



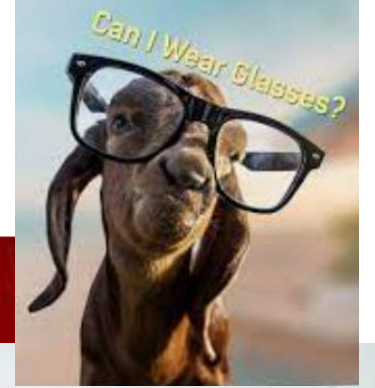
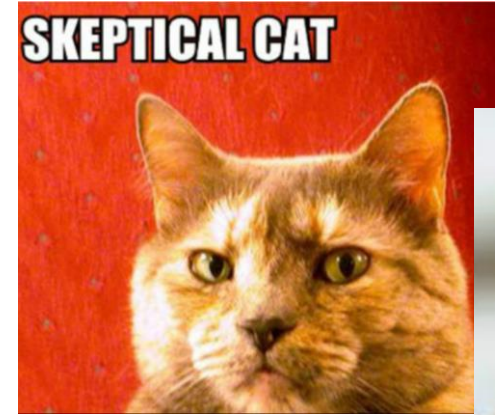
How to be a Smooth(ie) Talker

Sharon Maynard, RD, LD, FAND

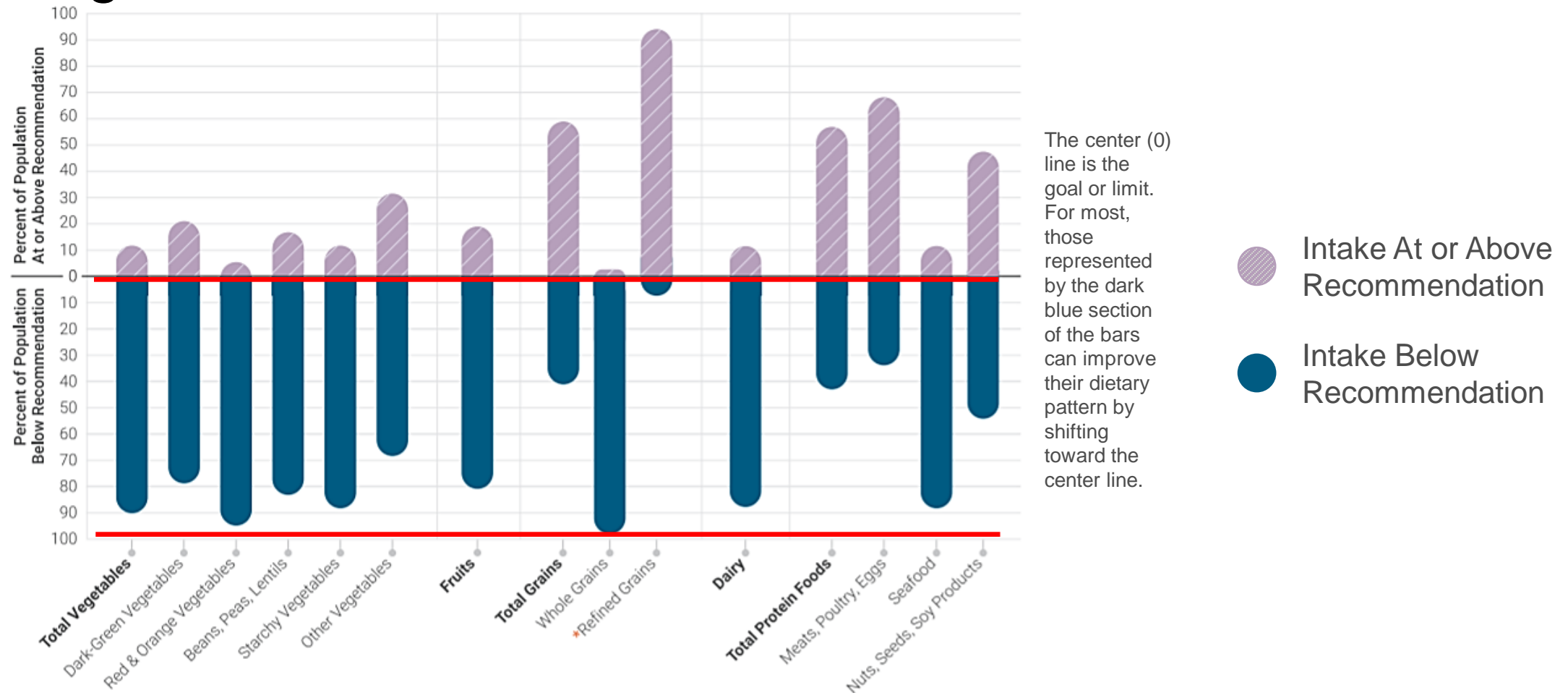


Who is your Audience?

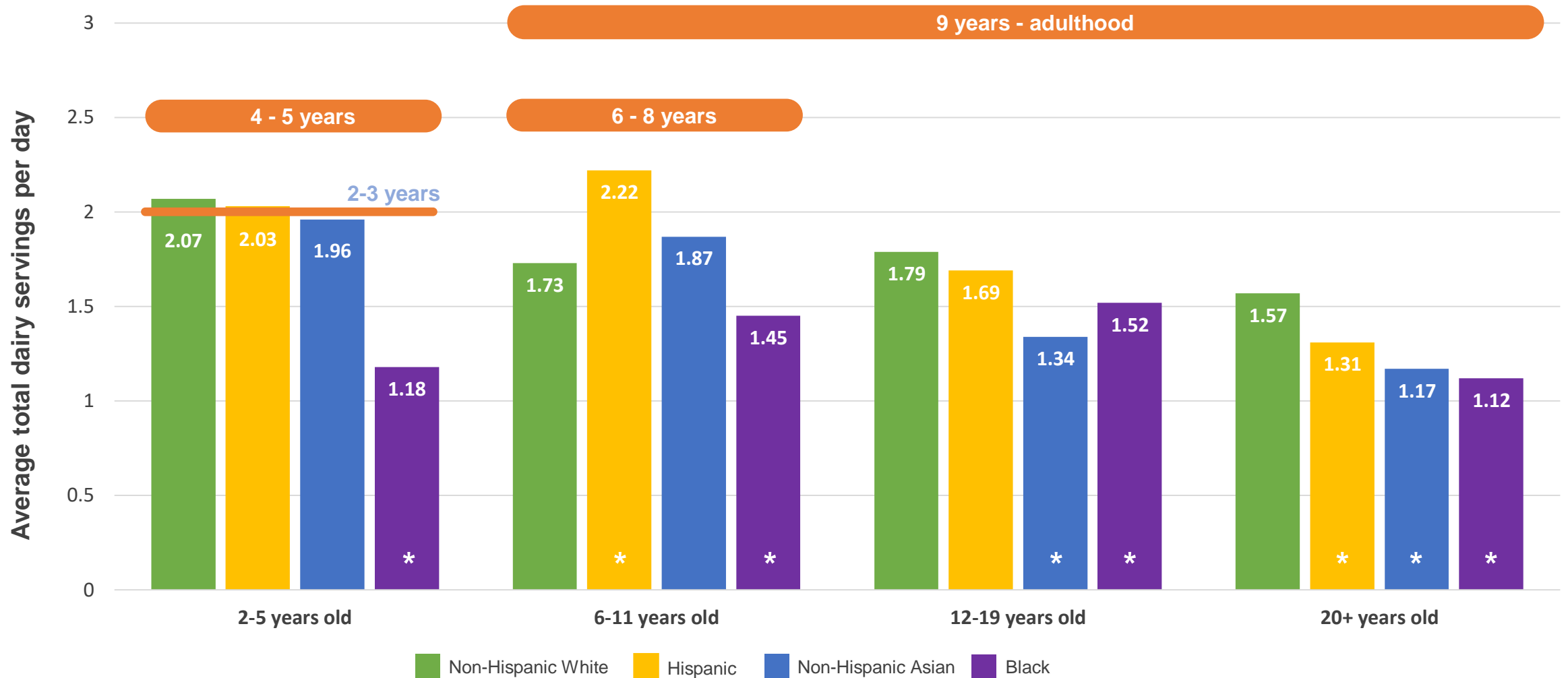
- New moms
 - WIC
- School children
 - Teens
- School Nutrition Staff
 - Athletes
- People who are “On the Go”
 - People Health concerns
 - Aging adult



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



The Dairy Gap is Evident at an Early Age



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>.

Moms and toddlers



- Growth and Development
- Food introduction
- Picky Eater

Pregnancy through Breastfeeding is a Pivotal Period to Nourish Baby's Brain Development



Dairy's Cognitive Bundle



Vitamin B12 helps prevent deficiency that can lead to permanent neurological damage.



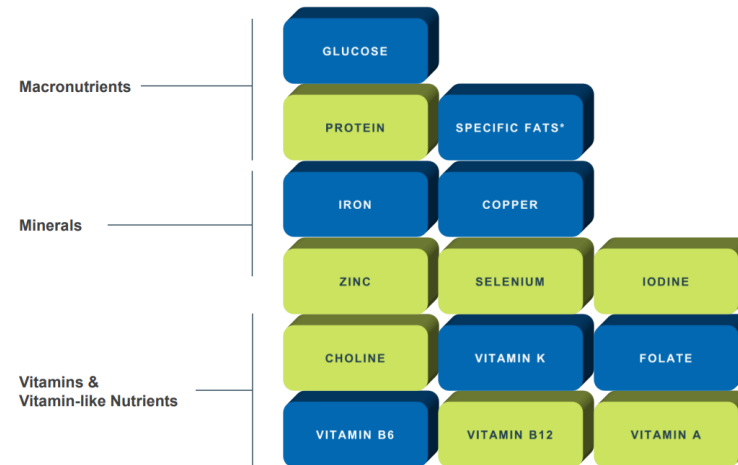
Choline* can help replenish maternal stores and supports the healthy growth and development of baby's brain and spinal cord.



Iodine helps prevent irreversible neurocognitive defects and lower IQ in children.

>50% Increase in iodine needs during pregnancy

Dairy Every Day is a Healthy Way to Support Brain Development



Dairy foods offer 7 of the 14 nutrients AAP notes as important for early cognitive development.

1. Schwarzenberg SJ, Georgieff MK, AAP COMMITTEE ON NUTRITION. *Pediatrics*. 2018;141(2):e20173716
 2. Georgieff MK, Brunette KE, Tran PV. *Dev Psychopathol*. 2015;27(2):411-423
 3. USDA, ARS. FoodData Central. 2019. fdc.nal.usda.gov



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

U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2020. Available at DietaryGuidelines.gov.

National Institutes of Health, Office of Dietary Supplements. *Vitamin B12 Fact Sheet for Consumers*. 2021.

National Institutes of Health, Office of Dietary Supplements. *Iodine Fact Sheet for Health Professionals and Consumers*. 2022

National Dairy Council. *The importance of iodine in prenatal brain development*. 2021

7 Green shading indicates nutrients in dairy foods

*Long-chain polyunsaturated fatty acids

Iodine Deficiency May Be the Most Preventable Cause of Intellectual Disability in Children



- Prenatal iodine deficiency may lead to:
 - irreversible neurocognitive defects
 - lower childhood IQ
- Women who limit/avoid dairy, eggs and seafood are at greater risk for deficiency

How Much Iodine Do You Need?¹

| LIFE STAGE | RECOMMENDED AMOUNT RDA ^a /AI ^b |
|-------------------------------|--|
| Pregnant teens and women | 220 mcg ^a |
| Breastfeeding teens and women | 290 mcg ^a |
| Birth to 6 months | 110 mcg ^b |
| Infants 7-12 months | 130 mcg ^b |
| Children 1-8 years | 90 mcg ^a |
| Children 9-13 years | 120 mcg ^a |
| Teens 14-18 years | 150 mcg ^a |
| Adults | 150 mcg ^a |

What Foods Provide Iodine?^{viii}

| FOOD | SERVING SIZE | MICROGRAMS PER SERVING | PERCENT DAILY VALUE (DV)* |
|--------------------------------|--------------|------------------------|---------------------------|
| Cod, baked | 3 ounces | 158 | 105% |
| Low-fat milk (1%) | 1 cup | 88 | 59% |
| Yogurt, Greek, plain, fat-free | 6 ounces | 87 | 58% |
| Iodized table salt | ¼ tsp | 76 | 51% |
| Fish sticks | 3 sticks | 58 | 39% |
| Cottage cheese (reduced fat) | ½ cup | 39 | 26% |
| Pasta, cooked in iodized salt | 1 cup | 38 | 25% |
| Swiss cheese | 3 slices** | 36 | 24% |
| Crab, canned and cooked | 3 ounces | 32 | 21% |
| Egg, hardboiled | 1 egg | 26 | 17% |
| American cheese | 3 slices** | 18 | 12% |
| Cheddar cheese | 3 slices** | 15 | 10% |
| Shrimp, pre-cooked | 3 ounces | 13 | 9% |
| Salmon, baked | 3 ounces | 14 | 9% |
| Soy beverage | 1 cup | 1.5 | 1% |
| Almond beverage | 1 cup | <1 | 1% |
| Non-iodized sea salt | ¼ tsp | <1 | 1% |

*The Daily Value for iodine is 150 mcg for healthy adults and children over the age of 4.
 **Cracker sized slice of cheese





Dairy Foods Can Begin to be Introduced Around Six Months of Age



Five Signs of Developmental Readiness for Solids

- ✓ Controls head and neck
- ✓ Sits up alone or with support
- ✓ Brings objects to their mouth
- ✓ Tries to grasp small objects
- ✓ Swallows food, rather than pushing it back onto chin

Introduction of Dairy Foods in the First 12 Months

| 0-6 Months | 6 Months | | 12 Months |
|---|--|--|--|
| Breast milk or iron-fortified formula, exclusively | Yogurt (Plain, Whole-fat, Whole-fat Greek) | Cheese (Pasteurized) | Whole Milk |
|  |  |  |  |

National Dairy Council Pediatric Care Specialist Pilot Program



Dairy Every Day is a Healthy Way

All aboard for healthy eating!

Brain Health

Dairy foods provide 7 of 14 nutrients key for early brain development.

Strong Bones

Dairy foods provide bone-building vitamins and minerals.

Immune Health

Dairy foods provide nutrients, as part of a healthy diet, important for immune health.

Growth

Dairy foods have key nutrients that fuel growth and development.

Plant-based milks – aside from fortified soy milk - don't match the nutrition in dairy milk.

Be sure to read the food label.



WIC and early childhood education

In partnership with the American Dairy Association Mideast

PERFECT PAIRINGS FOR KIDS & YOU

WEST VIRGINIA Health Human SERVICES BUREAU FOR PUBLIC HEALTH
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| Suggested Age: 1 YEAR | Suggested Age: 2-5 YEARS | Suggested Age: 5+ YEARS |
|---|---|--|
| <p>banana + whole milk yogurt + cereal</p> <p>💡 dip banana in yogurt, roll in cereal, freeze</p> | <p>spinach + low fat yogurt + mango</p> <p>💡 blend as a smoothie</p> | <p>whole grain bread + mozzarella + tomatoes</p> <p>💡 add basil and make a sandwich</p> |
| <p>egg + cheese + tomatoes</p> <p>💡 make an omelette</p> | <p>low fat milk + strawberries + brown rice</p> <p>💡 add cinnamon and nutmeg to make horchata</p> | <p>avocado + low fat yogurt + onion</p> <p>💡 add favorite herbs and make a dip</p> |
| <p>blueberries + chickpeas + whole milk yogurt</p> <p>💡 make a puree</p> | <p>cheese + apple + whole grain bread</p> <p>💡 make as a grilled cheese</p> | <p>whole grain tortilla + beans + cheese</p> <p>💡 make a wrap, serve with homemade salsa</p> |
| <p>strawberries + peanut butter + whole milk</p> <p>💡 make a "PBJ" parfait</p> | <p>low fat yogurt + carrots + pineapple</p> <p>💡 mix together as a salad</p> | <p>cheese + apple + low fat milk</p> <p>💡 make a kabob, serve with milk</p> |
| <p>whole milk yogurt + pumpkin + oatmeal</p> <p>💡 make overnight oats, sprinkle with cinnamon</p> | <p>cheese + pear + avocado</p> <p>💡 serve on a piece of whole wheat toast</p> | <p>pasta + cheese + bell peppers</p> <p>💡 mix and top with favorite sauce</p> |

💡 = idea

CONTACT US

Office of Nutrition Services
West Virginia WIC Program
Call 1-844-601-0365 or 304-558-0030
Text localwic + zip code to 67076
Email dhhrwic@wv.gov
Visit dhhr.wv.gov/wic
Participant Portal www.wichousehold.wvdhhr.org

PERFECT PAIRINGS FOR KIDS & YOU

Simple food combinations to power your day!

Looking for new ways to use your WIC foods? Inside you will find lots of fun ideas for pairing different WIC foods that will add variety to your menu. Snack time is a great time to get your little helpers involved, too. Choose and enjoy "perfect pairings" for you and your family!

HELPFUL TIPS

- Contact your WIC nutritionist if you need soy or lactose free milk.
- A variety of cheeses are available.
- Use your cash value benefits (CVB) to purchase fresh, frozen or canned fruits and vegetables.
- Fruits and vegetables can be diced or pureed.
- 1 tablespoon per age for toddlers is a healthful single serving of fruits & veggies. (1 yr = 1 tbsp, 2 yr = 2 tbsp, etc.)

TOTAL DAILY SERVING SIZES

| | 1 year | 2-5 years | 5+ years |
|---------|--------------|----------------|------------|
| grains | 1 1/2 - 2 oz | 1 1/2 - 3 oz | 3-4 oz |
| fruits | 1 1/2 -1 cup | 1- 2 cups | 2 cups |
| veggies | 1 cup | 1- 2 cups | 2 - 3 cups |
| dairy | 1 - 2 cups | 2 - 2 1/2 cups | 3 cups |
| protein | 2 oz | 2 - 5 oz | 5 - 6 oz |

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American Dairy Association Mideast
In partnership with the American Dairy Association Mideast. For more information about dairy foods, visit Drink-Milk.com

Spanish version coming soon!

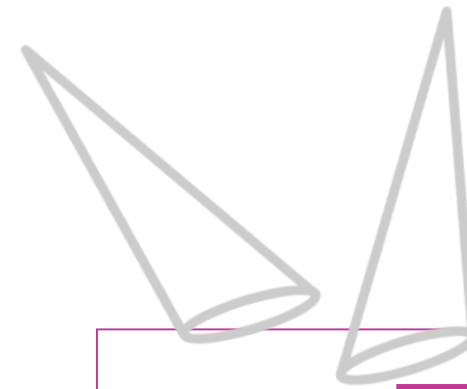
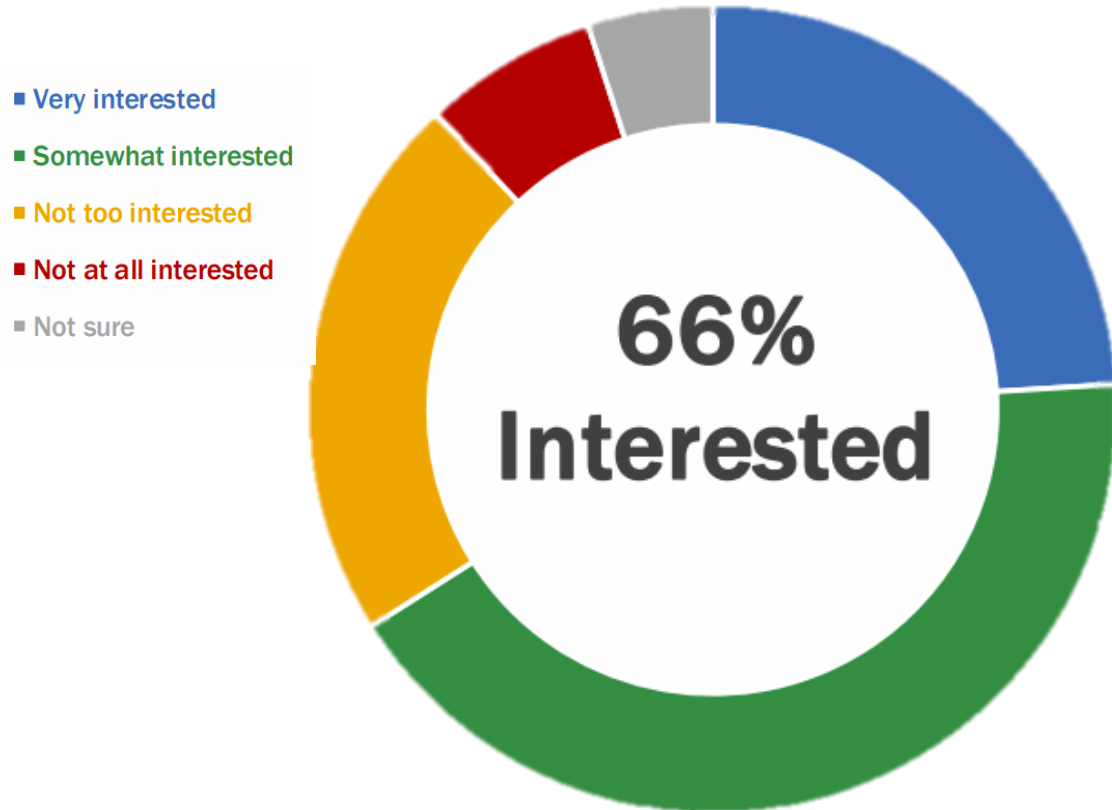
Children



Parents are Interested in Providing Nutrients to Build Bone Mass and Support the Immune System



Interest in Learning More About the Role that Foods and Nutrients Play in Immune Health



74%
of parents with children under 18 say that they are interested in immune health vs. 64% of those without children under 18

International Food Information Council. 2021 Food & Health Survey. 2021
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.
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.

Dairy Every Day is a Healthy Way to Benefit Immunity



Immunity-important Nutrients

Protein (Milk, Cheese, Yogurt)

Selenium (Milk)

Zinc (Milk, Yogurt)

Vitamins

- A (Milk, Cheese Fruits, Vegetables)
- B6 (Fruits, Vegetables)
- B12 (Milk, Cheese, Yogurt)
- C (Fruits, Vegetables)
- D (Milk)
- E (Nuts, Seeds)

! SNACK SMART! :



— DAIRY + PLANTS —

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! SUPER SNACK! :



— DAIRY + PLANTS —

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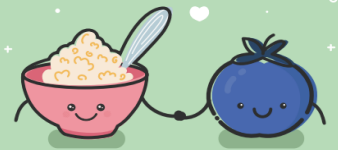
! POWER PAIR! :



— DAIRY + PLANTS —

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! DYNAMIC DUO! :



— DAIRY + PLANTS —

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A high tunnel where elementary school students are growing fresh fruits and vegetables.



Breakfast Matters



8 Gameday Nutrition Tips for Young Athletes

Contributors: Jill Castle, MS, RDN
 Published: October 25, 2017
 Reviewed: April 06, 2020

PEOPLE + PLANET + COMMUNITY

Dairy farmers are innovative upcyclers: they upcycle parts of plants like almond hulls and citrus pulp from other local farms to feed their cows, helping to **keep food waste out of landfills.**

Milk is nature's protein drink as it naturally contains 8 grams of **high-quality protein** in every 8-ounce serving.

Dairy farmers are committed to further **reducing their carbon footprint.**

Dairy cow manure is a **natural fertilizer** that returns nutrients to the soil for **future crops.**

The carbon footprint of a glass of milk is **two-thirds less** than it would be without dairy.

Milk contains a unique nutrient package, including calcium, potassium, and protein, that can fill nutritional gaps in your diet.

The U.S. Dairy community partners with Feeding America to feed hungry people by increasing the sustainability of dairy foods.

MADE FOR WEST VIRGINIA

The United States is home to nearly 29,000 dairy farms and numerous dairy companies that bottle milk or make cheese, yogurt or other dairy foods. Products from the dairy companies shown below are available in major supermarkets near you. West Virginia is home to about 30 dairy farms. Is there one in your county?

Each cow represents one dairy farm.

American Dairy Association West



Adopt a Cow Program

Teachers can sign up for this exciting year-long classroom experience.



Cooking with Kids



Explore Produce with Kids

Contributors: Beth Fontenot, MS, RD, LDN and Esther Ellis, MS, RDN, LDN
 Published: March 02, 2022
 Reviewed: June 17, 2022



Your Pre-Teen's Weight

BENEFITS OF DRINKING CHOCOLATE MILK

8 oz = 8 g OF PROTEIN

A natural source of high-quality protein to build lean muscle

3:1 RATION OF CARB:PROTEIN

The right mix of fluids, carbs and protein to rehydrate and refuel muscles

13 ESSENTIAL NUTRIENTS

A powerful package of nutrients including calcium, vitamin D and protein to help build strong bones and bodies



THE PROTEIN EDGE



POWERHOUSE PERFORMANCE

Including protein throughout the day, along with meeting energy needs, is best for muscle building and repair.

Although protein needs vary depending on the sport you play, your age, your body weight and your sex, a general guide is 6 to 9 grams of protein per pound of body weight. Most teens can get the protein they need by including high-quality sources in their daily diet – like dairy milk, cheese and yogurt, lean meat, poultry, fish, eggs and soy.

PRO TIP

Within 30 minutes after practice or a game, make sure you have a meal or snack that includes both carbohydrates and high-quality protein to refuel and rebuild muscle.

PROTEIN GOALS

Timing is important; make sure you have high-quality protein at each meal and snack while meeting your overall energy needs.

Eating the right amount is key – eating too much will be stored as extra calories and eating too little means your body needs to supply it, which may result in muscle breakdown or loss.

Both exercise AND protein are needed to build, strengthen and repair muscles.

WHICH FOODS CONTAIN THE MOST PROTEIN

| 16-22 grams per serving | 11-15 grams per serving | 6-10 grams per serving | 2-5 grams per serving |
|--------------------------------------|-------------------------|--------------------------|----------------------------|
| beef, chicken, pork or turkey (3 oz) | yogurt (1 cup) | yogurt (1 cup) | brown rice (1 cup, cooked) |
| seafood or fish (3 oz) | edamame pods (1 cup) | cheese (1 string) | oatmeal (1 cup, cooked) |
| Greek yogurt (1 cup) | 2 eggs | beans (1/2 cup) | nuts (1 oz) |
| cottage cheese (1/2 cup) | nut butters (2 tbsp) | quinoa (1/2 cup, cooked) | |
| | tofu, firm (1/2 cup) | hummus (2 tbsp) | |



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THE HYDRATION EDGE



WHO CAN BECOME DEHYDRATED?

Everyone needs to drink plenty of fluids, but it's especially important for athletes, who lose hydration through sweating and breathing hard.

Water is usually best. Unless your event is in hot weather, you're continuously moving for more than 60 minutes, or you have multiple events back-to-back, then include a sports drink that contains carbohydrates and electrolytes to help aid hydration.

TIPS FOR STAYING HYDRATED

Dehydration can tire you out and hurt your hydration. Here are some tips for staying hydrated:

- Drink plenty of fluids especially before, during and after physical activity.
- Stay hydrated on rest and non-competition days.
- After your event, rehydrate with a beverage rich in carbohydrates and electrolytes such as low fat or fat free chocolate milk (or lactose free chocolate milk). Chocolate milk has a carb:protein ratio of 3:1, is a good source of potassium & has a moderate amount of sodium.

WHAT'S YOUR GAME PLAN? KNOW WHAT YOU NEED

Below are guidelines for hydration, which could vary depending on body size, sweat, climate and individual need. It is most important to sense when you are thirsty and drink to your thirst and comfort level. Fluid losses and needs are variable, and fluid balance needs must be individualized for best results.

| 4 hours before | Drink 6-12 ounces of fluid* |
|-------------------------|-------------------------------|
| 2 hours before | Drink 6-12 ounces of fluid* |
| 30 minutes before | Drink 9-12 ounces of fluid* |
| Every 15 minutes during | Drink 3-8 ounces of fluid* |
| Recovery | Drink to replace lost fluids* |

*An amount of ounces that satisfy individual thirst/comfort level

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THE RECOVERY EDGE



5 FOOD HABITS THAT NOURISH AN ATHLETE

► **EATING = ENERGY**
Eat lean protein, whole grains, low fat or fat free dairy, veggies and fruit.

Meet your energy needs throughout the day – it helps promote recovery from yesterday's workout. Start with a good breakfast and don't skip meals!

► **CARBS = FUEL**
Eat nutrient-rich carbohydrates such as fruit, starchy veggies, whole grains and low fat dairy like milk.

Carbs are a primary fuel source during exercise.

► **PROTEIN BUILDS MUSCLE**
Eat lean meats, poultry, fish, eggs, beans, low fat and fat free dairy, lentils, nuts, nut butter such as peanut butter or almond butter, soy foods, veggie burgers and edamame.

Protein builds and maintains muscle and helps muscles recover.

► **DAIRY = NUTRIENTS**
Drink low fat or fat free white or chocolate milk (can be lactose-free). Eat yogurt and low fat cheese.

Dairy provides essential nutrients such as calcium, potassium and vitamin D. Drinking milk provides protein and helps replace fluids.

► **FLUIDS = PERFORMANCE**
Know your sense of thirst. Drink water and sports drinks, if necessary.

Fluids maintain performance, delay fatigue and guard against injuries.

3 Rs OF RECOVERY – REBUILD, REFUEL, REHYDRATE

Replace the fuel you used with carbohydrates, rebuild your muscles with protein and restore your fluids by hydrating.

When it comes to nutrition, don't get behind, what you eat EVERY day and meeting your overall energy needs is what counts!

TRY THIS

Within 30 minutes after practice or a game, make sure you have a meal or snack that includes both carbohydrates and high-quality protein to refuel and rebuild muscle.

- Low fat or fat free chocolate milk (or lactose free chocolate milk) and a banana
- String cheese and fruit
- Greek yogurt and berries

Within 2 hours after practice or a game, eat:

- Lean protein (meat, tuna or egg) and vegetables on whole wheat bread
- Rice and bean burrito with low fat cheese
- Stir-fried vegetables with lean beef, chicken, fish, tofu or pork over brown rice

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THE BREAKFAST EDGE



BREAKFAST IDEAS

SHORT ON TIME

- Prep overnight oats the night before and top with dried fruit or nuts
- Bowl of whole grain cereal with milk
- Graham crackers with peanut/nut butter and a banana
- Yogurt, sliced almonds and raspberries
- Trail mix with nuts, dried fruit and a glass of milk
- Whole wheat bagel with peanut butter, jelly, honey, apple butter or low fat cream cheese
- Cheese stick with a whole wheat toast and fruit

BOOST YOUR PROTEIN

- Greek yogurt mixed with whole grain cereal
- Waffle with peanut butter or yogurt and fruit
- Whole wheat wrap with egg, cheese, black beans and tomato
- Whole wheat toast, avocado and eggs
- Hard-boiled egg, fruit and mini whole grain bagel
- Breakfast pizza on pita or English muffin with cheese, veggies and chicken

BREAKFAST IN A MUG

- Smoothie made with milk, fruit, juice or yogurt
- Breakfast shake made with chocolate milk, peanut butter and a banana

START YOUR DAY WITH BREAKFAST

Breakfast helps you perform your best in the classroom and on the field. Without breakfast, you may experience fatigue, nausea, restlessness or irritability. You may have difficulty concentrating on and off the field or court, and in school.



NO EXCUSES FOR NO BREAKFAST

- Wake up earlier.
- Eat while getting ready for school.
- Keep emergency food in your bag. Once you eat it, replace it!
- Eat breakfast at school. Many schools serve breakfast or have breakfast food options to purchase in the morning.

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THE SPORTS SNACKING EDGE

THERE'S A REASON YOU'RE HUNGRY

Long, exhausting games and practices can leave you hungry. Your body is trying to grow, get stronger and recover from exercise all at the same time. All of this takes proper fuel.

SNACK SMART

Snacking supports your muscles and keeps fuel in the tank so you are ready to perform. You need a balance of nutrient-rich carbohydrates, quality protein, and vitamins and minerals like calcium and iron to get enough calories to meet your overall energy needs.

Snacks are important between school and practices or games. For events lasting longer than an hour or where you have a day of multiple events or practices, be sure to fuel your body with snacks or small meals.



PACK HEALTHY SNACKS

- **SNACKS THAT NEED A COOLER**
 - Fruit and low fat string cheese
 - Fruit smoothie made with low fat or fat free yogurt or milk
 - Pita or pretzels and hummus
- **Low fat or fat free chocolate milk (or lactose free chocolate milk) and a banana**
- Yogurt with fruit, low fat granola or chia seeds
- Turkey and veggies in a whole wheat pita
- Low fat cheese and crackers
- Greek yogurt and pretzels

SNACKS YOU CAN THROW IN YOUR BAG

- Apple or banana and a container of peanut/nut butter
- Trail mix with nuts, pumpkin seeds and dried fruit
- High-protein granola bars
- Peanut/nut butter and crackers

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DAIRY, INFLAMMATION AND IMMUNITY

WHAT'S THE CONNECTION?

DAIRY

- includes milk, cheese and yogurt
- contains 13 essential nutrients
- consuming 3 servings/day is recommended

INFLAMMATION

- imbalance of pro-inflammatory and anti-inflammatory markers in the body
- can lead to chronic disease

THE IMMUNE SYSTEM

- protects us from infection and illness
- important nutrients are protein, iron, vitamins A, C, D and E, zinc, selenium and folate

DAIRY + INFLAMMATION

- decreases or has a neutral effect on pro-inflammatory markers
- increases anti-inflammatory markers

DAIRY + HEART DISEASE

- dairy consumption has a beneficial or neutral effect on risk and incidence
- lower fat dairy may be more beneficial

DAIRY + IMMUNE SYSTEM

- immune cells need nutrients to function
- dairy foods are great sources of 5/9 important nutrients

FERMENTED DAIRY

- includes yogurt and cheese, among others
- has a beneficial or neutral effect on heart health and blood lipids

THE BOTTOM LINE

- dairy doesn't increase chronic disease risk
- dairy consumption can support anti-inflammation and the immune system



13 WAYS MILK Can help your body

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

| | |
|--|---|
| <p>25% Calcium Helps build and maintain strong bones and teeth.</p> | <p>20% Pantothenic acid Helps your body use carbohydrates, fats and protein for fuel.</p> |
| <p>16% Protein Helps provide sustained energy. Helps build and maintain lean muscle. Helps maintain a healthy immune system.</p> | <p>15% Niacin Used in energy metabolism in the body.</p> |
| <p>15% Vitamin D Helps build and maintain strong bones and teeth. Helps maintain a healthy immune system.</p> | <p>10% Zinc Helps maintain a healthy immune system, helps support normal growth and development and helps maintain healthy skin.</p> |
| <p>20% Phosphorus Helps build and maintain strong bones and teeth, supports tissue growth.</p> | <p>10% Selenium Helps maintain a healthy immune system, helps regulate metabolism and helps protect healthy cells from damage.</p> |
| <p>15% Vitamin A Helps keep skin and eyes healthy; helps promote growth. Helps maintain a healthy immune system.</p> | <p>60% Iodine Necessary for proper bone and brain development during pregnancy and infancy; linked to cognitive function in childhood.</p> |
| <p>30% Riboflavin Helps your body use carbohydrates, fats and protein for fuel.</p> | <p>10% Potassium* Helps maintain a healthy blood pressure and supports heart health. Helps regulate body fluid balance and maintain normal muscle function.</p> |
| <p>50% 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.</p> | |

*Source: USDA FoodData Central. 1% (2.9g) value (DV) for potassium of 4700 mg is based on a 2025 DR recommendation. In 2019, FDA updated the DR to 3400 mg based on the 2020 DR. A serving of milk provides 25% of the DR. DR value-making is needed to update the value for the purpose of food labeling.

● = daily value ● = 10% or higher is a good source ● = 20% or higher is an excellent source

REFERENCES

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

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9 WAYS YOGURT Can help your body

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

| | |
|--|--|
| <p>20% Calcium Helps build and maintain strong bones and teeth.</p> | <p>15% Pantothenic acid Helps your body use carbohydrates, fats and protein for fuel.</p> |
| <p>21% Protein Helps provide sustained energy. Helps build and maintain lean muscle. Helps maintain a healthy immune system.</p> | <p>10% Zinc Helps maintain a healthy immune system, helps support normal growth and development and helps maintain healthy skin.</p> |
| <p>15% Phosphorus Helps build and maintain strong bones and teeth, supports tissue growth.</p> | <p>20% Selenium Helps maintain a healthy immune system, helps regulate metabolism and helps protect healthy cells from damage.</p> |
| <p>35% 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.</p> | <p>45% Iodine Necessary for proper bone and brain development during pregnancy and infancy; linked to cognitive function in childhood.</p> |
| <p>25% Riboflavin Helps your body use carbohydrates, fats and protein for fuel.</p> | |

● = daily value ● = 10% or higher is a good source ● = 20% or higher is an excellent source

REFERENCES

- U.S. Department of Agriculture, Agricultural Research Service. 2016. USDA National Nutrient Database for Standard Reference, Release 28. Nutrient Data Laboratory Home Page. <https://www.ars.usda.gov/nutrition/>. Low-fat vanilla yogurt (#01139).
- The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

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8 WAYS CHEESE Can help your body

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

| | |
|--|--|
| <p>15% Calcium Helps build and maintain strong bones and teeth.</p> | <p>10% Niacin Used in energy metabolism in the body.</p> |
| <p>15% Protein Helps provide sustained energy. Helps build and maintain lean muscle. Helps maintain a healthy immune system.</p> | <p>10% Riboflavin Helps your body use carbohydrates, fats and protein for fuel.</p> |
| <p>10% Phosphorus Helps build and maintain strong bones and teeth, supports tissue growth.</p> | <p>10% Selenium Helps maintain a healthy immune system, helps regulate metabolism and helps protect healthy cells from damage.</p> |
| <p>15% 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.</p> | <p>15% Iodine Necessary for proper bone and brain development during pregnancy and infancy; linked to cognitive function in childhood.</p> |

● = daily value ● = 10% or higher is a good source ● = 20% or higher is an excellent source

REFERENCES

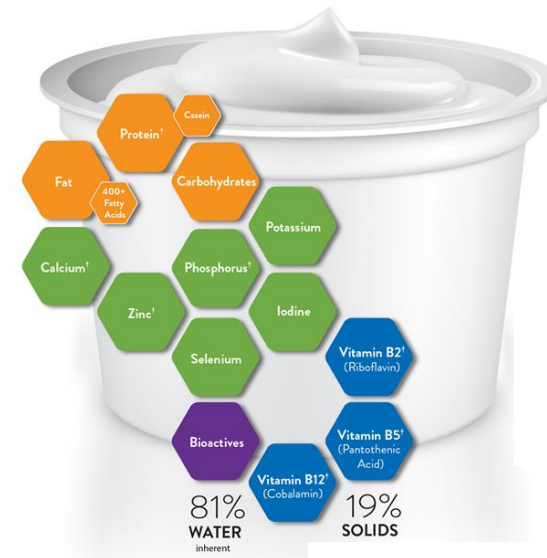
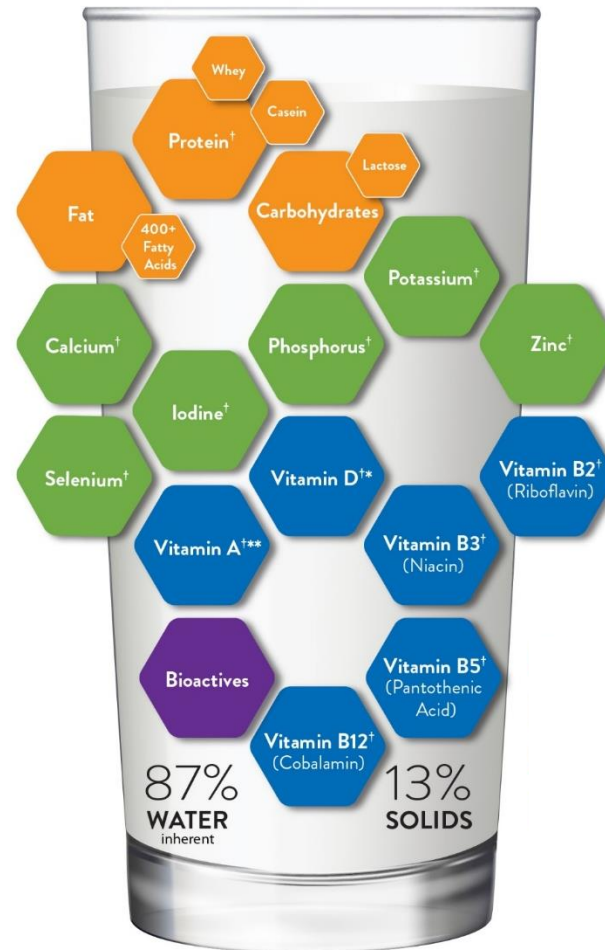
- U.S. Department of Agriculture, Agricultural Research Service. 2016. USDA National Nutrient Database for Standard Reference, Release 28. Nutrient Data Laboratory Home Page. <https://www.ars.usda.gov/nutrition/>. Low moisture, part skim mozzarella (#01029).
- The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

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Dairy Foods Provide a Powerful Nutrient Package

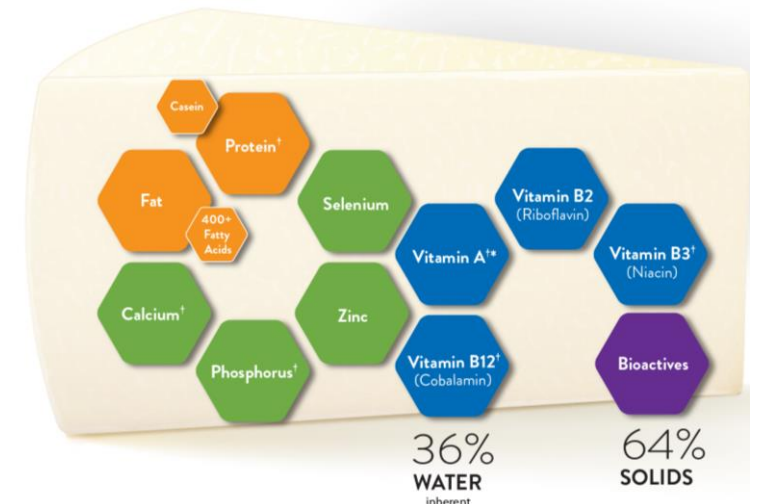
Milk's Unique Nutrient Package

Calcium
 Iodine
 Riboflavin (B2)
 Vitamin B12
 Protein
 Potassium*
 Vitamin D
 Phosphorus
 Vitamin A
 Niacin (B3)
 Pantothenic Acid (B5)
 Selenium
 Zinc



- Macronutrients
- Minerals
- Vitamins
- Bioactives

† Milk is a good or excellent source of 13 essential nutrients
 † Yogurt is a good or excellent source of 7 essential nutrients
 † Cheese is a good or excellent source of 6 essential nutrients
 *Vitamin D is added to milk
 **Vitamin A is naturally occurring in whole milk and added to reduced-fat, low-fat and fat-free milks



*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.

Milk – Food Data Central: 1077
 Greek Yogurt - Food Data Central: 171304
 Cheddar Cheese - Food Data Central: 170899



Chewing
Swallowing
Cooking for one
Osteopenia
Osteoporosis
Lactose Intolerance
Memory Decline
Fixed income
Sarcopenia....

AGING VIBRANTLY

What you need to know about dairy & bone health



A large randomized controlled trial by Luliano et al. showed that meeting dairy recommendations, by increasing calcium and protein intakes, decreased fall risk by 11% and fracture risk by 33% among older adults in assisted living facilities.

SCIENCE SAYS

When older adults increase their dairy intake to meet the recommended daily servings, it directly contributes to a reduction in falls and fractures.¹ Dairy products provide important nutrients, like calcium, vitamin D, and protein, that support bone health.



Low dairy intake: significant public health implications

Dairy consumption is critical across the life span, but particularly for older adults who consume less than half of the recommended 3 cups per day.² Advancing age is associated with an increased prevalence of chronic illness, including loss of muscle mass, fragility, and bone weakness, which amplify the risk of falls and fractures³ and need for full-time institutionalized care.⁴ In fact, millions of older adults (65 and above) – more than one in four – experience a fall each year.⁵ These falls can result in broken hips which account for more than 300,000 hospitalizations among aging adults in the U.S., annually.⁵

Preventing falls through nutrition has the potential to save thousands of dollars in healthcare costs and improve quality of life.



Research suggests dairy foods decrease fracture & fall risk

In a two-year, cluster-randomized controlled trial¹ published in *The British Medical Journal*, researchers examined the impact of consuming an additional 1.5 servings of dairy foods on fractures and falls among older Australian adults in 54 residential facilities.

While there was no group difference in all-cause mortality, the results of this study strengthen the available evidence on dairy and bone health. **Providing residents with 1.5 additional servings of dairy foods in order to meet the recommendation is an effective and accessible intervention for assisted living facilities to reduce the risk of falls and fractures.**

What's to love about dairy

A TRIFECTA

Delicious

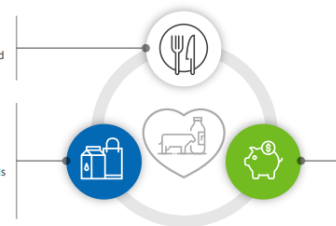
Dairy foods can provide creaminess, tanginess, and sweetness to meals and snacks.

Widely available & versatile

Dairy foods are plentiful! Enjoy the many versatile products made from milk, like cheese, Greek yogurt, kefir, cottage cheese or pudding. Dairy foods can be used as ingredients and flavorful toppings in a variety of dishes.

Affordable

Research shows that dairy foods are affordable sources of calcium, potassium and vitamin D – two nutrients underconsumed by most Americans.⁶ For as little as \$0.60 a day, people can meet the daily recommendations for dairy.⁷



Amp up your dairy for bone health

Making small changes to include more dairy throughout the day can help you meet your dairy needs to enhance bone health and overall wellness



Berry Delicious Overnight Oats

<https://www.usdairy.com/recipes/berry-overnight-oats>

INGREDIENTS

1/4 cup yogurt, low-fat strawberry
1/4 cup milk, low-fat or fat-free
1/2 cup berries, frozen, unsweetened
1/3 cup oats, quick-cooking, dry

INSTRUCTIONS

1. Combine all ingredients in a cup or jar. Stir to mix thoroughly
2. Cover and refrigerate several hours or overnight
3. Top each cup with 1 oz. of vanilla yogurt, 1 tablespoon of berries, or 1/2 an ounce of your favorite nuts



Snack on some pudding

Use low-fat milk to make pudding — mix in flavorful fruit like berries.



Sip some dairy

Use milk in your favorite beverages like tea, coffee, or hot chocolate to add 13 essential nutrients, including calcium and protein.

Lactose intolerant?

No problem! Lactose-free milks offer the same nutrients and bone-supporting benefits as regular milk.



Seek ways to add nutrition + flavor

Top toast with ricotta or cottage cheese and fresh fruit or veggies. Add whey protein powder to shakes, mashed potatoes and soups. Sprinkle your favorite cheese on top of salads or grain bowls.

The dairy intervention group experienced



▼ **33%**
reduction in risk of fractures of any type



▼ **46%**
reduction in risk of hip fractures



▼ **11%**
reduction in risk of falls relative to controls

1. Sims J, et al. Effect of dietary sources of calcium and protein on hip fractures and falls in older adults in residential care: a randomized trial. *BMJ*. 2021;375:n2364. Published 2021 Oct 20.
2. Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2019. www.dietaryguidelines.gov.
3. Y, et al. The burden of disease in older people and implications for health policy and practice. *Lancet*. 2015;385(9967):549-562.
4. Health and Welfare 2018. Hip fracture incidence and hospitalisations in Australia 2015-16. Cat. no. PHE 226. Canberra: AIHW.
5. *Control and Prevention. Important Facts about Falls. Updated Aug 2021. <https://www.cdc.gov/ncipc/nationalfallsprevention/infographic/falls.html>*
6. Irwin S, Fulgoni VL 3rd. Comparing the cost of essential nutrients from different food sources in the American diet. *Nutr J*. 2019;18(1):68. Published 2019 Nov 9.
7. gallon milk price. Source: IRI Multi Outlet + Conv. 2020, YTD through 10/04/20.

Affordable, Available, Flexible, variety...

PEARY GREEN SMOOTHIE



VANILLA YOGURT
PEARS
SPINACH

PEARY GREEN SMOOTHIE

| INGREDIENTS | WEIGHT | MEASURE |
|--|-----------------------------------|--------------------------|
| Canned Pears (in juice or light syrup) | 13 lbs 9 oz | 6 qt |
| Chopped Spinach (frozen or fresh) | 3 lbs frozen/ 4 lbs 8 oz fresh | 6 c frozen/ 9 c fresh |
| Lowfat Vanilla Yogurt | 12 lbs | 6 qt |



MEAL COMPONENTS

½ c Juice
1 Meat/Meat Alternate
1/8 c Dark Green Vegetable (Lunch Only)

DIRECTIONS

- Puree pears (with liquid) and spinach until smooth.
- Add yogurt and blend thoroughly.
- Pour 9 oz of smoothie mixture into 10-oz cups.
- Cover and chill until ready for service.

MAX YIELD: 48 9-oz servings
ALLERGENS: Milk

BEST PRACTICES

- Thoroughly chill all ingredients prior to preparation.
- Do not add ice or water.
- Freeze "past-its-prime" fresh fruit to puree for use in smoothies.
- For maximum yield, thoroughly scrape all containers and blender head.
- Smoothies can be prepared and refrigerated up to 24 hours prior to service.

Critical Control Points: Cool and hold smoothies at 41° F or lower

NUTRITION FACTS

PER 9-OZ SERVING

| | | | | | |
|---------------|-----|--------------|--------|---------------|-------|
| Calories | 168 | Cholesterol | 2.5 mg | Dietary Fiber | 3 g |
| Total Fat | 1 g | Sodium | 79 mg | Sugars | 26 g |
| Saturated Fat | 1 g | Carbohydrate | 37 g | Protein | 4.5 g |



Created in partnership with Pisanica Partners

SUNSHINE SMOOTHIE



VANILLA YOGURT
MANDARIN ORANGES
ORANGE JUICE

SUNSHINE SMOOTHIE

| INGREDIENTS | WEIGHT | MEASURE |
|------------------------------------|-------------|---------|
| Canned Mandarin Oranges (in juice) | 11 lbs 7 oz | 5 qt |
| Orange Juice | 32 fl oz | 1 qt |
| Lowfat Vanilla Yogurt | 12 lbs | 6 qt |
| Vanilla or Almond Extract | 2 fl oz | ¼ c |



MEAL COMPONENTS

½ c Juice
1 Meat/Meat Alternate

DIRECTIONS

- Puree mandarin oranges (with liquid) and orange juice until smooth.
- Add yogurt and vanilla or almond extract and blend thoroughly.
- Pour 9 oz of smoothie mixture into 10-oz cups.
- Cover and chill until ready for service.

MAX YIELD: 48 9-oz servings
ALLERGENS: Milk

BEST PRACTICES

- Thoroughly chill all ingredients prior to preparation.
- Do not add ice or water.
- For maximum yield, thoroughly scrape all containers and blender head.
- Smoothies can be prepared and refrigerated up to 24 hours prior to service.

Critical Control Points: Cool and hold smoothies at 41° F or lower

NUTRITION FACTS

PER 9-OZ SERVING

| | | | | | |
|---------------|-----|--------------|--------|---------------|-------|
| Calories | 163 | Cholesterol | 2.5 mg | Dietary Fiber | .06 g |
| Total Fat | 1 g | Sodium | 62 mg | Sugars | 25 g |
| Saturated Fat | 1 g | Carbohydrate | 34 g | Protein | 4.5 g |



Created in partnership with Pisanica Partners

APPLE PIE SMOOTHIE

| INGREDIENTS | WEIGHT | MEASURE |
|------------------------------|----------|---------|
| Unsweetened Applesauce | 9 lbs | 4 qt |
| Ground Cinnamon | 1 oz | ¼ cup |
| Ground Nutmeg | 0.25 oz | 1 Tbsp |
| Honey (or Brown Sugar) | 8.5 oz | ¼ cup |
| Lowfat Vanilla Yogurt | 12 lbs | 6 qt |
| Unsweetened Apple Juice 100% | 64 fl oz | 2 qt |



MEAL COMPONENTS

½ c Juice
1 Meat/Meat Alternate

DIRECTIONS

- Blend applesauce, spices and honey (or brown sugar).
- Add yogurt and apple juice and blend thoroughly.
- Pour 9 oz of smoothie mixture into 10-oz cups.
- Cover and chill until ready for service.

BEST PRACTICES

- Thoroughly chill all ingredients prior to preparation.
- Do not add ice or water.
- For maximum yield, thoroughly scrape all containers and blender head.
- Smoothies can be prepared and refrigerated up to 24 hours prior to service.

MAX YIELD: 48 9-oz servings
ALLERGENS: Milk

Critical Control Points: Cool and hold smoothies at 41° F or lower

NUTRITION FACTS

PER 9-OZ SERVING

| | | | | | |
|---------------|-----|--------------|--------|---------------|------|
| Calories | 168 | Cholesterol | 2.5 mg | Dietary Fiber | 1 g |
| Total Fat | 1 g | Sodium | 61 mg | Sugars | 28 g |
| Saturated Fat | 1 g | Carbohydrate | 37 g | Protein | 4 g |



Created in partnership with Pisanica Partners

APPLE PIE SMOOTHIE



VANILLA YOGURT
APPLE SAUCE & JUICE
HONEY & SPICES

PURPLE COW SMOOTHIE

| INGREDIENTS | WEIGHT | MEASURE |
|--------------------------------|----------|---------|
| Frozen Unsweetened Blueberries | 8 lbs | 4 qt |
| Grape Juice 100% | 64 fl oz | 2 qt |
| Lowfat Strawberry Yogurt | 12 lbs | 6 qt |



MEAL COMPONENTS

½ c Juice
1 Meat/Meat Alternate

DIRECTIONS

- Puree blueberries until smooth.
- Blend grape juice with blueberry puree.
- Add yogurt and blend until smooth.
- Pour 8 oz of smoothie mixture into 9-oz cups.
- Cover and chill until ready for service.

MAX YIELD: 48 8-oz servings
ALLERGENS: Milk

BEST PRACTICES

- Thoroughly chill all ingredients prior to preparation.
- Do not add ice or water.
- Freeze "past-its-prime" fresh fruit to puree for use in smoothies.
- Fruit is easiest to puree when semi-frozen.
- For maximum yield, thoroughly scrape all containers and blender head.
- Smoothies can be prepared and refrigerated up to 24 hours prior to service.

Critical Control Points: Cool and hold smoothies at 41° F or lower

NUTRITION FACTS

PER 8-OZ SERVING

| | | | | | |
|---------------|-----|--------------|-------|---------------|------|
| Calories | 154 | Cholesterol | 7 mg | Dietary Fiber | 1 g |
| Total Fat | 1 g | Sodium | 72 mg | Sugars | 23 g |
| Saturated Fat | 1 g | Carbohydrate | 32 g | Protein | 4 g |



Created in partnership with Pisanica Partners

PURPLE COW SMOOTHIE



STRAWBERRY YOGURT
BLUEBERRIES
GRAPE JUICE

Tool kits, Grants, and Resources for your School

SMOOTHIES FOR YOUR SCHOOL MEAL PROGRAM

SMOOTHIE EQUIPMENT GRANT
The American Dairy Association Mideast is offering a smoothie equipment grant, valued at \$1,020, for K-12 schools in Ohio and West Virginia to serve smoothies as part of their school meal programs.

WHY SERVE SMOOTHIES?
Fruit and yogurt smoothies are equal parts nutritious and delicious, and are loved by students! They are a great way to use USDA required foods and can easily be served for breakfast, lunch or a la carte. Smoothies are also ideal for breakfast in the classroom or grab and go breakfast.

This smoothie equipment grant includes:

- Immersion Blender & Wall Hanger
- 5-Gallon Buckets & Lids (2)
- Pull-up "Fuel Up With Smoothies" Sign
- 1-Gallon Pitcher

Strawberry Pancake Yogurt Parfait

Ingredients

| Ingredients | Measure | Directions |
|----------------------------|--------------------|--|
| 1 cup strawberries, sliced | 1 cup (1 1/2 cups) | 1. Wash strawberries, slice, and add to blender. |
| 1/2 cup plain yogurt | 1/2 cup (1/2 cup) | 2. Add yogurt to blender. |
| 1/2 cup pancakes | 1/2 cup (1/2 cup) | 3. Blend until smooth. |
| 1/2 cup granola | 1/2 cup (1/2 cup) | 4. Pour into a 1-gallon pitcher. |
| 1/2 cup milk | 1/2 cup (1/2 cup) | 5. Serve chilled, or for hot smoothies. |

Notes:
Can substitute raspberries or blueberries in blending of berries for strawberries.

Meal Components:

| Meal Component | Yield |
|-----------------|------------|
| 1. Strawberries | 1 1/2 cups |
| 2. Yogurt | 1/2 cup |
| 3. Pancakes | 1/2 cup |
| 4. Granola | 1/2 cup |
| 5. Milk | 1/2 cup |

As seen in the Institute of Child Nutrition recipe database.

OVERNIGHT OATS 101

You can now serve delicious, nutritious overnight oats to students and get credit for the fruits, yogurt and grains thanks to updated USDA guidelines!

Ingredients:

- 1/4 cup OATS (credit on 1 grain)
- 1/8 cup MILK

Directions:

1. Mix together each serving and blend berries to taste (optional).
2. Seal each container with a lid.
3. Place containers in the refrigerator overnight or in a cooler.
4. Remove from refrigerator and serve.
5. Add a splash of milk or yogurt if desired.
6. Add a splash of fruit or granola if desired.
7. Serve and enjoy!

Notes:
Can substitute raisins for berries. Use water instead of any other liquid. Refrigerate for best results. Wash and dry fruit before use.

Meal Components:

| Meal Component | Yield |
|----------------|---------|
| 1. Oats | 1/4 cup |
| 2. Milk | 1/8 cup |

Notes Per Serving:

| Category | Amount | Yield |
|--------------------|---------|---------|
| Total Fat | 1/2 cup | 1/2 cup |
| Total Protein | 1/2 cup | 1/2 cup |
| Total Carbohydrate | 1/2 cup | 1/2 cup |
| Total Fiber | 1/2 cup | 1/2 cup |
| Total Sugar | 1/2 cup | 1/2 cup |

As seen in the Institute of Child Nutrition recipe database.

Caprese Chicken Wrap

Ingredients:

- 1/2 cup Chicken
- 1/2 cup Tomatoes
- 1/2 cup Cheese

Directions:

1. Preheat oven to 350°F.
2. Cook chicken in a skillet until done.
3. Chop tomatoes and cheese.
4. Mix chicken, tomatoes, and cheese.
5. Roll up in a wrap.
6. Serve and enjoy!

Notes:
Can substitute turkey for chicken. Use water instead of any other liquid. Refrigerate for best results. Wash and dry fruit before use.

Meal Components:

| Meal Component | Yield |
|----------------|---------|
| 1. Chicken | 1/2 cup |
| 2. Tomatoes | 1/2 cup |
| 3. Cheese | 1/2 cup |

As seen in the Institute of Child Nutrition recipe database.

Communications Toolkit

To help School Foodservice Directors provide useful resources to parents and students, the American Dairy Association Mideast created a communications toolkit.

The resources listed below are a few of the many found on our website, Dairy-Mideast.com. Share on social media, on school websites and in digital newsletters using the suggested text on the following pages.

Recipe Resources

- 5 Recipes That are 5 Ingredients or Less to Make with Kids
- How to Make the Perfect Grilled Cheese
- Squares & Fries for Cream
- Easy Greek Yogurt Dip
- Easy Cheese Frittata
- Perfect Package Seasonal Snacking Guide
- 7 Ways to Use Yogurt

Dairy Communications Toolkit

Useful resources for School Food Service Directors to share with students and parents.

West Virginia Farm to School Kit

FOR WEST VIRGINIA DAIRY FOODS

DAIRY FUN FACTS

Milk is fresh and local all year long!

Milk is a great source of protein, calcium, and other nutrients.



Smoothie School Kit

Large-batch recipes that meet USDA meal requirements and complementary countertop signs.

Hot Chocolate Kit for Schools

Hot chocolate can be part of reimbursable meals, per USDA guidelines.

CAPRESE CHICKEN WRAP VISUAL RECIPE GUIDE

TOOLS & INGREDIENTS

MIX

ARRANGE

TOP

FOLD

FINAL





I hope you are outstanding in your field when you give your presentations!



Thank you! Sharon Maynard, RD, LD, FAND
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304 382 8553