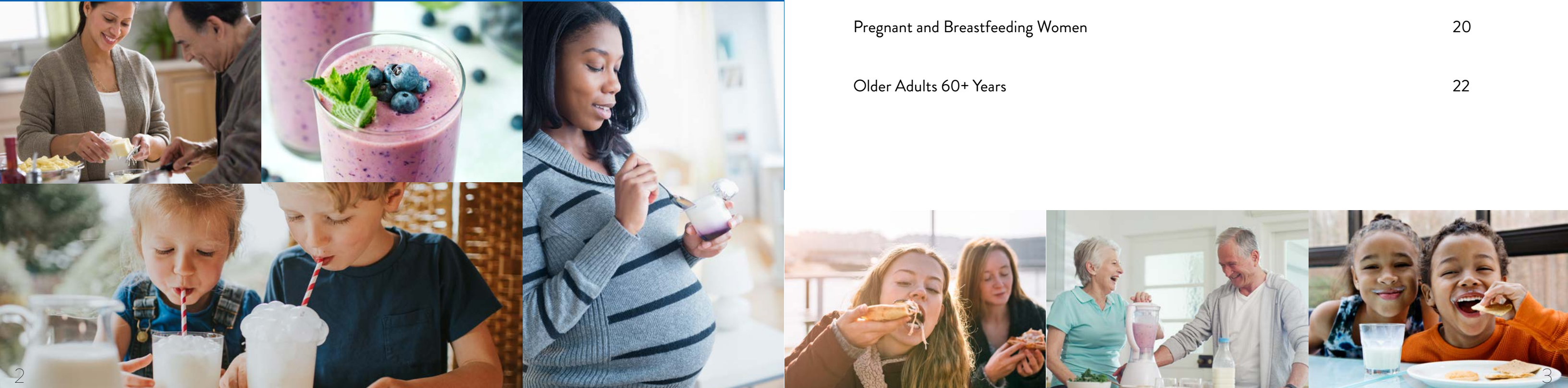
There are also tips, food pairing ideas and recipes that will inspire individuals to make every bite, slice and sip count each day.

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# Dairy Throughout the Lifespan



## Infants 6-11 Months:

### Building the foundation for healthy eating.

At about 6 months, infants should be introduced to nutrient-rich, developmentally appropriate foods to complement human milk or infant formula feedings to ensure adequate nutrition and encourage acceptance of a wide variety of nutritious foods.<sup>1,2</sup> Cheese and yogurt offer a range of diverse tastes and textures, which can help support development of future healthy eating habits.<sup>3</sup>

## Toddlers 12-23 Months:

### Supporting growth and development.

After their first birthday, as babies transition from human milk or iron-fortified infant formula, whole milk and other dairy foods emerge as critically important sources of essential nutrients to support growth and development.<sup>4</sup>



## Grade Schoolers 6-12 Years:

### Building healthy habits to last a lifetime.

Dairy's calcium, vitamin D, protein and phosphorus can help support bone mass, which may reduce risk for osteoporosis (or bone diseases) later in life.<sup>6</sup> Dairy foods also provide sources of important nutrients that support the immune system, including high-quality protein, vitamins A and D, zinc and selenium.<sup>7</sup>



## Preschoolers 2-5 Years:

### Delivering high-quality nutrition.

Leading health experts agree water and plain milk are the only recommended beverages for children 1 to 5 years of age.<sup>5</sup> Plant-based alternatives are not recommended due to their wide variability in nutrient content, limited evidence of bioavailability and impact on diet quality and health outcomes.<sup>5</sup>



## Teenagers 13-18 Years:

### Supplying necessary nutrition for a crucial chapter.

Adolescence is a unique growth period, making nutritious food choices vitally important. However, the gap between the amount of dairy foods recommended and actually eaten widens as children age.<sup>1</sup> Teen girls are especially vulnerable to falling short of their vitamin B12 and bone-building nutrient needs.<sup>1</sup> Dairy foods provide more bone-beneficial nutrients per calorie than any other food group.<sup>8</sup>



## Adults 19-59 Years:

### Reducing risk of chronic diseases.

Healthy eating patterns that include low-fat or fat-free dairy foods are associated with reduced risk for several chronic diseases, including cardiovascular disease and type 2 diabetes.<sup>1</sup> In addition, dairy foods provide calcium and vitamin D, which are particularly important to accruing peak bone mass in early adulthood.<sup>1</sup>

## Older Adults 60+ Years:

### Aging vibrantly.

Older adults are at greater risk for health conditions related to changes in bone and loss of muscle mass, such as osteoporosis and sarcopenia.<sup>1</sup> Nutrient-rich dairy foods provide high-quality protein to help maintain muscle, as well as bone building nutrients important during bone remodeling that takes place post-menopause.<sup>1</sup>

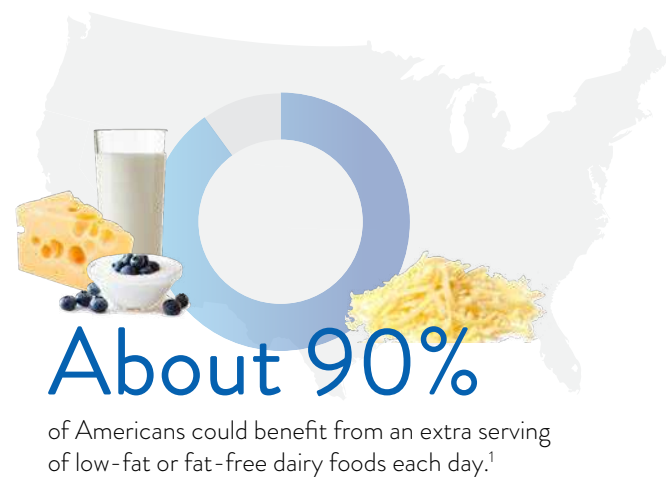


## Pregnant and Breastfeeding Women:

### Supporting baby's brain development.

Pregnant and breastfeeding women need higher amounts of some nutrients including vitamin B12, iodine and choline.<sup>1,2,9</sup> As excellent sources of vitamin B12, dairy foods help support a healthy pregnancy and may help prevent vitamin B12 deficiency in infants which can lead to permanent neurological damage.<sup>10</sup> As good sources of iodine, milk and yogurt may help protect against neurocognitive defects and lower childhood IQ linked to prenatal iodine deficiency.<sup>2</sup> Plus, the choline<sup>†</sup> found in dairy foods can help replenish maternal stores and support the growth and development of the baby's brain and spinal cord.<sup>1,2</sup>

<sup>†</sup>One serving of milk provides 8% of the Daily Value for choline.



## Dairy Foods are Flexible to Meet Personal Preferences

Low-fat and fat-free dairy foods contribute to health across the lifespan. Research shows there's also room to allow for fat flexibility. It is possible to stay within saturated fat recommendations while choosing whole milk dairy foods for one of the three servings of dairy foods recommended each day.<sup>11</sup>

### Daily Dairy Food Recommendations<sup>1,12</sup>

Toddlers*	12-23 months	1 ⅓ - 2 cups
	2-3 years	2 cups
Children	4-8 years	2 ½ cups
	9-13 years	3 cups
Teenagers	14-18 years	3 cups
Adults	>19 years	3 cups

## \$ Dollar for Dollar

Dollar for dollar, dairy foods are one of the most economical sources of nutrition.<sup>13,14</sup> In fact, three servings of milk can cost as little as \$0.60 per day.<sup>15</sup> And there are a variety of options in the dairy case so people can customize their approach to building healthy habits.

## 🥛 Lactose Intolerant?

While it is a serious condition, the good news is most people with lactose intolerance can tolerate varied amounts of lactose. There are many solutions to try so you can continue to enjoy the great taste and nutritional benefits of dairy foods. For example, try working small amounts into meals or choosing foods with minimal amounts or no lactose.

## Did you know?

- ✓ Lactose-free milk is real milk, just without lactose.
- ✓ Natural cheeses such as Cheddar, Colby/Monterey Jack, Mozzarella and Swiss contain minimal amounts of lactose.
- ✓ Yogurt's live and active cultures help to digest lactose, plus Greek and Icelandic yogurts have even less lactose because of the straining process.

*Low-fat and fat-free dairy foods contribute to health across the lifespan.*

# What Counts as a Serving of Dairy?<sup>1,12</sup>



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1. 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).
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\*Fortified soy beverages and yogurt are classified within the dairy group because their nutrition content is similar to that of dairy foods. Other plant-based alternatives, such as almond or oat "milk," are not included within the group because their nutrient composition is not equivalent to dairy foods.





# Infants 6-11 Months

At about 6 months, infants should be introduced to nutrient-rich, developmentally appropriate foods that complement human milk or iron-fortified infant formula feedings. Providing complementary foods helps to ensure adequate nutrition, encourage acceptance of a wide variety of nutritious foods, and set the stage for a lifetime of healthy eating habits.<sup>1,2</sup>



## Dairy's Unique Contributions

The first two years of a baby's life is a critical window to set the foundation for healthy eating habits that may help prevent chronic diseases in the future.<sup>3</sup> Once a baby is developmentally ready, introducing complementary foods like yogurt and cheese is an easy way to familiarize babies to new tastes and textures.

### Cheese



Cheese comes in a variety of textures from soft and solid, like Cheddar cheese, to lumpy, like cottage cheese. Cheese can also introduce a variety of tastes such as mild, sharp and tangy.

### Yogurt



Whole milk yogurt (plain, unsweetened) introduces a creamy texture and slightly sour taste.



Yogurt also contains good bacteria, which helps to support digestion at all ages.<sup>4</sup>



## Special Considerations

- Offer “finger foods” that babies can feed themselves to help them develop fine motor skills and experience how different foods feel in their hands and in their mouth.



months

Yogurt and cheese can be introduced in meals and snacks starting around 6 months. Whole cow's milk can be introduced after the baby's first birthday.

- It's understandable to be concerned about the development of food allergies. But the 2020-2025 Dietary Guidelines for Americans state there is no evidence that shows the prevention of food allergies by delaying the introduction of allergenic foods beyond when other complementary foods are given.<sup>1</sup> In fact, the opposite might be true. The introduction of potentially allergenic foods during the complementary feeding period is supported by research, pediatrician recommendations and child readiness and may be helpful in reducing the risk of food allergy.<sup>1</sup>

# Building the Foundation for Healthy Eating



## Make Every Bite & Sip Count

- Shred or grate cheese so baby can grab as the pincer grasp is being developed and these sizes will be easier to swallow.
- Melt cheese atop cooked broccoli, cauliflower or carrots and mash or finely chop into bite-sized portions.
- Introduce one new “single-ingredient” food at a time – wait a few days before adding a new food to ensure baby can tolerate each new food. Remember, it might take several attempts to accept and enjoy a new food.
- Once baby has embraced a new food, you can pair it with other complementary foods. Serve plain, unsweetened regular or Greek/Icelandic yogurt and cottage cheese alone or with pureed fruits to introduce a variety of tastes and textures at once, like a tart taste balanced with something naturally sweeter like fruit.

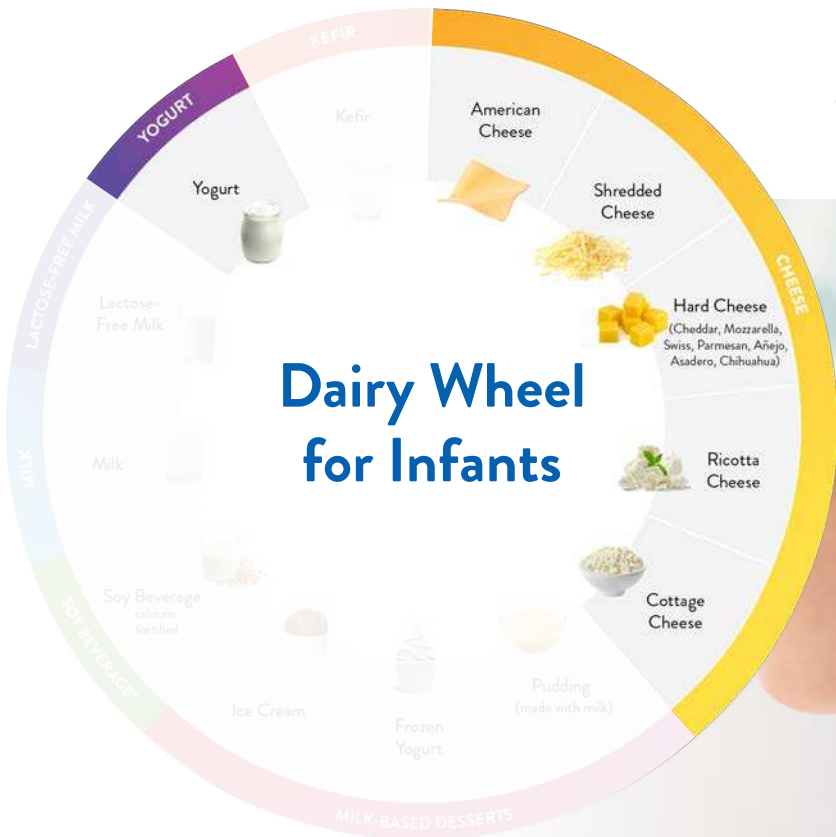
- Start small, don't stress about having to get a full serving in. Just one bite is a great start to increasing exposure and familiarity, even if more of it ends up on the floor, tray or on baby versus in their mouths!
- By 7 or 8 months, babies should be eating foods from all food groups. Continue offering a variety of foods over the next several months to expand baby's range of tastes and textures.

### Sources

<sup>1</sup> 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).  
<sup>2</sup> Dietary Guidelines Advisory Committee. Scientific Report of the 2020 Dietary Guidelines Advisory Committee. July 2020. Accessed at <https://www.dietaryguidelines.gov/2020-advisory-committee-report>.  
<sup>3</sup> Perez-Escamilla R, Segura-Perez S, Lott M. Feeding guidelines for infants and young toddlers: A responsive parenting approach. *Healthy Eating Research*. February 2017. Accessed at <https://healthyeatingresearch.org/research/feeding-guidelines-for-infants-and-young-toddlers-a-responsive-parenting-approach/>.  
<sup>4</sup> 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.



The first two years of a baby's life is a critical window to set the foundation for healthy eating habits.





# Toddlers 12-23 Months

After their first birthday, as babies transition from human milk or iron-fortified infant formula, whole milk and other dairy foods emerge as critically important sources of calories and essential nutrients to fuel brain development and growth spurts.<sup>1</sup>

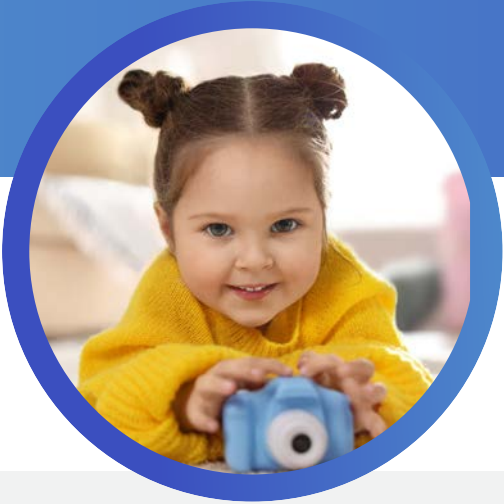
## Dairy's Unique Contributions

Within the first 12 months, a baby's brain doubles in size and triples to almost adult size by 36 months. To fuel this incredible expansion, the infant brain alone uses over 50% of consumed daily calories. Whole milk provides a concentrated source of calories and nutrients during this time.<sup>2</sup>

### Milk

Milk is considered one of the top food sources for several vitamins and minerals.<sup>1</sup>

- Protein helps build muscle.
- Calcium, vitamin D and phosphorus help build strong bones and teeth.
- B vitamins, like B12 and riboflavin, help turn food into fuel.
- Protein, zinc, selenium and vitamins A and D help support a healthy immune system.
- Iodine is linked to cognitive function in childhood.



### Special Considerations

- Toddlers are endlessly curious and at mealtimes it is no different. Though it may get messy, toddlers will want to try what the rest of the family is enjoying as they test out new tastes, textures and fine motor skills.

### Recommended Daily Dairy Servings<sup>3,4</sup>

1 2/3 – 2 cups

(for those no longer consuming breastmilk or iron-fortified formula)  
*This can be easily divided into several 1/2 cup (milk and yogurt) and 1/2 oz (cheese) servings throughout the day.*



# Supporting Growth & Development

## Make Every Bite & Sip Count

- Introduce a new food alongside a familiar food in the same meal.
- It may take several attempts – more than eight times even – for babies and toddlers to accept new foods.<sup>5</sup> Patience will pay off.
- Offer milk from a sippy-cup instead of a bottle to help toddlers build skills needed to transition them to an open cup.
- Toddlers know when they are full, so don't worry about them cleaning their plate – this will distort their innate hunger and fullness cues.
- Remember that making a mess is all part of the learning process. Encourage babies and toddlers to smell, feel and explore their food.

## Simple Pairings to Try\*

- Turkey and cheese pinwheels
- Mini whole wheat English muffin pizzas
- Cheese quesadillas with whole wheat tortillas and smashed avocado
- Yogurt parfaits



\*Pairings are provided as nutritious examples – other combinations are possible.

### Sources

<sup>1</sup> Analyses of NHANES 2013-2014 & 2015-2016 data conducted by Victor Fulgoni, PhD. Analyses conducted using SAS 9.4 and SUDAAN 11 with survey parameters including strata, primary sampling units and dietary sample weights. Means were calculated using SAS proc survey means and percentages were calculated using SUDAAN proc ratio.  
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<sup>5</sup> U.S. Department of Agriculture. MyPlate. Toddlers - Picky eating. 2020. Accessed at <https://www.myplate.gov/life-stages/toddlers>.





# Preschoolers 2-5 Years

Leading health experts agree water and plain milk are the only recommended beverages for children 1 to 5 years of age. Plant-based alternatives are not recommended due to their wide variability in nutrient content, limited evidence of bioavailability and impact on diet quality and health outcomes. The exception would be unsweetened, fortified soy milk if a child is allergic to dairy milk or is in a family that has made specific dietary choices such as abstaining from animal products.<sup>1</sup>



## Dairy's Unique Contributions

Dairy foods like low-fat or fat-free milk, yogurt and cheese are fundamental to good nutrition.

Milk, in particular, provides a powerful package of 13 essential nutrients.



Calcium, phosphorus and vitamin D help build and maintain strong bones and teeth.



The high-quality protein found in dairy foods helps build and repair muscles.



The package of B vitamins helps convert food to fuel.



Leading health experts agree water and plain milk are the only recommended beverages for children 1 to 5 years of age.



## Special Considerations

- It is important for adults to role model healthy eating behaviors for children. One easy way to help kids build healthy habits is to serve nutrient-rich milk at meals and water in between for hydration.

## Recommended Daily Dairy Servings<sup>2,3</sup>

2-3 years old

2 cups

4-5 years old

2½ cups

See opposite page for what counts as a serving of dairy. There are a variety of ways to enjoy milk, cheese and yogurt to meet the recommended daily servings.

# Nourishing Growing Kids



## Try this Recipe



### Fruit & Yogurt Ice Pops

Makes 6 servings

- Ingredients:**
- 3 cups frozen raspberries, blueberries and/or strawberries
  - 3 cups fat free yogurt

### Instructions:

- Place ½ cup of fruit in paper cup.
- Place ½ cup yogurt into cups of fruit.
- Stir each cup with spoon or wooden stick and place in center of cup.
- Freeze until firm.



## Make Every Bite & Sip Count

- Caregivers and littles can enjoy a bowl of oatmeal with milk or build their own fruit, whole grain cereal and yogurt parfaits together in the mornings. It's a nutritious start to the day and can help jumpstart healthy habits to last a lifetime.
- Let preschoolers lend a hand with meal prep. This can help little ones have a say in mealtime, feel more comfortable trying new foods and make healthy eating fun. Make whole grain pita pizzas together by decorating with tomato sauce, mozzarella cheese and colorful veggies or cool off after a day of play with fruit & yogurt ice pops.

### Sources

<sup>1</sup> 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/>.  
<sup>2</sup> 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).  
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# Grade Schoolers 6-12 Years

Elementary school years are filled with activity. To keep pace with packed schedules, fuel learning and play, build bone mass and support unique developmental needs at this life stage, high-quality nutrition – like the nutrients provided by dairy foods – is especially important. However, dairy consumption starts to slip below recommended levels before children start elementary school, with the gap widening as they enter school and become more independent.<sup>1</sup> This means school-aged children are at risk of under consuming three key nutrients that dairy foods provide: potassium, calcium and vitamin D.

## Dairy’s Unique Contributions

Dairy’s calcium, vitamin D, protein and phosphorus can help support bone mass, which may reduce risk for osteoporosis later in life. Osteoporosis may seem a long way off for kids, but building bone density early in life is vitally important.<sup>2</sup>

Dairy foods like milk also provide essential nutrients that support the immune system, including high-quality protein, vitamins A and D, zinc and selenium.<sup>3</sup>

## Did You Know?

School meals are healthy and can go a long way in helping make every bite and sip count and ensuring well-rounded and nutrient-rich meals are within reach.



### Special Considerations

Drinking low-fat or fat-free plain or flavored milk helps kids get their recommended servings of dairy.<sup>1,4</sup> Whether plain or flavored, milk is a nutrient-rich and delicious option. Plus, flavored milk is low in added sugars compared to sugar-sweetened beverages and only contributes about 4% of added sugars in kids’ diets.<sup>5</sup>

### Recommended Daily Dairy Servings<sup>1,6</sup>

6-8 years old  
2½ cups

9-12 years old  
3 cups

See opposite page for what counts as a serving of dairy. There are a variety of ways to enjoy milk, cheese and yogurt to meet the recommended daily servings.

# Building Healthy Habits to Last a Lifetime

## Try this Recipe



- Berry Dairy Delicious Smoothie**
- Ingredients:**
- 2 cups frozen strawberries
  - ½ cup frozen cauliflower
  - 1⅓ cup low-fat or 2% milk
  - ½ cup low-fat vanilla yogurt
  - 2 tbsp honey (optional)
  - Fresh strawberries (optional)

- Instructions:**
- Place all ingredients into a blender and puree until smooth.
  - Pour smoothie into a glass and top with strawberries.

## Make Every Bite & Sip Count

- It’s ok to have fun with food. Decorating a smoothie bowl is one way to bring excitement to mealtimes. Let kids add their favorite smoothie ingredients like milk, yogurt and berries then give it a whirl, pour into a bowl and decorate with fruit, nuts or seeds.
- Kids love to dip. Serving a dip alongside veggies encourages kids to try them. Try blending your favorite herbs and spices with Greek yogurt or cottage cheese for an easy kid-friendly dip.
- Teach kids where their food comes from. The more involved a child is in growing and preparing foods, the more likely they are to be engaged around food and try something new. Let kids tend to their own herb pots, take them on a field trip to a local dairy farm or ask them to pick out produce at the farmers market.

**Sources**

<sup>1</sup> 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).

<sup>2</sup> Weaver CM, Gordon CM, Janz KF, et al. The National Osteoporosis Foundation’s position statement on peak bone mass development and lifestyle factors: A systematic review and implementation recommendations. *Osteoporos Int*. 2016;27(4):1281-1386. doi:10.1007/s00198-015-3440-3.

<sup>3</sup> Calder PC, Carr AC, Gombart AF, Eggersdorfer M. Optimal nutritional status for a well-functioning immune system is an important factor to protect against viral infections. *Nutrients*. 2020;12(4):1181.

<sup>4</sup> Greer FR, Krebs NF, American Academy of Pediatrics Committee on Nutrition. Optimizing bone health and calcium intakes of infants, children and adolescents. *Pediatrics*. 2006;117(2):578-585. doi: 10.1542/peds.2005-2822.

<sup>5</sup> National Dairy Council. NHANES 2015-2018. Data Source: Centers for Disease control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey Data. Hyattsville, MD: U.S. Department of Health and Human Services. <http://www.cdc.gov/nchs/nhanes.htm>.

<sup>6</sup> U.S. Department of Agriculture. MyPlate. What foods are included in the Dairy Group? 2020. Accessed at <https://www.myplate.gov/eat-healthy/dairy>.





# Teenagers 13-18 Years

Adolescence is a unique growth period, making nutritious food choices vitally important. However, the gap between the amount of dairy foods recommended in the U.S. Dietary Guidelines and what’s actually eaten widens as children age. This is concerning because dairy foods provide more bone-beneficial nutrients per calorie than any other food group.<sup>1</sup> Teen girls are especially vulnerable to falling short of their vitamin B12 and bone building nutrient needs.<sup>2</sup>

## Dairy’s Unique Contributions

Teenagers are constantly on the go and enjoying more independence, so it’s important that they understand why – and how – to make healthy food choices. If they don’t, teenagers run the risk of missing out on important nutrients at a time when they’re experiencing major developmental changes.<sup>2</sup> Low consumption of dairy foods can lead to low intakes of key nutrients, such as:

- Calcium, vitamin D and phosphorus, which help build strong bones and teeth;
- Magnesium, which supports muscle function and energy production; and
- Choline, which helps support cognitive health and the conversion of food to fuel.<sup>3</sup>

Adolescence is a unique growth period, making nutritious food choices vitally important.



## Special Considerations

- Acne is a common concern for teens. To promote healthy skin, the American Academy of Dermatology encourages a balanced approach to eating that contains all food groups, rather than removing specific foods.<sup>4</sup>
- Lactose intolerant? There are many lactose-free milk options on the market – it’s real milk with all the same nutrients, just without the lactose. Additionally, many teens with lactose intolerance can still tolerate some amount of lactose in their diet. For example, the good bacteria in yogurt helps digest lactose.

## Recommended Daily Dairy Servings<sup>2,5</sup>

3 cups

See opposite page for what counts as a serving of dairy. There are a variety of ways to enjoy milk, cheese and yogurt to meet the recommended daily servings.

# Necessary Nutrition for Teens

## Try this Recipe

Get creative with this classic pizza recipe by encouraging teens to top with their favorite veggies.



## Grilled Pizzas Made with No-Yeast Greek Yogurt Pizza Dough

Makes 4 servings

- Ingredients:**
- 2 cups self-rising flour
  - 1 cup Greek yogurt (fat level of choice)
  - 1/4 cup cornmeal
  - Shredded cheese
  - Tomato sauce
  - Sliced and diced veggies of choice

## Instructions:

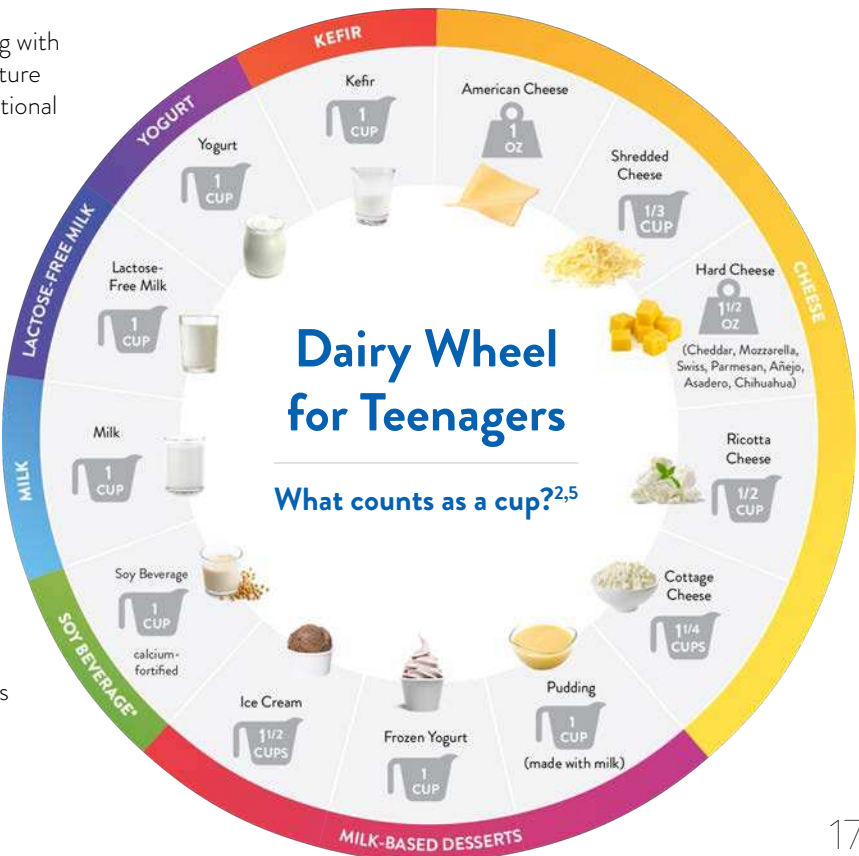
- Place a pizza stone in the center of gas grill and preheat to 450 degrees. (An oven works, too.)
- Combine flour and Greek yogurt in a large bowl, stirring with a fork until a rough dough begins to form. Turn the mixture out onto a floured work surface and knead, adding additional flour as needed, until the dough becomes smooth and elastic, about 8 minutes.
- Divide the dough in half to create two balls. Place one ball on a floured work surface and use a rolling pin to roll the dough into a 10-inch disk.
- Dust a pizza paddle or a cookie sheet with a generous amount of cornmeal, then transfer dough on top.
- Top dough with tomato sauce and add cheese, leaving a half inch border around the edge, followed by veggie toppings of choice.
- Carefully slide pizza from pizza paddle (or cookie sheet) onto preheated pizza stone in the center of grill (or oven). Close the lid and cook until the crust is golden and the cheese is bubbling, 8 to 10 minutes.
- Transfer pizza to cutting board. Rest pizza for 5 minutes before slicing. Repeat process with second dough ball.

## Make Every Bite & Sip Count

- Nutrient-rich foods can get lost in refrigerator drawers. Try leaving ready-to-eat cheese sticks or drinkable yogurts next to cleaned and prepped vegetables and fruits in high-traffic areas of the refrigerator. Teens will be more likely to see them quickly and grab a healthy snack on their way out the door or for a homework break.
- Teens have packed schedules and may need a hand thinking ahead for healthy choices – whether in the lunchroom, on the field or out with friends. Designate a meal prep day to cook together and help them understand nutrition labels on their favorite products.

## Sources

<sup>1</sup> Wallace TC, Bailey RL, Lappe J, et al. Dairy intake and bone health across the lifespan: a systemic review and expert narrative. *Crit Rev Food Sci Nutr*. 2020, Ahead of Print;1-47.  
<sup>2</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2020.  
<sup>3</sup> Hess JM, Cifelli CJ, Fulgoni VL. Energy and Nutrient Intake of Americans according to Meeting Current Dairy Recommendations. *Nutrients*. 2020;12(10):3006.  
<sup>4</sup> Zaenglein AL, Pathy AL, Schlosser BJ, Stem M, Boyer KM, Bhushan R. Guidelines of care for the management of acne vulgaris. *Journal of the American Academy of Dermatology*. 2016;74(5):p945-973.  
<sup>5</sup> U.S. Department of Agriculture. *MyPlate*. What foods are included in the Dairy Group? 2020.





# Adults 19-59 Years

Healthy eating patterns that include low-fat or fat-free dairy foods are associated with reduced risk for several chronic diseases, including cardiovascular disease and type 2 diabetes. In addition, dairy foods provide calcium and protein, which are particularly important for accruing peak bone mass in early adulthood.<sup>1</sup>

## Dairy's Unique Contributions

For many, adulthood becomes about routines – creating them and sticking to them to juggle an ever-growing list of home, family and work responsibilities. To live their best life, adults are seeking ways to improve their diets to support all the demands thrown their way. Enjoying dairy foods is one way to support healthy eating throughout adulthood.

Inflammation is a hot topic. Research has consistently shown that milk, cheese and yogurt do not cause inflammation and some studies have shown dairy foods may even be beneficial in reducing chronic inflammation.<sup>2</sup>

A healthy immune system is essential to wellness. The nutrients in dairy foods play an important role in immunity. Milk, for example, provides vitamins A and D, protein, zinc and selenium.<sup>3</sup>

## Recommended Daily Dairy Servings<sup>1,6</sup>

3 cups

See opposite page for what counts as a serving of dairy. There are a variety of ways to enjoy milk, cheese and yogurt to meet the recommended daily servings.



## Special Considerations

It is more than a “gut feeling.” Fermented dairy foods like yogurt with live cultures, hard cheeses and kefir can benefit gut health by helping to maintain gut barrier function.<sup>4</sup> They also contain unique bioactives, due to the fermentation process, that may improve health.<sup>5</sup>

Lactose intolerant? While it is a condition to take seriously, the good news is most people with lactose intolerance can handle small amounts of lactose. There are many solutions to try that may help people continue to enjoy the great taste and nutritional benefits of dairy foods without discomfort. For example, working small amounts into meals or choosing foods with minimal amounts or no lactose, like yogurt, hard cheeses (such as Cheddar) or lactose-free milk, are strategies to incorporate dairy foods in a low-lactose or lactose-free eating style.

# Staying Healthy and Vibrant

## Try this Recipe

### Turkish Eggs with Greek Yogurt and Sautéed Spinach

Makes 2 servings

- Ingredients:**
- 2 large eggs
  - 2 cups Greek yogurt (fat level of choice)
  - 2 teaspoons lemon juice
  - 4 teaspoons olive oil
  - 1 small garlic clove, minced
  - 1/2 teaspoon red pepper flakes
  - 1/2 teaspoon smoked paprika
  - 2 cups fresh baby spinach
  - 8 small cherry tomatoes, quartered
  - 1 tablespoon fresh basil, minced
  - Salt and pepper to taste
  - 4 slices whole-grain bread, toasted



- Instructions:**
1. Bring a small pot of water to a simmer. Break eggs, one at a time into a small dish or ramekin. Carefully add eggs, one at a time to water. Cook eggs until whites are set and yolks begin to thicken, 3-5 minutes. Use a slotted spoon to transfer eggs to a plate lined with a paper towel.
  2. Combine yogurt and lemon juice in a bowl and whisk until smooth.
  3. Heat olive oil in a large skillet over medium heat. Add garlic, red pepper flakes and paprika and cook, stirring constantly for 30 seconds. Add spinach and cook until wilted and coated.
  4. To serve, divide Greek yogurt mixture evenly between two shallow bowls. Top each bowl with half of the spinach mixture and nestle an egg in the center. Garnish with tomatoes and basil. Season to taste with salt and pepper and serve immediately with toasted bread.

## Make Every Bite & Sip Count

- ✓ Have a plant with dairy. Dairy foods and plant foods bring different nutrients to the table and complement each other's flavors and textures. Think ricotta and strawberries, Cheddar cheese and apples, berries and yogurt, or tomatoes baked with feta.
- ✓ Lean into yogurt's versatility to enhance everyday meals. It can serve as the base for dips, dressings, and marinades. Plain, thick yogurt – like Greek- and Icelandic-style varieties – is an excellent topping for tacos, stews, soups or sandwiches.

**Sources**

<sup>1</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020.

<sup>2</sup> Cifelli C. Does dairy cause inflammation? 2021.

<sup>3</sup> Calder PC, Carr AC, Gombart AF, Eggersdorfer M. Optimal nutritional status for a well-functioning immune system is an important factor to protect against viral infections. *Nutrients*. 2020;12(4):1181.

<sup>4</sup> Bell V, Ferrão J, Pimentel L, Pintado M, Fernandes T. One health, fermented foods, and gut microbiota. *Foods*. 2018;7(12):195.

<sup>5</sup> Dimidi E, Cox SR, Rossi M, Whelan K. Fermented foods: definitions and characteristics, impact on the gut microbiota and effects on gastrointestinal health and disease. *Nutrients*. 2019;11(8):1806.

<sup>6</sup> U.S. Department of Agriculture. MyPlate. What foods are included in the Dairy Group? 2020.





# Pregnant and Breastfeeding Women

Dairy foods help people thrive across the lifespan – including the earliest stages. To help nourish a growing baby, pregnant and breastfeeding women need higher amounts of some nutrients including vitamin B12, iodine and choline, as well as fluids.<sup>1,2</sup> However, many pregnant or breastfeeding women are falling short of the recommended three daily servings of dairy foods to help meet these fluid and nutrient needs during this time of development.<sup>1</sup>



## Dairy's Unique Contributions

Dairy foods provide important nutrients that help support a healthy pregnancy.



Vitamin B12 helps prevent deficiency that can lead to permanent neurological damage.<sup>3</sup>



Iodine helps prevent neurocognitive defects and lower childhood IQ.<sup>1</sup> During pregnancy, iodine needs increase over 50%. Iodine deficiency is the most preventable cause of intellectual disability.<sup>4</sup> However, women who do not regularly consume dairy foods, eggs, seafood, or use iodized table salt, may not consume enough iodine to meet increased needs during pregnancy and lactation.<sup>1</sup> Also keep in mind, many prenatal supplements do not contain iodine, so it is important to read the supplement label.<sup>1</sup>



Choline\* can help replenish maternal stores and supports the healthy growth and development of baby's brain and spinal cord.<sup>1</sup>

*\*One serving of milk provides 8% of the Daily Value for choline.*



## Special Considerations

- ✓ Contrary to conventional thinking, new or expecting moms do not need to restrict food and beverage choices to prevent food allergies in their baby.<sup>1</sup>
- ✓ Access to safe and nutritious foods can help support a lifetime of health and wellness for babies and moms alike. At around \$0.20 per 8-ounce serving, milk is an affordable source of iodine and other important nutrients.<sup>5,6,7</sup>
- ✓ Lactose intolerant? There are many lactose-free milk options on the market – it's real milk with all the same nutrients, just without the lactose. Additionally, many women with lactose intolerance can still tolerate some amount of lactose in their diet. For example, the good bacteria in yogurt helps break down lactose, making it easier to digest.
- ✓ During pregnancy women should take special precautions not to consume unpasteurized milk or soft cheeses made from unpasteurized milk.<sup>1</sup>

# Supporting a Healthy Foundation for Life



## Try this Recipe

### Overnight Rice Porridge – 3 Ways

Makes 3 servings

#### Ingredients:

- 2 cups cooked brown rice
- 1 1/3 cups low-fat or fat-free milk
- 1/4 tsp iodized salt
- Toppings of choice
  - Eggs, spinach, chicken breakfast sausage and cheese
  - Mushrooms, seaweed and scallions
  - Pomegranate seeds, walnuts and honey



#### Instructions:

1. Combine cooked brown rice, milk and salt in a container with a tight-fitting lid. Place in the refrigerator for 8 hours or overnight.
2. Transfer rice mixture to a saucepan placed over medium heat on the stovetop and bring to a boil. As soon as the mixture comes to a boil, reduce the temperature to low.
3. Simmer the porridge, stirring occasionally for 10-15 minutes, or until the mixture has thickened.
4. Serve immediately with toppings of choice.

#### Sources

1. U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020.
2. The National Academies of Science Engineering and Medicine. Dietary reference intakes: The essential guide to nutrient requirements. 2006.
3. National Institutes of Health Office of Dietary Supplements. Vitamin B12 fact sheet for consumers. 2021.
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5. Drewnowski A. The contribution of milk and milk products to micronutrient density and affordability of the U.S. diet. *J Am Coll Nutr.* 2011;30(5 Suppl 1):422S-8S.
6. Hess J, Cifelli C, Agarwal S, Fulgoni V III. Comparing the cost of essential nutrients from different food sources in the American diet (OR20-04-19). *Curr Dev Nutr.* 2019;3(1).
7. IRI Multi Outlet + Conv 2020, YTD ending 10-4-20. Based on U.S. average price of unflavored, branded and private label milk, 1 gal.
8. U.S. Department of Agriculture. MyPlate. What foods are included in the Dairy Group? 2020.

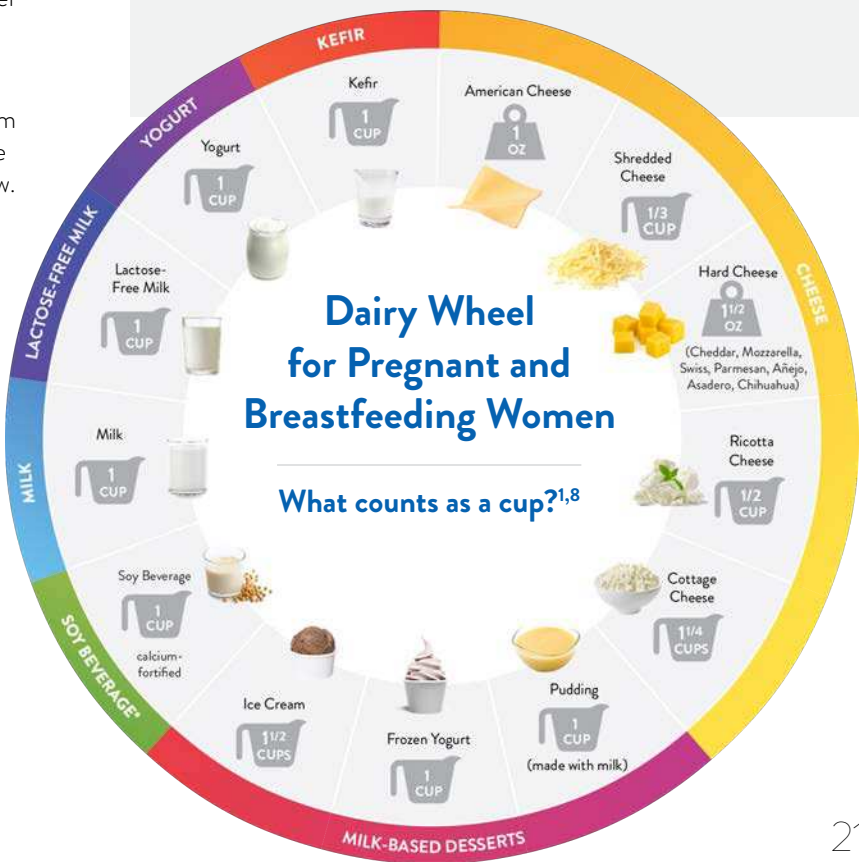


## Make Every Bite & Sip Count

- ✓ Before, during and after pregnancy, women require much higher amounts of iodine to support baby's brain development. Adding milk or yogurt to recipes that typically call for water, like rice porridge, oatmeal or soups, is an easy way to boost daily iodine consumption.
- ✓ New moms are often short on time and energy. Dairy foods can help. Whether it's grabbing a slice of cheese on-the-go or enjoying a cup of yogurt with berries while baby naps, dairy foods can easily fit into an unpredictable schedule.

## Recommended Daily Dairy Servings<sup>1,8</sup>

3 cups









# Older Adults 60+ Years

Healthy aging begins with healthy habits like good nutrition and wellness. As adults age, it's important to protect against health conditions related to changes in bone and muscle mass, like osteoporosis and sarcopenia. Nutrient-rich dairy foods provide high-quality protein to help maintain muscle, as well as bone building nutrients important during bone remodeling that takes place post-menopause.<sup>1</sup>

## Dairy's Unique Contributions

Whether working, easing into retirement, taking care of elderly parents, supporting friends or keeping up with the kids and grandkids, older adults are looking for ways to balance the demands of life while maintaining energy and avoiding chronic diseases. Regular strength exercises combined with healthy eating is essential and doesn't have to be hard. For example, enjoying healthy eating patterns, which can include healthy fats like nuts and olive oil, plenty of fruits and vegetables, lean protein sources and three servings of dairy each day, can help set older adults up for success.

Most older adults fall short of the Dietary Guidelines for Americans' daily dairy recommendations. By increasing to three servings each day, dairy can help deliver on many of the unique nutrition needs to support healthy aging.

-  High-quality protein helps maintain muscle health.
-  Calcium, phosphorus and vitamin D help sustain strong bones and teeth.
-  Vitamin B12 plays a critical role in nerve function.
-  Choline\* supports cognitive function.<sup>2</sup>  
\*One serving of milk provides 8% of the Daily Value for choline.

## Recommended Daily Dairy Servings<sup>1,6</sup>

 **3 cups**

See opposite side for what counts as a serving of dairy. There are a variety of ways to enjoy milk, cheese and yogurt to meet the recommended daily servings.



## Special Considerations

- ✓ Maintaining optimal muscle mass is one way to stay well through older adulthood. While some loss of muscle is expected, there are ways to help minimize and support healthy aging, including regular resistance training and consuming a balanced amount of high-quality protein each day.
- ✓ During this time in life, it may be difficult to become comfortable with a set income. Dollar for dollar, dairy foods are one of the most affordable sources of nutrition.<sup>3,4</sup> In fact, three servings of milk can cost as little as \$0.60 per day,<sup>5</sup> and research has shown that dairy foods are the lowest cost sources of calcium and vitamin D – both nutrients of public health concern.<sup>3,4</sup>
- ✓ Lactose intolerant? The good news is even individuals with lactose intolerance can still benefit from dairy's nutrients. Adding small amounts of dairy foods into meals or choosing foods with minimal or no lactose, like hard cheeses and Greek- or Icelandic-style yogurts, are great strategies. Lactose-free milk is also still real milk, just without the lactose.

# Aging Vibrantly

## Try this Recipe

**Baked Oats with Cottage Cheese and Dried Fruit Sprinkles**  
Makes 4 servings

- Ingredients:**
- 1/4 cup freeze-dried blueberries and strawberries
  - 2 cups old-fashioned or quick cooking oats
  - 1 cup cottage cheese
  - 2 ripe bananas
  - 4 eggs
  - 4 tablespoons agave nectar or honey
  - 1 teaspoon baking powder
  - 1/4 teaspoon salt



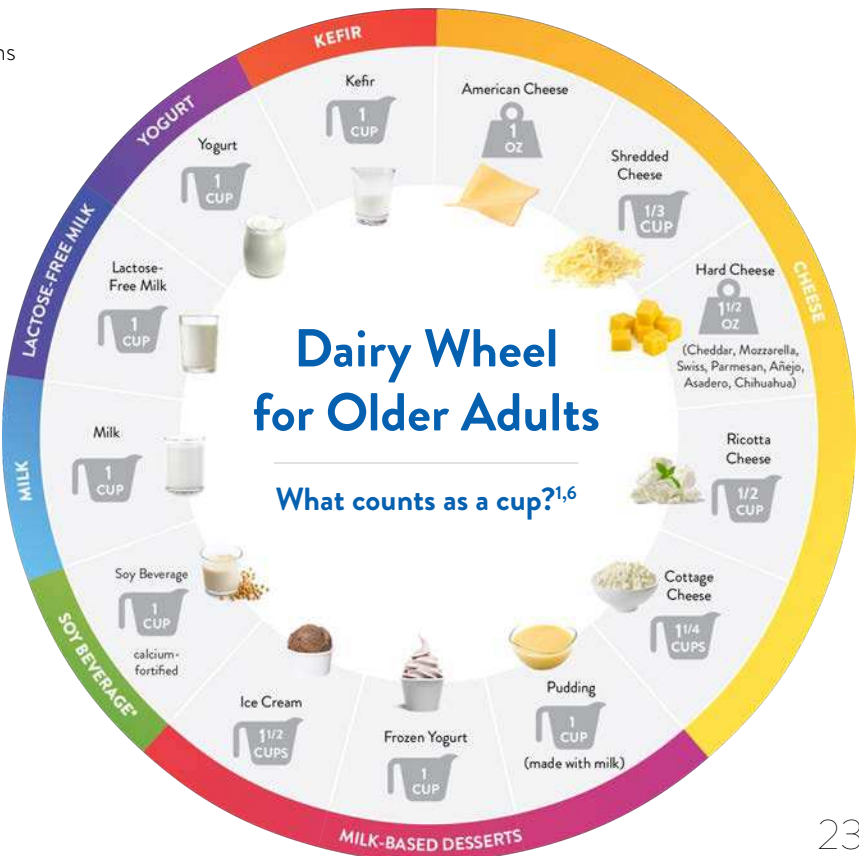
- Instructions:**
1. Preheat oven to 350° F. Grease four 8-ounce ramekins or oven-safe bowls with butter or cooking spray.
  2. Place freeze-dried blueberries and strawberries in a zip-top bag and crush using a rolling pin. Fruit pieces should be roughly the size of sprinkles. Set aside.
  3. In a blender, combine oats, cottage cheese, bananas, eggs, agave nectar (or honey), baking powder and salt. Pulse until the mixture is combined and the oats are starting to break down but not completely smooth. Do not over mix.
  4. Using a spoon or spatula, gently fold 1/4 cup of freeze-dried fruit into batter.
  5. Divide batter between four prepared ramekins or bowls. Bake in preheated oven for 25 minutes, or until cakes are set. Remove from oven and allow to cool for 5 minutes before serving.
  6. To serve, garnish each cake with a dollop of Greek yogurt, freeze-dried fruit "sprinkles" and a drizzle of honey, if desired.

## Make Every Bite & Sip Count

- ✓ Use milk instead of water in oatmeal and soups and top with a dollop of Greek yogurt to enhance creaminess while adding a splash of nutrients and high-quality protein.
- ✓ It can be hard for older adults to stay hydrated. Luckily, milk naturally contains ~90% water, plus it comes with important nutrients that play a role in hydration like electrolytes potassium and sodium.

### Sources

<sup>1</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020.  
<sup>2</sup> Zelman K. Micronutrients: Choline. *Food & Nutrition*. 2017.  
<sup>3</sup> Drewnowski A. The contribution of milk and milk products to micronutrient density and affordability of the U.S. diet. *J Am Coll Nutr*. 2011;30(5 Suppl 1):422S-8S.  
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<sup>5</sup> IRI Multi Outlet + Conv 2020, YTD ending 10-4-20. Based on U.S. average price of unflavored, branded and private label milk, 1 gal.  
<sup>6</sup> U.S. Department of Agriculture. MyPlate. What foods are included in the Dairy Group? 2020.







Milk, yogurt and cheese are foundational foods that help nourish people throughout life. Dairy foods, including lactose-free varieties, are highly nutritious and accessible options that help fill nutrient gaps and contribute to healthy eating patterns. To learn more about how dairy foods help people thrive across the lifespan, visit [USDairy.com](https://www.usdairy.com).