



Better Health With a Balanced Diet



Dairy Nutrition Notebook



adapted from American Dairy Association North East

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About Us

National Dairy Council's mission is to bring to life the dairy community's shared vision of a healthy, happy, sustainable world with science as the foundation. On behalf of America's dairy farmers, National Dairy Council shares science-based information about how nutritious, responsibly produced dairy foods help nourish people across the lifespan.

Dairy Nourishes
— NETWORK —

Scan here to join the Dairy Nourishes
Network to stay up-to-date dairy
research, resources and recipes.



Health Disparities and Nutrition are Inextricably Linked

Black adults are*

- 60%** more likely to have been diagnosed with diabetes
- 50%** more likely to have a stroke
- 30%** more likely to have high blood pressure
- 30%** more likely to die from heart disease
- 1.3X** more likely to have obesity

*% more likely than non-Hispanic white adults

Children and Adolescents

- 28%** of non-Hispanic Black girls have obesity
- 6%** of non-Hispanic Black teens have high blood pressure





Most Americans are Falling Short on Dairy, Vegetable, Fruit and Whole Grain Recommendations

According to the 2020-2025 Dietary Guidelines for all Americans, the percentage of Americans not meeting recommendations:



In part, these disparities are due to challenges with food and nutrition security.

Between 2020 and 2021, 28% of Black households experienced food insecurity affecting nearly 1/3 of Black households with children.

At 22 cents a serving, dairy foods are nutrient rich and can be affordable, accessible, culturally appropriate and part of the solution to helping people of color thrive across the lifespan.

1. Office of Minority Health. Black/African American - The Office of Minority Health. Hhs.gov. Published 2019. <https://www.minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlid=61>
2. Kris-Etherton PM, Petersen KS, Velarde G, et al. Barriers, Opportunities, and Challenges in Addressing Disparities in Diet-Related Cardiovascular Disease in the United States. Journal of the American Heart Association. 2020;9(7). doi:<https://doi.org/10.1161/jaha.119.014433>
3. USDA and USDHHS. Dietary Guidelines for Americans, 2020-2025. 9th Edition
4. 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>
5. NDC. COVID-19: Unveiling Its Impact on Food Insecurity. <https://www.usdairy.com/getmedia/89e3f0f6-d563-43ee-86ed-91b6bf9e417f/covid-19-impact-on-food-insecurity.pdf?ext=.pdf>
6. Northwestern Institute for Policy Research, "Visualizing Food Insecurity." July 14, 2020, <https://www.ipr.northwestern.edu/state-food-insecurity.html>

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. Cheese and yogurt offer a range of diverse tastes and textures, which can help support development of future healthy eating habits.



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.

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. Dairy foods also provide sources of important nutrients that support the immune system, including high-quality protein, vitamins A and D, zinc and selenium.



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. 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.

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.

2. Dietary Guidelines Advisory Committee. Scientific report of the 2020 Dietary Guidelines Advisory Committee: advisory report to the Secretary of Agriculture and the Secretary of Health and Human Services. July 2020. Accessed at https://www.dietaryguidelines.gov/sites/default/files/2020-07/ScientificReport_of_the_2020DietaryGuidelinesAdvisoryCommittee_first-print.pdf.

3. Murray, RD. Influences on the initial dietary pattern among children from birth to 24 months. *Nutr Today*. 2017;52(25):S25-S29. doi: 10.1097/NT.0000000000000195.

4. 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.

5. 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/>.

6. 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



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. Teen girls are especially vulnerable to falling short of their vitamin B12 and bone-building nutrient needs. Dairy foods provide more bone-beneficial nutrients per calorie than any other food group.

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. In addition, dairy foods provide calcium and vitamin D, which are particularly important to accruing peak bone mass in early adulthood.

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. 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.



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. 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. As good sources of iodine, milk and yogurt may help protect against neurocognitive defects and lower childhood IQ linked to prenatal iodine deficiency. Plus, the choline[†] found in dairy foods can help replenish maternal stores and support the growth and development of the baby's brain and spinal cord.

[†]One serving of milk provides 8% of the Daily Value for choline.

implementation recommendations. Osteoporos Int. 2016;27(4):1281-1386. doi:10.1007/s00198-015-3440-3.

7. 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.

8. 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. doi: 10.1080/10408398.2020.1810624.








9. The National Academies of Science Engineering and Medicine. Dietary reference intakes: The essential guide to nutrient requirements. 2006. Accessed at <https://www.nap.edu/catalog/11537/dietary-reference-intakes-the-essential-guide-to-nutrient-requirements>.

10. National Institutes of Health Office of Dietary Supplements. Vitamin B12 fact sheet for health professionals. November 2019. Accessed at <https://ods.od.nih.gov/factsheets/VitaminB12-HealthProfessional/#en47>.

11. 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>.

Milk and Dairy Foods Can Contribute Essential Nutrients to the Daily Diets of Americans

One serving of milk contains many of the essential nutrients your body needs, including:

CALCIUM		Helps build and maintain strong bones and teeth.	25% DAILY VALUE
PROTEIN		Helps build and repair tissue. Helps maintain a healthy immune system.	16% DAILY VALUE
VITAMIN D		Helps build and maintain strong bones and teeth. Helps maintain a healthy immune system.	15% DAILY VALUE
PHOSPHORUS		Helps build and maintain strong bones and teeth, supports tissue growth.	20% DAILY VALUE
VITAMIN A		Helps keep skin and eyes healthy; helps promote growth. Helps maintain a healthy immune system.	15% DAILY VALUE
RIBOFLAVIN		Helps your body use carbohydrates, fats and protein for fuel.	30% DAILY VALUE
VITAMIN B12		Helps maintain healthy immune, blood and nervous system function. Supports normal energy metabolism. Necessary for brain development during pregnancy and infancy; linked to cognitive function in childhood.	50% DAILY VALUE

10% OR HIGHER IS A GOOD SOURCE

20% OR HIGHER IS AN EXCELLENT SOURCE

PANTOTHENIC ACID



Helps your body use carbohydrates, fats and protein for fuel.

20%
DAILY VALUE

NIACIN



Used in energy metabolism in the body.

15%
DAILY VALUE

ZINC



Helps maintain a healthy immune system and healthy skin, and helps support normal growth and development.

10%
DAILY VALUE

SELENIUM



Helps maintain a healthy immune system, helps regulate metabolism and helps protect healthy cells from damage.

10%
DAILY VALUE

IODINE



Necessary for proper bone and brain development during pregnancy and infancy; linked to cognitive function in childhood.

60%
DAILY VALUE

POTASSIUM*



Helps maintain a healthy blood pressure and supports heart health. Helps regulate body fluid balance and helps maintain normal muscle function.

10%
DAILY VALUE

*Source: USDA FoodData Central. FDA's Daily Value (DV) for potassium of 4700 mg is based on a 2005 DRI recommendation. In 2019, NASEM updated the DRI to 3400 mg. Based on the 2019 DRI, a serving of milk provides 10% of the DRI. FDA rule-making is needed to update this value for the purpose of food labeling.

1. USDA Food Data Central online at <https://fdc.nal.usda.gov/>. Mean values calculated from database entries across all fat levels of plain vitamin D-fortified fluid milk in Legacy, Foundation, (FNDDS) data sources.

2. The % Daily Value (DV) tells you how much nutrient is in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Dairy Food Recommendations

The current Dietary Guidelines for Americans recognizes that dairy foods play an important role in healthy eating patterns.

Below are the recommended dairy servings for all ages and information on what counts as a serving of dairy.

Daily Dairy Food Recommendations

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

*No longer receiving human milk or infant formula



*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 "milks," are not included within the group because their nutrient composition is not equivalent to dairy foods.

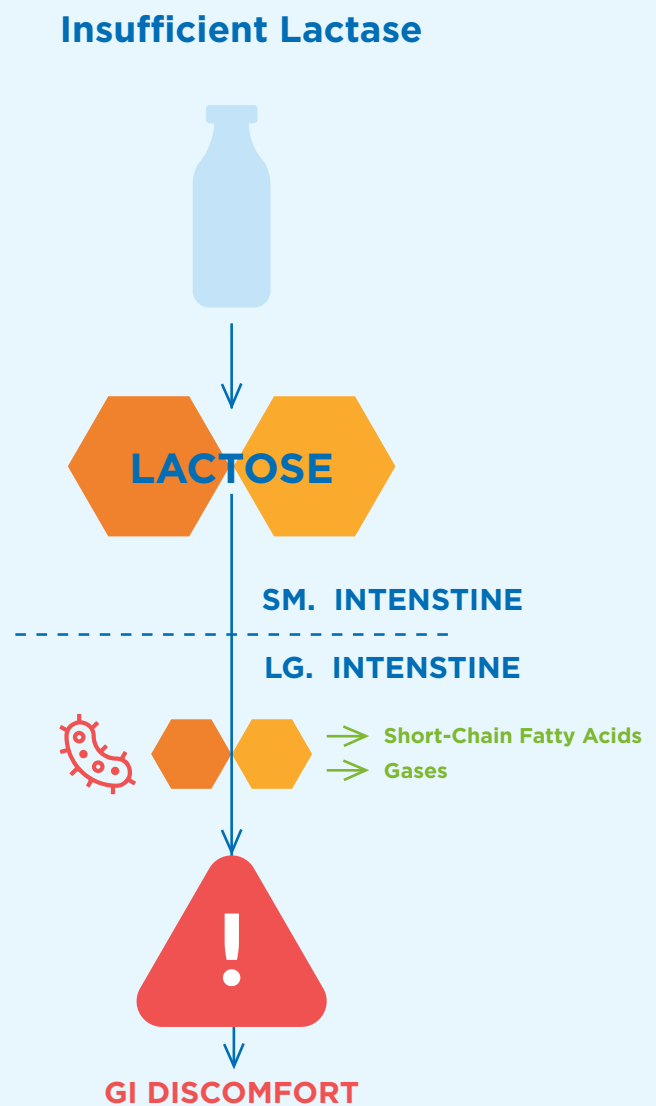
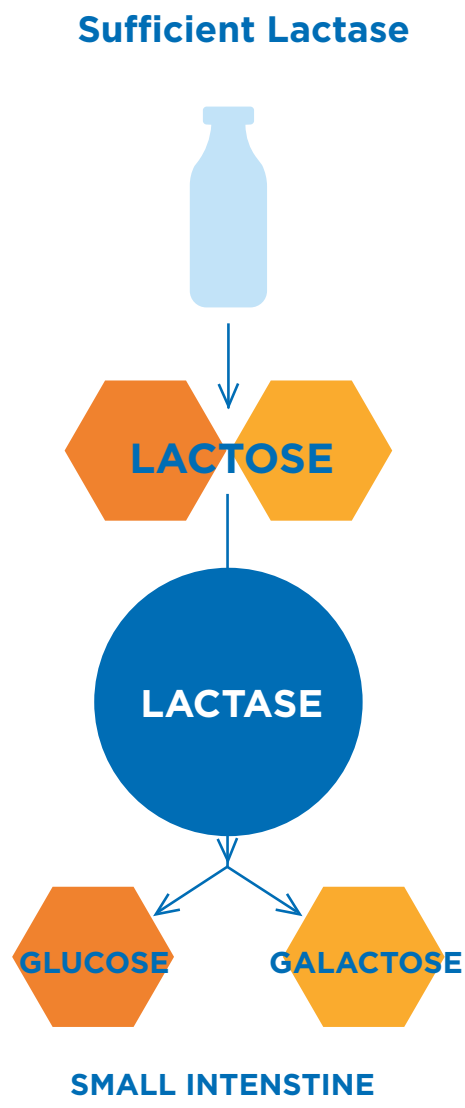


1. U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Accessed at https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf.
2. Dietary Guidelines Advisory Committee. Scientific report of the 2020 Dietary Guidelines Advisory Committee: advisory report to the Secretary of Agriculture and the Secretary of Health and Human Services. July 2020. Accessed at https://www.dietaryguidelines.gov/sites/default/files/2020-07/ScientificReport_of_the_2020DietaryGuidelinesAdvisoryCommittee_first-print.pdf.
3. Murray, RD. Influences on the initial dietary pattern among children from birth to 24 months. *Nutr Today*. 2017;52(25):S25-S29. doi: 10.1097/NT.0000000000000195.
4. 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.
5. 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/>.
6. 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.
7. 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.
8. 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. doi: 10.1080/10408398.2020.1810624.
9. The National Academies of Science Engineering and Medicine. Dietary reference intakes: The essential guide to nutrient requirements. 2006. Accessed at <https://www.nap.edu/catalog/11537/dietary-reference-intakes-the-essential-guide-to-nutrient-requirements>.
10. National Institutes of Health Office of Dietary Supplements. Vitamin B12 fact sheet for health professionals. November 2019. Accessed at <https://ods.od.nih.gov/factsheets/VitaminB12-HealthProfessional/#en47>.
11. Hess JM, Cifelli CJ, Fulgoni VL 3rd. Modeling the Impact of Fat Flexibility With Dairy Food Servings in the 2015-2020 Dietary Guidelines for Americans Healthy U.S.-Style Eating Pattern. *Front Nutr*. 2020;7:595880. doi:10.3389/fnut.2020.595880.
12. What foods are included in the Dairy Group. MyPlate.gov. 2020. Accessed at <https://www.myplate.gov/eat-healthy/dairy>.
13. 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): p. 422S-8S. doi:10.1080/07315724.2011.10719986.
14. Hess JM, Cifelli CJ, Agarwal S, Fulgoni VL 3rd. Comparing the cost of essential nutrients from different food sources in the American diet using NHANES 2011-2014. *Nutr J*. 2019;18(1):68. doi:<https://doi.org/10.1186/s12937-019-0496-5>.
15. 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

Lactose Intolerance Impacts Many Black Americans

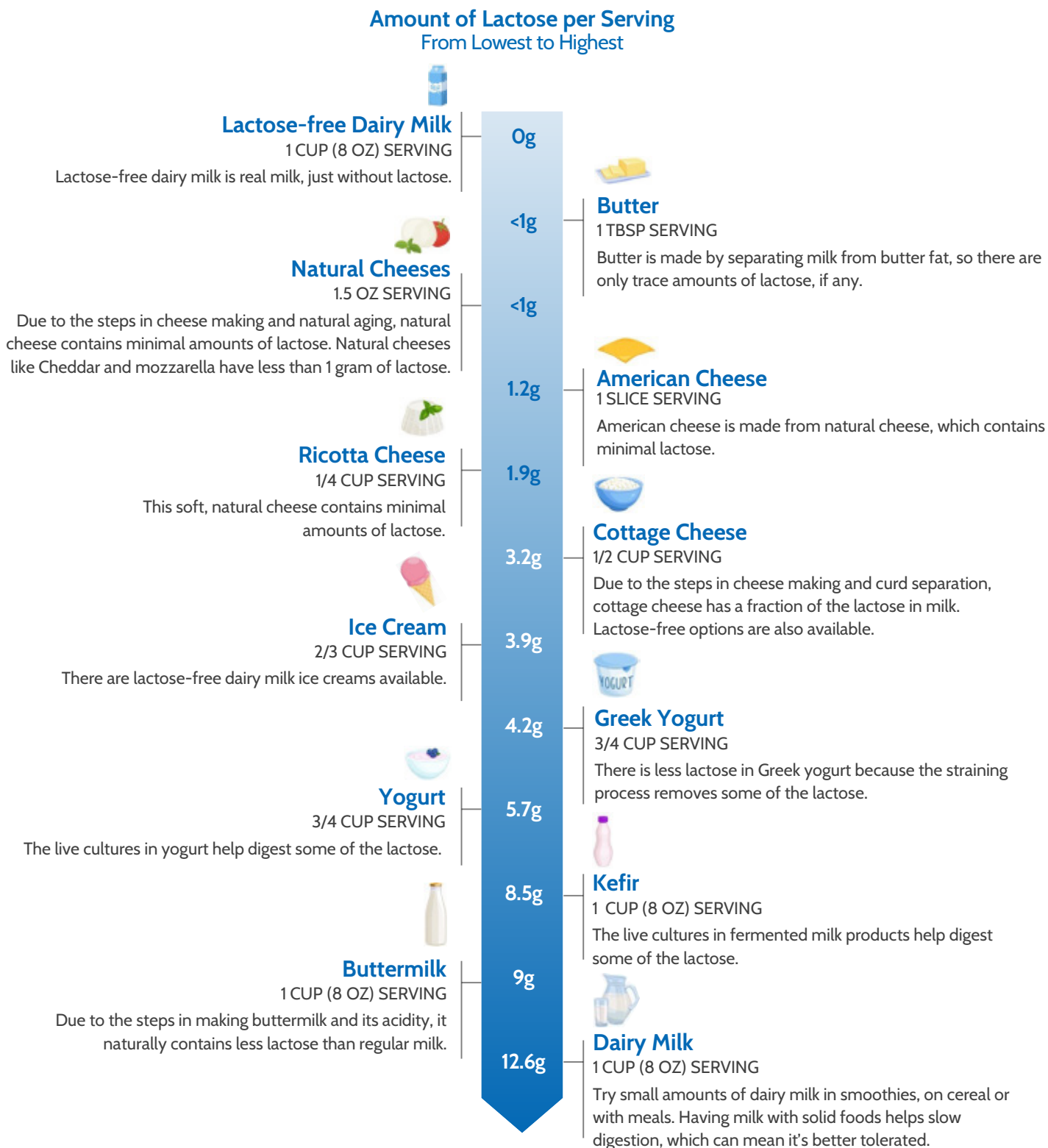
The estimated prevalence of lactose intolerance in African Americans is 80%.

There can be many barriers to healthy eating which is why providing education about potential solutions such as lactose-free and low-lactose dairy options is important to empower people with lactose intolerance to make the best choices for their health.



Enjoy Dairy Foods with Confidence

Everyone tolerates lactose differently. The good news is there are a variety of lactose-free and lower-lactose choices that deliver on taste and nutrition.



1. Lactose content based on the Reference Amount Customarily Consumed (RACC) and data from Food Data Central: <http://fdc.nal.usda.gov/> Accessed October 22. Ricotta lactose contents based on Facional M Setal. 2020 and Food Standards Australia New Zealand. Detailed data is on file and available up request.

Tried and True Tips for Incorporating Low Lactose Dairy Foods for Those with Lactose Intolerance



Dress It

Yogurt makes a great base for salad dressing.



Shred It

Top grits with natural cheese like Gouda or sharp Cheddar.



Marinate It

Use Greek yogurt or buttermilk as a marinade for poultry.



Top It

Fruit topped with ricotta makes a great dessert combo with minimal lactose.



Breakfast:

Cheesy Grits



10 MIN
PREP TIME

15 MIN
COOK TIME

6
SERVINGS

Ingredients

- 1 teaspoon unsalted butter
- 1 cup Cheddar cheese, shredded
- 1 small garlic clove, minced
- 1/2 cup quick cooking grits, not instant
- 1/2 cup lactose-free dairy milk, room temperature
- 1/4 teaspoon salt
- 2 cups water

Directions

1. Heat water and salt in a medium saucepan over medium-high heat to boiling. Slowly whisk grits, butter and garlic into the boiling water; reduce heat to medium-low. Gradually whisk to prevent lumpy grits. Cover the pan and cook, stirring occasionally, until grits have thickened, about 5 minutes.
2. Add cheese, milk and paprika. Cook and stir until the cheese is melted.



Cheese is a good source of high-quality protein and provides other essential nutrients such as calcium, phosphorus, B12, selenium and iodine. Eating small amounts of aged, hard cheeses such as Parmesan, Cheddar and Swiss, which contain minimal lactose, may be an effective approach to manage Lactose Intolerance and still enjoy important nutrients dairy foods provide.

1. Huth PJ, Fulgoni VL, Keast DR, Park K, Auestad N. Major food sources of calories, added sugars, and saturated fat and their contribution to essential nutrient intakes in the U.S. diet: data from the national health and nutrition examination survey (2003–2006). *Nutr J.* 2013;12(1):116. doi:10.1186/14752891-12-116
2. Hess JM, Cifelli CJ, Fulgoni III VL. Energy and Nutrient Intake of Americans according to Meeting Current Dairy Recommendations. *Nutrients.* 2020;12(10):3006. doi:10.3390/nu12103006
3. Silberman ES, Jin J. Lactose Intolerance. *JAMA - J Am Med Assoc.* 2019;322(16):1620. doi:10.1001/jama.2019.9608
4. Dekker P, Koenders D, Bruins M. Lactose-Free Dairy Products: Market Developments, Production, Nutrition and Health Benefits. *Nutrients.* 2019;11(3):551. doi:10.3390/nu11030551

Lunch:

Yogurt Marinated Chicken with a Kick



Yogurt's live and active cultures can support a healthy gut and help digest lactose. Additionally, it's an excellent source of high-quality protein, calcium, vitamin B12, selenium and iodine.

15 MIN
PREP TIME

30 MIN
COOK TIME

4 MIN
MARINADE TIME

4
SERVINGS

Ingredients

- **4 skinless boneless chicken breasts**

MARINADE:

- **1 cup plain Greek yogurt** (*fat level of choice*)
- **1/4 cup fresh lemon juice**
- **1/4 cup olive oil**
- **2 garlic cloves, minced**
- **2 teaspoons sweet paprika**
- **1/2 teaspoon salt**
- **1/2 teaspoon chili powder**
- **1/2 teaspoon ground cayenne red pepper**
- **1/4 teaspoon black pepper**

Directions

1. Combine marinade ingredients in a small bowl; whisk until blended.
2. Place chicken in a food-safe resealable plastic bag; add marinade. Seal bag, pressing out as much air as possible. Turn bag over several times to coat chicken evenly. Refrigerate at least 4 hours or as long as overnight, turning once.
3. Heat grill to medium. Remove chicken from marinade; discard marinade. Grill chicken, turning occasionally, until temperature registers 160°F on an instant-read thermometer inserted into thickest part of chicken, 15-18 minutes.

1. Adolfsson O.,Meydani S.N., Russell R.M. Yogurt and gut function. AmJ ClinNutr2004;80(2):245-256.
2. Holscher HD.Dietary fibers and prebiotics and the gastrointestinal microbiota. GutMicrobes2017;8(2):172-184.
3. KokC.R.,Hutkins R .Yogurt and other fermented foods as sourcesof health-promoting bacteria.NutrRev. 2018;76(Suppl 1):4-15. doi:10.1093/nutrit/nu
4. Pei R.,MartinD.A.,D iMarco D.M., BollingB.W.Evidencefor theeffectsofyogurtonguthealth andobesity.Crit Rev FoodSciNutr. 2017;57(8):1569-1583.doi:10.1080/10408398.2014.883356
guidelines.gov/sites/default/files/2020-
12/Dietary_Guidelines_for_Americans_2020-2025.pdfAccessedFebruary23, 2021

Dinner:

Salmon, Corn & Potato Chowder



Milk is an excellent source of iodine, which is necessary for proper bone and brain development during pregnancy and infancy; linked to cognitive function in childhood.

20 MIN
PREP TIME

30 MIN
COOK TIME

6
SERVINGS

Ingredients

- **2 tablespoons unsalted butter**
- **1 pound fresh skinless salmon fillet, cut into 1-inch pieces**
- **2 tablespoons olive or vegetable oil**
- **1 medium onion**
- **1 teaspoon salt**
- **2 cups sliced celery, about 3 stalks**
- **2 garlic cloves, minced**
- **1-1/2 pounds petite or small red-skinned potatoes, scrubbed, cut into 3/4-inch pieces**
- **8 cups chicken stock**
- **1 cup frozen corn**
- **1/2 cup frozen okra, cut into 1/2-inch pieces, optional**
- **1/2 teaspoon black pepper**
- **1 cup (8 ounces) plain Greek yogurt (fat level of choice), room temp.**
- **Minced parsley, optional**

Directions

1. Heat butter in a 6-quart saucepan or small Dutch oven over medium heat. Place salmon in the pan in a single layer; cook, turning once, until browned and cooked through, about 5 minutes. Cooking time will vary depending on the thickness of the salmon. Remove salmon to a plate; reserve.
2. Heat oil in the same pan over medium heat. Add onion and salt; sauté until onion is tender but not browned, about 4 minutes. Add celery and garlic; sauté 30 seconds. Add potatoes; stir to coat. Stir in stock, corn, okra, if using, and pepper. Bring to a boil; reduce heat to low. Cover and cook until potatoes are tender, about 8 minutes.
3. Remove soup from heat. Remove 3 cups of the soup and puree it in a blender until smooth. Add yogurt; process on low just until blended. Add puree, half at a time, to soup and mix well. Gently stir in the reserved salmon; heat through over low heat. Garnish with parsley, if using.

1. NationalInstitutesofHealth.OfficeofDietarySupplements.IodineFactsheetforHealthProfessionals.<https://ods.od.nih.gov/factsheets/Iodine-HealthProfessional>.AccessedFebruary23, 2021
2. NationalInstitutesofHealth.OfficeofDietarySupplements.IodineFactsheetforConsumers.<https://ods.od.nih.gov/factsheets/Iodine-Consumer>.AccessedFebruary23, 2021.
3. U.S.DepartmentofAgricultureandU.S.DepartmentofHealthandHumanServices.DietaryGuidelinesforAmericans, 2020-2025.9thEdition.December2020.https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdfAccessedFebruary23, 2021

Snack:

Fruit And Vanilla Yogurt Parfait



5 MIN
PREP TIME

1
SERVING



Dairy foods can enhance plant-packed plates. Animal sourced foods are often higher in protein, branch chain amino acids, iodine, iron, zinc, vitamin B12 and choline. Plant sourced foods are often higher in carbohydrates, fiber, vitamin A, Vitamin C, and other antioxidants so pair plants with dairy foods for a superfood power couple.

Ingredients

- 1 cup vanilla yogurt
- 1/2 cup rolled oats, granola or whole wheat cereal
- 1/2 cup fresh fruit, sliced (i.e., strawberries, pineapple, mango or blueberries)

Directions

1. Spoon yogurt in the bottom of a bowl or tall glass.
2. Add three tablespoons of cereal and 1/4 cup of fruit.
3. Repeat layers.
4. Top with remaining cereal and serve.

1. Comerford KB, Miller GD, Reinhardt Kapsak W, Brown KA. The Complementary Roles for Plant-Source and Animal-Source Foods in Sustainable Healthy Diets. *Nutrients*. 2021; 13(10):3469. <https://doi.org/10.3390/nu13103469>

2. Comerford KB, Miller GD, Boileau AC, Masiello Schuette SN, Giddens JC, Brown KA. Global Review of Dairy Recommendations in Food-Based Dietary Guidelines. *Front Nutr*. 2021; 8:671999. <https://doi.org/10.3389/fnut.2021.671999>

3. Food and Agriculture Organization of the United Nations and World Health Organization. Sustainable Healthy Diets: Guiding Principles. Rome, Italy. 2019. Available online: <https://www.fao.org/3/ca6640en/ca6640en.pdf>

4. Comerford, Kevin; Arndt, Channing; Drewnowski, Adam; Ericksen, Polly; Griffin, Timothy; Hendrickson, Mary; Ingram, John; and Nicholls, Jill. Proceedings of a workshop on characterizing and defining the social and economic domains of sustainable diets. *Sustainability*. 2020; 12(10): 4163. <https://doi.org/10.3390/su12104163>

5. Food and Agriculture Organization of the United Nations. The contributions of livestock species and breeds to ecosystem services. Rome, Italy. 2016. Available online: <https://www.fao.org/3/i6482e/i6482e.pdf>

Snack:

Mango Kefir Smoothie



5 MIN
PREP TIME

2
SERVINGS



Kefir is a good dietary source of live microorganisms that offer gut health-promoting benefits. It has been found to improve lactose digestion.

Ingredients

- **2 cups frozen mango**
- **1 banana**
- **1 cup kefir**
- **1 cup Greek vanilla yogurt**

Directions

1. Place all ingredients into a blender and blend until smooth.

1. Hutkins, R.W. (2018). Microbiology and Technology of Fermented Foods, 2nd Edn. Hoboken, NJ: Wiley.
2. Dimidi E., Cox S.R., Rossi M., Whelan K. Fermented foods: definitions and characteristics, impact on the gut microbiota and effects on gastrointestinal health and disease. Nutrients 2019.
3. Hertzler S., Savaiano D.A., Dilk A., et al. Nutrient considerations in lactose intolerance. In: Coulston A., Boushey C., Ferruzzi M., Delahanty L., eds. 4th ed. Nutrition in the Prevention and Treatment of Disease. New York, NY: Elsevier; 2017: 875–892.

Dessert:

Cinnamon Raisin Bread Pudding with Vanilla Sauce



Lactose-free milk is real milk just without the lactose, offering the same 13 essential nutrients, health benefits and taste.

30 MIN
PREP TIME

55 MIN
COOK TIME

10
SERVINGS

Ingredients

BREAD PUDDING

- 1 pound egg bread, or challah, cubed
- 1 teaspoon cinnamon
- 1/2 cup egg substitute
- 4 egg whites
- 1/3 cup sugar substitute
- 4 cups fat-free lactose-free dairy milk
- 2 teaspoons vanilla extract
- 1/3 cup raisins

VANILLA SAUCE

- 1 egg
- 1 egg whites
- 1/4 cup sugar substitute
- 2 teaspoons corn starch
- 2 1/2 cups fat-free lactose-free dairy milk
- 2 teaspoons vanilla extract

Directions

For the Bread Pudding:

1. Preheat oven to 350 degrees Fahrenheit. Spray an 8-x8-inch baking pan with cooking spray; set aside.
2. Place bread cubes in a large bowl; sprinkle with cinnamon. In a medium bowl, whisk egg substitute, egg whites, sugar substitute, milk and vanilla until blended. Pour over bread, sprinkle with raisins and stir gently to mix. Pour mixture into prepared pan.
3. Bake 45 minutes in preheated oven or until top is puffed and golden and tester comes out clean.
4. Cut cinnamon raisin bread pudding into squares and serve warm with vanilla pudding sauce.

For the vanilla sauce:

1. Whisk egg, egg white, sugar substitute and cornstarch together in a medium saucepan. Whisk in milk and vanilla
2. Cook over medium-low heat, stirring constantly, until mixture thickens and begins to bubble, about 10 minutes.
3. Serve warm or cold.

1.USDA Food Data Central online at <https://fdc.nal.usda.gov/>. Mean value calculated from database entries across all fat levels of plain vitamin D-fortified fluid milk in Legacy Foundation, and Survey (FNDDS) data sources.

2.The % Daily Value (DV) tells you how much nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Dairy Alternatives are Different Than Real Dairy Milk

There are now more varieties of plant beverages than ever and the nutrients can vary widely by brand. Some plant milks have added nutrients and many also contain added sugars, which are not recommended for young children.

Plant Milk Nutrition (unflavored, unsweetened varieties)¹

	Cow's milk (whole)	Soy	Pea	Oat	Hazelnut	Hemp	Coconut	Cashew	Almond	Flax	Rice
Calories	152	80	80	90	90	60	40	25	30	25	70
Protein (g)	8	7	8	2	2	3	0	<1	1	0	0
Fat (g)	8	4	4.5	1.5	9	4.5	4	2	3	2.5	2.5
Added sugar (g)	0	0	0	0	0	0	0	0	0	0	0
Calcium (mg)	306	300	440	350	24	257	460	450	450	280	240
Vitamin D (mcg)	2.4	3	6	4	0	2	2	2.5	2.5	2.3	5
Potassium (mg)	374	350	405	400	105	100	310	0	170	0	0
Vitamin B12 (mcg)	1.34	3	2.5	0.2	--	--	0.9	--	--	1.4	0.6

Plant Milk Price²

	\$	\$\$	\$\$\$	\$\$	\$\$\$\$	\$\$\$\$	\$\$	\$\$	\$\$	\$\$	\$\$
\$/gallon	3.62	5.98	12.24	9.82	23.16	21.16	7.74	7.74	6.54	7.98	7.38
\$/8 fl oz serving	0.22	0.37	0.77	0.61	1.44	1.32	0.48	0.48	0.40	0.50	0.46

Modified from: Healthy Eating Research. Dairy Milk vs. Plant Milks.
<https://healthydrinkshealthykids.org/app/uploads/2022/09/Dairy-Milk-vs-Plant-Milks-for-Young-Kids.pdf>

Did you know?

Cup for cup, plant milks are more expensive than cow's milk.

1. Nutrition information is all for unsweetened, unflavored varieties. Specific products include:

Soy L Silk Organic Unsweet, Pea- Ripple unsweetened Original, Oat- Planet Oat , Hazelnut- Elmhurst Unsweetened, Hemp - Pacific Foods Unsweetened Original, Coconut - Silk Unsweet Cashew, Silk Unsweet Almond- Silk Unsweetened Original, Flax- Good Karma Unsweetened Rice - Rice Dream Enriched Unsweetened

2. Prices are taken from various U.S. Retailers, updated September 2022



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