



# GSWCF Florida Dairy Farmers Patch

Did you know that milk is such a versatile food? It can be transformed into so many different things, such as cheese, butter, yogurt and ice cream. It's delicious, nutritious and sustainable. Find out where milk comes from, how it is processed, the role dairy plays in nutrition and all the possible careers in the dairy world. Plus, you'll get to try some yourself!

## Steps

1. Learn about Florida Dairy Farms
2. Explore Dairy Nutrition
3. Turn Milk into Dairy Products
4. Discover Dairy Careers
5. Learn about Dairy Sustainability
6. Taste Test
7. Take Action!

## Purpose

When I've earned this patch, I'll know all about dairy in Florida.



STEP

## 2 Dairy Nutrition: Why is it Good for Me?

Milk contain 13 essential nutrients like calcium and protein that your body needs to grow and be healthy.

The United States Department of Agriculture's (USDA) "Choose My Plate" recommendations state that you should consume around 2.5 (3 – 8 yrs.) to 3 (9 – 18 yrs.) servings of dairy per day, depending on your age.

Examples of typical servings of dairy include:

- One 8oz cup of milk
- One 8oz cup of yogurt
- 1½ oz of hard cheese or 2 oz of processed cheese.



CHOICES – DO ONE:

**Pick a dairy product and read the nutrition label**

- How many servings are there?
- What nutrients are listed?
- How many ingredients are listed?
- What else can you learn about this dairy product from the nutrition label?
- Visit <https://www.fda.gov/media/89314/download>

OR

**Learn what nutritional benefits are in dairy foods.**

Dairy contains 13 essential nutrients! The top two are protein and calcium, but all 13 nutrients help your body grow and be healthy. Protein and calcium help build strong bones, teeth and muscles. Can you find all 13 nutrients? What benefits do they have?

### *Why is Milk Important?*

Milk from cows is commonly referred to as “nature’s most perfect food”. Few foods deliver dairy’s unique combination of nutrients in such an affordable, appealing and readily available way.

Many nutrition experts and health professional organizations – including the American Academy of Pediatrics and the National Medical Association – have long recognized the importance of three daily servings of dairy foods as part of a healthy, nutrient-rich diet.

Americans currently consume about two servings of dairy per day, on average. Adding just one more serving of dairy can help fill some of America’s nutrient gaps, and eating more low-fat dairy foods has been shown to reduce the risk for high blood pressure, osteoporosis and certain cancers.

Milk contributes more calcium, vitamin D and potassium, three nutrients considered lacking in American diets, than any other food. Drinking milk substitutes can lead to gaps in calcium and other nutrients such as protein, phosphorous and B vitamins.



**UF** UNIVERSITY of FLORIDA  
IFAS Extension

Milk supplies calcium and other nutrients to help you stay healthy. Drink 3 glasses each day for a healthy and hard-working body.



**CALCIUM**  
to build strong bones and teeth



**PHOSPHORUS**  
to generate energy in cells and strengthen bones



**WATER**  
to maintain body temperature and carry nutrients and oxygen to cells



**NIACIN and RIBOFLAVIN**  
to help cells produce energy



**CARBOHYDRATE**  
to produce energy to fuel your muscles

**VITAMIN A**  
to assist with normal vision



**PROTEIN**  
to grow and build muscles and other tissues



**POTASSIUM**  
to help your muscles move and contract and keep blood pressure in balance



**VITAMIN D**  
to absorb and deposit calcium and phosphorus in your bones and teeth



**VITAMIN B-12**  
to produce red blood cells



## ***Dairy Products***

SOMETHING YOU CAN  
EAT, MADE FROM MILK

- [Butter](#)
- Buttermilk
- [Cheese](#)
- Cottage Cheese
- Cream Cheese
- [Ice Cream](#)
- Sour Cream
- [Yogurt/Greek Yogurt](#)
- Kefir

## **ICE CREAM IN A BAG**

### ***Ingredients***

- 1 Cup half-and-half
- 2 Tablespoons sugar
- 1/2 Teaspoon pure vanilla extract
- 3 Cups ice
- 1/3 Cup kosher salt
- Toppings of your choice

### ***Directions***

1. In a small plastic bag, combine half-and-half, sugar and vanilla. Push out excess air and seal.
2. Into a larger plastic bag, combine ice and salt.
3. Place small bag inside the bigger bag and shake vigorously, 7 to 10 minutes, until ice cream has hardened.
4. Remove from bag and enjoy with your favorite ice cream toppings!

STEP

# 3 Turning Milk into Dairy Products

How does milk get made into dairy products like cheese, butter and ice cream? Pick two ways to find out below. Even more fun - try it yourself at home!

## CHOICES – DO ONE:



Watch “[From the Farm to the Fridge](#)” to learn about the journey of Florida Milk. Then, conduct the “[Curds and What](#)” activity. This activity will help you discover how milk becomes curds and whey.

OR



Make one of the dairy products from the list on the left. You can find [recipes online](#), at the library or in a cookbook.

Share with your friends and family! What were their thoughts?

Reflect. Would you change or add different ingredients? Would you make it again?

OR



Conduct the “[Butter Making](#)” activity with friends or family.



STEP

# 4 Discover Dairy Careers

Being a dairy farmer is one of the many careers in the dairy industry. Not all dairy jobs are at a farm. You can work in an office managing the business, on the road transporting dairy, in the media cooking or in a lab developing new products!

The dairy industry offers several STEM related careers like Dairy Engineers, Dairy Research, Dairy Scientists, Dairy Microbiologists and many more.

## CHOICES – DO ONE:



### Educate yourself!

Learn about dairy careers. Check out this list and learn about three careers! Which ones are the most interesting to you? Find out what roles these different professionals play in the dairy industry.

- Agricultural Economist
- Dairy Plant Manager
- Nutritionist
- Veterinarian
- Milk Hauler
- Food Scientist
- Cheesemaker
- Cheesemonger

OR



### Vet Check:

Cows are no different than people in that they sometimes become ill and require medical care.

[Watch the Vet Talk](#) with a Dairy Vet to learn more about medical care provided by a veterinarian.



## Meet a few Florida Dairy Cows!

Ayrshire



Holstein



Milking Shorthorn



Jersey



STEP

# 5 Learn about Dairy Sustainability

The dairy industry is dedicated to making dairy a healthy, delicious and sustainable product. Farmers take care of the land, conserve and reuse water and are constantly innovating to be more sustainable and take care of the environment. Here are some examples:

- On some farms, manure can be converted into electricity and renewable natural gas that heat and power facilities.
- New technologies on farms help turn cow manure into helpful environmental resources, including manure pellets that are used to fertilize crops.
- By 2050, goals set by the dairy industry aim to achieve greenhouse gas neutrality, optimize water usage and improve water quality by optimizing utilization of manure and nutrients.
- Dairy farmers are making nutritional changes to their cow's diet, like adding starches, fats and seaweed, which may help reduce methane emissions of up to 20%-50%.
- Water conservation is a critically important practice on today's dairy farms. Water is recycled up to four times to cover uses from chilling the actual milk produced to drinking water for cows, to cleaning of stalls and irrigation of crops.

## CHOICES – DO ONE:

- Create a poster or video to show how Dairy farmers help the environment! Hang your poster in your community or share your video with Girl Scouts of West Central Florida!

OR .....

- Do you have any ideas as to how you could conserve water in your house? Or use food leftovers to create a new meal? Be creative, develop a plan and have fun!



STEP

# 6 Taste Test

Now that you've learned all about milk and dairy products, it's time to taste test!

## CHOICES – DO ONE:

**Share your favorite dairy food with a friend.**  
Grab your favorite cheese or yogurt and compare it with one you haven't tried. Have you ever tried cottage cheese, blue cheese or aged cheese? What about kefir or greek yogurt? Share with friends and compare.

OR .....

**Explore lactose-free options.**  
Not everyone can digest dairy easily. Some people are lactose-intolerant, meaning their bodies can't process the sugars in milk. Thankfully, there are lactose-free dairy products to enjoy. Try lactose-free milk, yogurt or aged cheeses like Cheddar that are very low in lactose.

## Basic Smoothie

### Ingredients

- 1 Cup vanilla yogurt
- 1 Cup whole milk
- 1 Cup frozen fruit

### Directions

1. In a blender, blend all ingredients until smooth and enjoy!

## Mango Orange Milkshake

### Ingredients

- 1/4 Cup milk
- 1 Cup vanilla ice cream
- 1 Cup fresh Florida mango
- 1/2 Cup Florida orange juice

### Directions

1. In a blender, blend all ingredients until smooth and enjoy!

Find more recipes at

[www.floridamilk.com/recipes](http://www.floridamilk.com/recipes)

[Adventurefuls S'mores mousse](#)





STEP

# 7 Take Action

Let's put what you have learned into action!

## CHOICES – DO ONE:

- Share what you have learned about Florida Dairy Farmers with family, friends and your community.

OR

- Show your family how versatile milk is by making a milk-based treat. Pick from one of the following or find your own:

- [Ice Cream](#)
- [Butter](#)
- [Cheese](#)
- [Yogurt](#)
- [Mac & Cheese](#)
- [Over Night Oats](#)
- [Smoothie Bowl](#)

OR

- Try [Mooga](#) with your family or friends. Designed by the Dairy Council of Florida, Mooga is cow-inspired yoga that is targeted towards the whole family. Mooga can bring mindful movements to any part of your day to help focus and energize you.



For more activities, recipes and information about the dairy industry and products, visit [floridamilk.com](http://floridamilk.com)

# Mooga

Try any series of these yoga poses for 3-5 minutes at the beginning or middle of class. Getting students energized and moving is proven to help students stay focused on learning!

### WARRIOR

- Stand with legs 3 to 4 feet apart, turning right foot and 90 degrees point left foot in slightly.
- Bring your hands to your sides and raise your shoulders. Then extend arms out to the sides, palms down.
- Bend right knee 90 degrees, keeping heel over right heel, and rest right hand on your right knee. Stay for 1 minute.
- Switch sides and repeat.

### TREE POSE

- Stand with arms at sides.
- Shift weight onto left leg and place sole of right foot inside left thigh, keeping toes facing forward.
- Once balanced, bring hands on floor or to your partner, palms together.
- Repeat on one side, palms upturned and facing each another. Stay for 30 seconds.
- Lower and repeat on opposite side.

### DOWNWARD COW

- Start on all fours with hands directly under shoulders, knees under hips.
- Walk hands a few inches forward and spread fingers wide, pressing palms into floor.
- Lift one ankle and slowly press hips toward ceiling, bringing your heels into or toward 6, pressing shoulders away from ears. Feet should be hip-width apart, knees slightly bent.
- Hold for 3 full breaths.

### TRIANGLE POSE

- Extend arms out to sides, then bend over your right leg, turned out to 90 degrees, left knee to 45 degrees.
- Allow your right hand to touch the floor or rest on your right leg before or after the knee, and extend the fingertips of your left hand toward the ceiling.
- Turn your gaze toward the ceiling, and hold for 3 breaths.
- Stand and repeat on opposite side.

### BUTTERFLY

- Sit with your knees close to your chest.
- Relax your knees out to either side.
- Gently press the bottoms of your feet together.
- Hold your feet or your ankles.
- Breathe deep and hold for 30 seconds.

### BOW

- Lie flat on your stomach, stretching your arms to your sides.
- Push for your ankles and slowly make a bow shape with your body.
- Hold for 3 deep breaths.

Download this fun Mooga poster at [FloridaMilk.com/in-the-schools](http://FloridaMilk.com/in-the-schools)

DAIRY COUNCIL OF FLORIDA