

Food and Fitness

How Do Cow's Milk Alternatives Compare?

Over the years, the milk section of the grocery store has grown to have more types of “milks”. Before, the biggest question when approaching the milk section was how much fat do I want? The options were whole milk, 2%, 1% and skim. You can even add in a curve ball with buttermilk or chocolate flavored. Now the milk section is spilling over with even more variety of cow's milk and milk alternative options. Whatever the reason people choose these alternatives, whether it is due to cow's milk allergy, lactose intolerance, vegetarian or veganism, or for any other reason, how do these plant based “milks” compare to the original cow's milk option?

There are four main choices to milk alternatives: soy, almond, rice and coconut milks. There are a few more that you can find on the shelf like hemp, flax, and cashew.

Soy milk is a popular choice as an alternative. Soy milk is made from the soy bean plant by extracting the liquid from the bean after soaking, mashing, and cooking the soy beans. It can be found in unsweetened, sweetened and flavored. In terms of nutrients, soy is the most comparable to cow's milk in most categories. It provides similar calories, protein and a few less carbohydrates than cow's milk. It is difficult to compare the amount of fat in any of the milks since cow's milk can be purchased in all different amounts of fat.

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How Do Cow's Milk Alternatives Compare?

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With that being said, soy milk contains about 3.5-4.5 grams of fat (per 8 ounces serving), with 1% cow's having about 2.4 grams of fat and 2% containing 4.9 grams per every 8 ounce glass, soy milk hits right in the middle of the previous two choices. Almond milk is made from ground almonds and water. It is found in unsweetened, sweetened and flavored. It contains about 50% of the daily amount of vitamin E in an 8 ounce glass. Almond milk has about half as many calories as low-fat cow's milk, which is appealing to those watching their calorie consumption. On the opposite end, almond milk only has an average of 1 gram of protein per serving and cow's milk generally has about 8 grams. Almond milk doesn't have the vitamins and minerals that cow's milk provides so finding ones that are fortified is a must.














Rice milk is made from boiled rice, brown rice syrup and brown rice starch. It is the "hypoallergenic" choice for alternative milk when it comes to allergies to cow's milk, soy, gluten and tree nuts. Rice milk just like almond milk is low in protein. However, rice milk is the highest in carbohydrates. It contains almost double the amount of carbohydrates in cow's milk. So if you are watching your carbohydrates beware. Rice milk also needs to be fortified with calcium and vitamin D to be comparable to cow's milk. Rice milk is very thin and watery in consistency unlike some of the other milk alternatives.

Coconut milk is a close alternative for cow's milk and is also both soy and gluten free. Coconut milk has a nutty flavor that is very distinct and is made by extraction of the coconut and water blend. Coconut milk resembles the texture of whole milk the most and is high in fat. Coconut milk has about the same amount of fat as 2% cow's milk but lacks the protein measuring at less than 1 gram per serving. Coconut milk naturally has more potassium than cow's milk but should be fortified with calcium and vitamin D.

Depending on your specific nutritional wants or needs, any of these milk alternatives can be a good choice for you. All of these substitutes can be beneficial to different people who have different needs. If milk alternatives are the choice for you, make sure you pick the one that best suits your individual needs.



Choices are great, but they can be overwhelming. This at-a-glance chart can help you understand what's in your 8-ounce glass of milk.

	 (Low-Fat) COW'S MILK¹	 SOY²	 ALMOND²	 COCONUT²	 RICE³
CALORIES AND NUTRIENTS					
Calories	110	110	60	80	120
Protein	8g	8g	1g	<1g	1g
Fat	2.5g	4.5g	2.5g	5g	2.5g
Carbohydrates	12g	9g	8g	7g	23g
VITAMINS AND MINERALS** (% Daily Value*)					
Calcium	30%	45%	45%	45%	30%
Phosphorus	25%	25%	N/A***	N/A	15%
Potassium	10%	10%	1%	1%	15%
Riboflavin	25%	30%	30%	N/A	N/A
Vitamin B-12	20%	50%	50%	50%	25%
Vitamin A	10%	10%	10%	10%	10%
Vitamin D	25%	30%	25%	25%	25%
<div>  Naturally Occurring  Good Source = 10%–19% DV  Excellent Source = 20%+ DV </div>					
PRICE⁴					
					
Per ½ Gallon	\$2.05	\$3.37	\$3.28	\$4.99	\$3.46
Per 8oz. Serving	\$0.26	\$0.42	\$0.41	\$0.62	\$0.43

1. Cow's Milk levels are per the USDA National Nutrition Database (NDB No.01083 SR-27); available at: <http://ndb.nal.usda.gov/>

2. Silk Original Soy Milk, Original Almond Milk, and Original Coconut Milk; Nutritional information per Silk® website www.silk.com

3. Rice Dream Enriched Refrigerated Original; Nutritional information per Rice Dream® website www.tastethedream.com

4. Based on gallon volume equivalents per BRF DMI Custom Database Data for 2014 (Jan-Dec) — National Average (Cow's milk based on conventional white milk)

*The percent Daily Value (DV) provides nutrient information based on a caloric intake of 2,000 calories for adults and children four or more years of age.

**Nutrient information not listed here can be found on the product website

***Nutrient not listed on product website



Mineral—Molybdenum

Functions

Molybdenum is a trace element in the human body and is used as a co-factor for enzymes involved in catabolism of sulfur amino acids, purines, and pyridines.



Molybdenum

Recommendations

Dietary Reference Intakes for 51 years and older

Recommended Dietary Allowances (RDA):

Men and Women 51+:
45 µg/d

Food Sources :

Legumes Meat
Fish
Poultry
Grains and Grain Products
Nuts
Vegetables

COMMON FOOD SOURCES OF MOLYBDENUM



Health Online Zone, Copyright © 2016.

Deficiency

Deficiency related to diet consumption is typically rare. Low levels of molybdenum have been linked to esophageal cancer.

Toxicity

Toxicity is also rare related to diet. Toxicity who are deficient in dietary copper intake or have an issue related to copper metabolism dysfunction could be at risk of molybdenum toxic

Sweet and Salty Cheeseball

Ingredients

- 2– 8 ounce packages 1/3 less fat cream cheese, softened
- 2.25 ounce chipped or dried beef , chopped
- 15 ounce can crushed pineapple, drained
- 4 green onions, diced
- Optional for topping: Parsley, extra chipped beef, almond slices, sunflower seeds, or shredded cheddar cheese

Directions

1. In a medium sized mixing bowl, add cream cheese and pineapple and mix until combined.

Note: You can stop here and refrigerate leftovers in an air tight container and eat like a dip or you can move to 3 and make it into a ball shape.

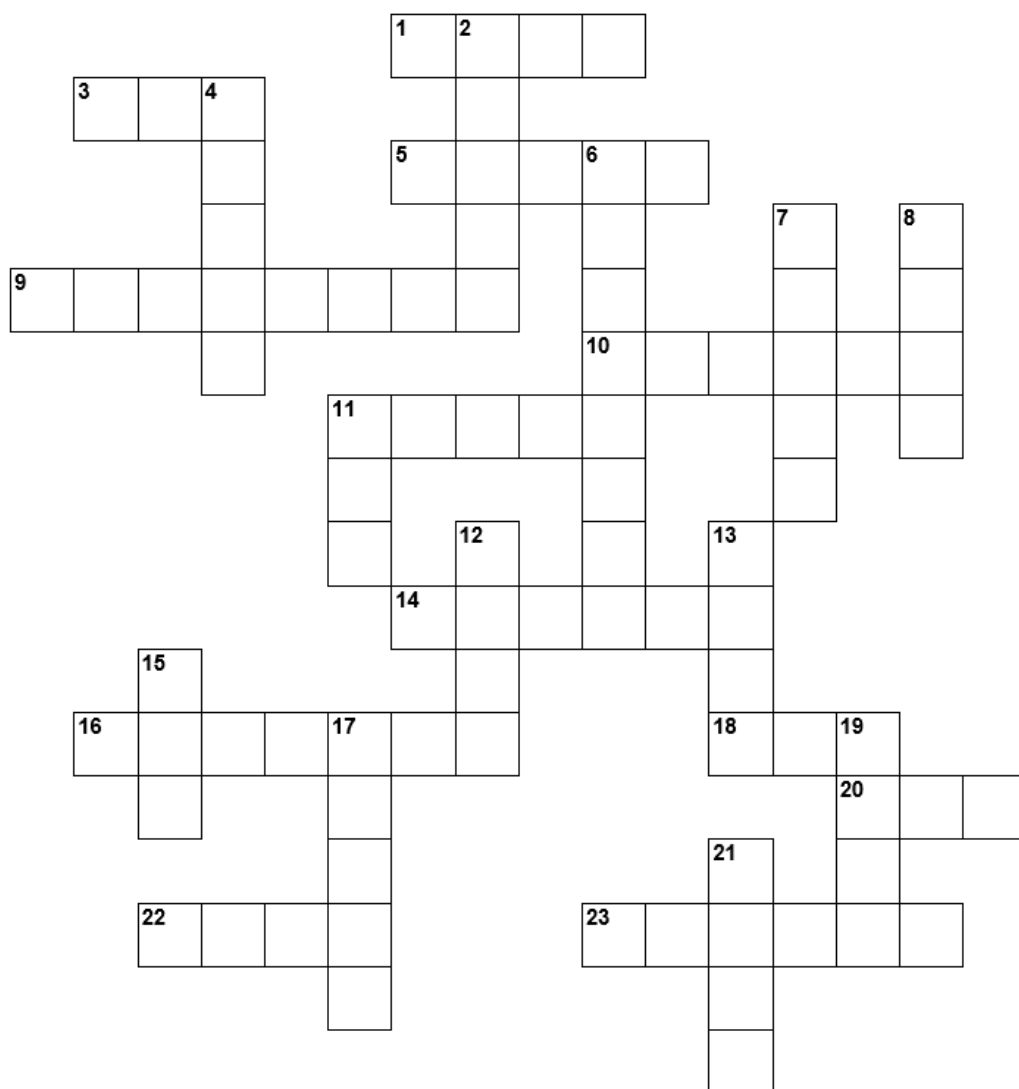
2. Add in the beef and green onions, mix well.
3. Refrigerate mixture for 2 hours to allow it to get firm.
4. Once the mixture is firm, lay a piece of parchment paper on a flat surface and move the cheeseball mixture from the bowl onto the paper.
5. Form the mixture into a ball with your hands.
6. Lastly, on another flat surface place topping down . Remove the ball from the parchment paper and place it on to the topping of your choice. Cover the cheeseball with the desired topping until completely covered.
7. Serve on your favorite crackers and enjoy.



Brain Exercise

Don't Just Exercise Your Body, Workout Your Brain!

SPRING



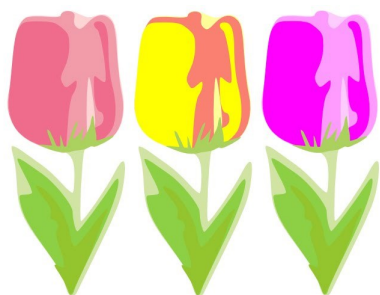
ACROSS

- 1 Water vapor that condenses and falls from the sky
- 3 Thin-shelled ovum of a bird or reptile
- 5 Green plant with narrow flat leaves
- 9 Game played with a bat and ball
- 10 Start to grow as a shoot or bud
- 11 Month spring begins this year
- 14 Light or gentle wind
- 16 Arc in the sky containing the colors of the visible spectrum
- 18 Water droplets that collect at night on cool surfaces
- 20 Water in a frozen state
- 22 Change from a solid to liquid state
- 23 Visible body of water droplets high in the earth's atmosphere

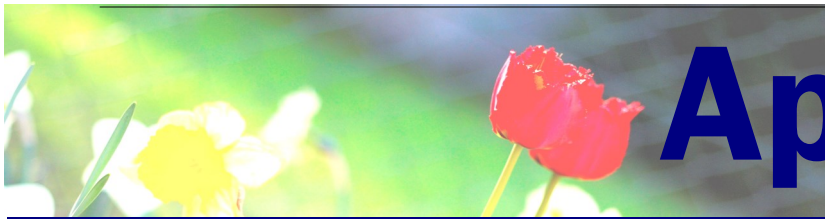
By Evelyn Johnson - www.qets.com

DOWN


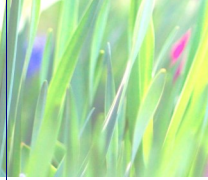
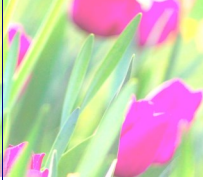
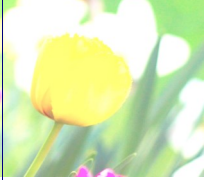
- 12 Become larger by the process of natural development to be flown in the air
- 13 Part of plant capable of growing into a new plant
- 15 Fifth month of the year
- 17 Process or fact of being born
- 19 Movement of air over the surface of the earth
- 21 Neither warm nor very cold



- 2 Fourth month of the Gregorian calendar year
- 4 Color lying between yellow and blue on the spectrum
- 6 Bright light of the sun
- 7 Produce flowers
- 8 Toy consisting of light frame covered in paper
- 11 Earth that has turned soft by wetting



April 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 April Fool's Day
2 National Peanut Butter and Jelly	3 World Party Day	4 Hug a Newsman Day	5 Go for Broke Day	6 National Tartan Day	7 World Health Day	8 All is Ours Day
9 Name Yourself Day	10 National Siblings Day	11 Barbershop Quartet Day	12 Big Wind Day	13 Scrabble Day	14 National Pecan Day	15 Husband Appreciation Day
16 Easter Day	17 National Cheeseball Day	18 Newspaper Columnists Day	19 National Garlic Day	20 Look Alike Day	21 Kindergarten Day	22 National Jelly Bean Day
23 Lover's Day	24 Pig in a Blanket Day	25 World Penguin Day	26 National Pretzel Day	27 Tell a Story Day	28 Kiss Your Mate Day	29 National Shrimp Scampi Day
30 National Honesty Day						

March Monthly Observations

- National Humor Month
- International Guitar Month
- Keep America Beautiful Month
- Lawn and Garden Month
- National Poetry Month
- National Pecan Month
- National Welding Month
- Records and Information Management Month
- Stress Awareness Month
- Sexual Assault Awareness Month

April 2017



Active Body = Active Brain

By Terrill Peck, WVU Extension Agent, Raleigh County

Health Motivator Talking Points

Did you know . . . ?

Being physically active every day promotes good brain health. Persons of all ages benefit from regular exercise. How does physical activity benefit our brains?

- Exercise helps clear the cob webs or “brain fog” that may happen as we age. Increased heart rate and blood flow protects memory and thinking skills.
- Exercise improves your mood and sleep habits, and reduces anxiety and stress.
- Brain chemicals are released when you exercise, stimulating growth of new blood vessels and helping existing brain cells last longer.
- With exercise, extra blood bathes your brain cells in oxygen and glucose, which they need to function. The more they get, the better they perform.
- Your body releases the feel-good hormone oxytocin during exercise. Its effects can last up to 12 hours.
- Nature boosts our mood. Going to a park or walking in the woods can improve creativity by up to 50% and reduce stress hormones by 16%.

How can you make the most of daily exercise and benefit your brain?

- Be active at least 30 minutes a day, no matter what your age.
- Get outside and enjoy nature. Take a walk. Join an exercise group. Go dancing. Walk the dog. Play with your grandchildren and pets.
- Exercise with a friend. Just having someone with you helps keep you engaged, and they are counting on you.

Quick Club Activity: Active Body = Active Brain

Play dance or salsa music. Not feeling spicy? Play the chicken dance song. Those who are able, get up and dance. If not, dance in your chair! Get your heart pumping oxygen and glucose. Toss a few balloons in and keep them in the air. If you’re laughing, that’s a real brain bonus! After dancing, talk about it: “How does your brain feel now?” All that oxytocin hormone will keep you feeling great!

Learn More!

Mind & Mood – Harvard Health. <http://www.health.harvard.edu/topics/mind-and-mood>.

Find local events and things you love to do. <http://www.active.com/>.



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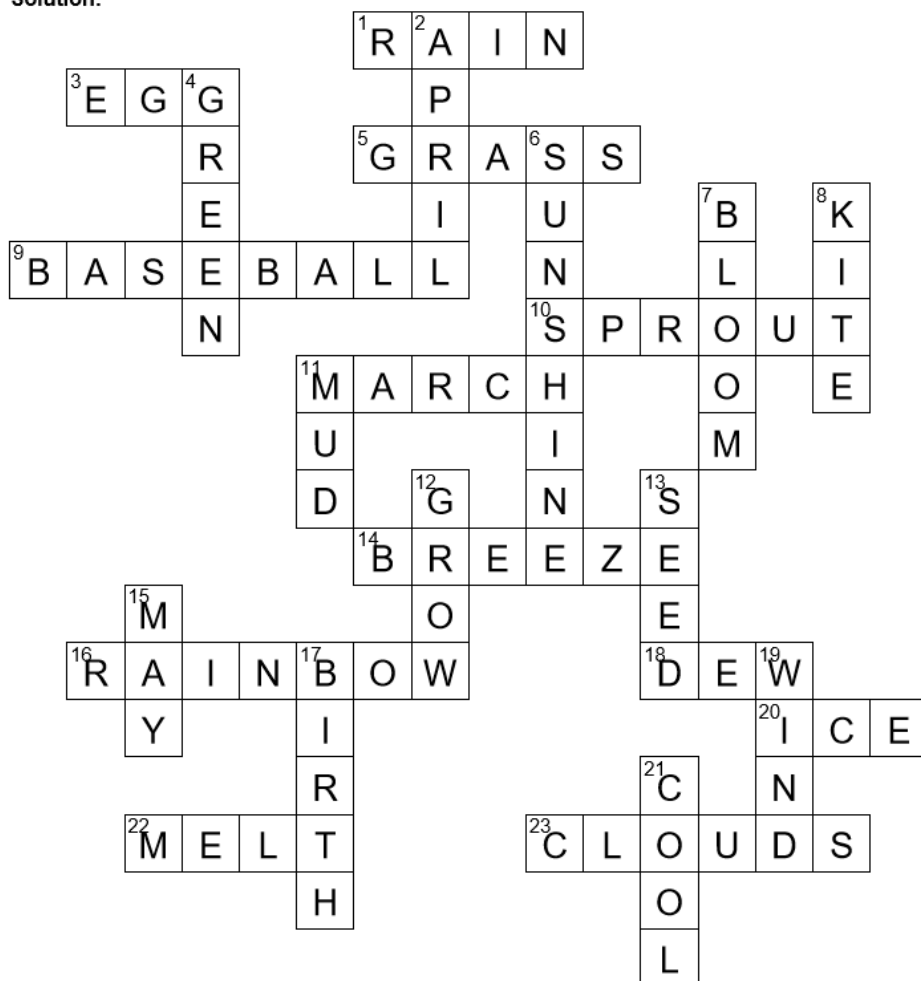
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Solution:



**Brain Exercise
Answers**