How Do You Like Your Milk?

Have you ever wondered how we make so many products starting from one bucket of plain white milk? It really is amazing if you stop to think about it. After all, what comes out of the cow, goat or buffalo looks nothing like a block of aged cheddar cheese, or a cube of streaky bleu cheese. Even if you don't drink liquid milk, there are just so many other ways you can get all the health benefits of milk!

Besides whole milk with its 4% fat, we have 2%, 1% and skim milk. The only differences between these are how much fat has been removed. Skim milk has all the protein and minerals of whole milk, just a whole lot less fat. It’s more of the good stuff, less of the bad stuff. Of course, the big complaint about skim milk is that it’s so watery and thin it also has less flavor.

There are several products on the market that have tried to solve that problem. There are skim milks that have been slightly concentrated by filtering out some of the water too. That increase the proteins, minerals and milk sugar so that it feels and looks more like whole or 2% milk, but without the fat. Or the manufacturer can add powdered non-fat dry milk to skim milk. Either way, there are more protein and minerals to make it thicker, but still no fat. The brands that I’ve seen locally include Over The Moon®, Skim Plus® and Simply Smart®.

For the people with lactose intolerance, we have LactAid® and Dairy Ease® brands of milk. The milk sugar has been removed to avoid the indigestion and bloating that it can give some people. These milks come as whole, skim, low fat and flavored.
Goat and buffalo milk have more lactose than cow’s milk has. So far there are no lactose-reduced goat or buffalo milks on the market, so they are not an option for people with lactose intolerance.

Then there are all the cultured or fermented products. They include cheeses, a million different flavors, colors and textures of cultured milk, plus yogurt, kefir, lassi and many others. One thing that makes them all so different are the different kinds of bacteria that are used. Many kinds of bacteria can grow on milk. Most turn the lactose sugar into acid. Acid makes the proteins curdle, which thickens the milk. The trick is that some bacteria make a lot of acid. Others make a little. Some make one flavor with their acid, others make different flavors. A little acid just thickens the milk. A lot of acid makes it separate into curds and whey (clear watery liquid).

Over the centuries people have figured out which bacteria produce the flavors and thickness they want. Kefir and lassi stay liquid and drinkable. Yogurt we eat with a spoon, cheese we slice and eat in pieces. In yogurt for example we actually use two different bacteria. The first one starts making acid, the second one makes more acid and adds flavor. Using just one or the other won’t make good yogurt. Greek yogurt is just yogurt that has had some water strained out to thicken it even more.

Another difference is the kind of milk we start with. Starting with skim milk will make one kind of cheese, starting with whole milk or even cream will give us a very different kind of cheese. Whether we use cow, sheep, goat, camel or buffalo milk will also change the kind of cheese we get. The flavors and textures depend on the kind and amount of protein and fat that the animal put into its milk. I don’t think anyone has tried using whale milk for cheese yet, but that would be really different!
Here’s a super-easy dish with 2 kinds of milk products. You can prepare it in advance for either breakfast or dinner. Make it in the morning, bake it for dinner. Serve with veggies or salad to round out the meal, and while it’s baking you can help the children with their homework! If you’d like a little more flavor, add a drained 4 oz can of chopped mild green chilies when you add the green onions.

Farmer’s Casserole

3 cups frozen shredded hash brown potatoes  
1 cup chopped cooked ham

¾ cup shredded reduced fat Monterey Jack cheese

¼ cup chopped green onions  
4 eggs or equivalent substitute

1 12-oz can evaporated skim milk  
salt, pepper optional

Spread potatoes over bottom of 8x8 inch baking pan. Sprinkle the ham, cheese and onions over potatoes. In small bowl whisk the milk, eggs, salt and pepper together until blended. Pour over the potatoes. Cover and refrigerate for 2 to 10 hours. Preheat oven to 350°F while dish stands at room temperature for 30 minutes (no longer!) Remove covering and bake 55-60 minutes, until knife inserted in center comes out clean. Serves 6.