

Lancaster Stake Preparedness Class

Got MILK?

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"I am satisfied that the Father of us all does not wish His children to walk in poverty. He wants them to have comforts and some of the good things of the earth. In the Old Testament, He speaks of "a **land flowing with milk** and honey," of the fatlings of the flock, and of other things which indicate that He would have His children properly fed and clothed and sheltered, enjoying the comforts that come of the earth, but not to excess."
Gordon B. Hinckley, "Thou Shalt Not Covet," *Ensign*, Mar 1990, 2

A Little Milk Humor

[It's So Hot In Texas That...](#) The cows are giving evaporated milk.

"It was so dry out there for three months, our cows gave powdered milk."
11 September 1930, Burlington, Kansas, *Daily Times*, pg. 8, col. 2:

What kind of milk comes from a forgetful cow? **Milk of Amnesia**

Why don't cows have any money? **Because farmers milk them dry**



Today's Milk



Today, most milk is processed; removing all the fat and then adding it back in to make 1%, 2%, etc. Each cow used to produce 1,700 quarts of milk per year, now they produce 8,200 quarts. Pasture feed cows produce cream colored milk, white milk comes from grain feed cow. Curds and whey is much like cottage cheese.

Powdered Milk



Remember those days of chalky, lumpy powdered milk? Well those days are over. With new drying processes the milk is exposed to heat for 1/3 the time. This makes milk with much-improved flavor and a much longer storage life than in previous years, and with soaring milk prices, you may want to reconsider its use in your daily lives. Powdered milk can be good! **Have old powdered milk?** Don't throw it out, use it to make cheese or yogurt or for fertilizer in your garden.

All About Powdered Milk

Powdered milk was developed to make it easier and cheaper to store milk in undeveloped countries. This makes it a great benefit for long-term food storage.



1) Milk arrives fresh everyday to be processed. 2) Each load of fresh milk is tested for quality and content. 3) Milk is pasteurized & separated into milk/cream. 4) Water is evap. off. 5) Milk is dried into Flakes or granules.



Much of the regular powdered milk made for USA is used by the food manufacturing industry. It's used in commercial baking mixes, pancake and waffle mixes and a myriad of foods. Look at the ingredient label. If it includes milk, there's a really good chance the ingredient was actually powdered, regular milk.



Most powdered milk sold in the United States has been fortified with vitamins A&D. They are NOT shelf stable and are sensitive to heat and light. They will dissipate at the rate of about 20% per year.

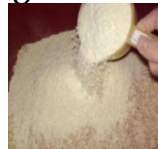


Dry milk powder can be added to baked goods, gravies, smoothies, hot cereals, casseroles, and meat loaf as a nutrition booster.



It can also be used to make yogurt, cheese and most any cultured dairy product that does not require a high fat content.

Advantages to using Powdered Milk



- It needs no refrigeration (until reconstituted)
- It is easy to store for long periods of time
- By making just what you need there is less waste
- It is fast and easy to measure and mix.
- It is low in fat and contains only ½ the calories of whole milk.
- It is much cheaper than fluid milk.
- Adding 1 T. dry milk to 1 c. fresh milk increases: protein, B vitamins, calcium and minerals.

Hints for Making Good Tasting Milk



- Mix 50/50 with whole fresh milk to make 2%, mix 50/50 with 2% for 1% milk.
- Use whisk to mix non-instant milk with ½ warm water, then add remaining water.
- Completely chill milk before serving.
- Adding ½-1 T. sugar and ½-1 t vanilla can really improve flavor.
- Once powdered milk has been opened, it picks up odors easily so use it quickly for best taste.

Milk Alternatives

By *Mary Ann Wilcox*

Most people stock powdered cow's milk because that's (1) most readily available, and thus (2) cheapest. However, some children are born unable to tolerate the lactose, or adults develop problems over time. Make plans for alternates. There are three that I can think of that can be found in most supermarkets or health food stores, and certainly online at amazon.com.



Powdered Goat's Milk - it's a bit strong and takes some getting used to. Add a bit of sugar or cocoa powder. My kid loves it! It can be mixed half goat with half rice or soy to change up the taste.



Powdered Soy Milk - I get the carob flavored because it tastes just like a chocolate malt! Also comes in plain and vanilla. And probably chocolate too.



Powdered Rice Milk - I like this the best because my kid's tummy can't handle cow or soy milk. Also comes in vanilla.

Milk Comparison Chart (or, All Milks Are **Not** Created Equal)

| | Instant | Regular | WheyBased (Morning Moo, Swiss Maid, etc) | Chocolate whey based | 2% Milk (liquid from store) | Canned milk (undiluted) |
|--------------|---------|----------|--|-------------------------|-----------------------------------|-------------------------------|
| Serving Size | 8 oz | 8 oz | 8 oz | 8 oz | 8 oz | 8 oz |
| #10 can | 42 | 80 | 88 | 64 | N/A | N/A |
| Calories | 80 | 109 | 80 | 110 | 120 | 213 |
| Cal from fat | 0 | 0 | 20 | 10 | 45 | 160 |
| Protein | 8 grams | 11 grams | 3 grams | 2 grams | 8 grams | 16 grams |
| TotalCarbs | 12 | 15 | 12 grams | 21 grams | 12 grams | 24 grams |
| Calcium | 30% | 34% | 30% | 8% | 30% | 64% |

Cost per serving has not been included in this table due to price fluctuations.

Hint: To find current cost per serving, divide the current price by the number of servings.

Types of Powdered Milk

Nonfat Dry Milks

This is pasteurized skim milk reduced to a powdered concentrate. It can be found in two forms, regular and instant. They are both made from milk in a spray-drying process, but the instant variety has been given further processing to make it more easily soluble in water than regular dry milk. Both types have the same nutrient composition.

Regular Powdered Milk



- More compact and requires less storage space than the instant variety.
- To make; mix your milk with warm water using a wire whip, then chill. Before serving, give it another quick stir and serve. This will give the milk better flavor.
- Need 4-#10 cans per adult = 1 c. per day. Need more for children.

Whey Based Milk (Morning Moo, Swiss Maid, Mountain Mills, etc.)



- Most of the milk protein has been removed: Morning Moo, Swiss Maid, etc.
- *Does NOT meet protein needs of growing children.*
- Best tasting of the milks
- Will **NOT** make yogurt or cheese because the milk solids have been removed. Whey is what's left over after making cheese or yogurt.

Instant Powdered Milk



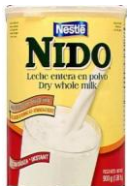
- Instant milk is made by taking regular powder and making it a little flakier.
- Most common variety found in grocery stores, also Food Storage Co.
- Dissolves instantly in cold water (will lump up in warm water)
- Need 5 - #10 cans per person = 1 c. per day, more for children.

Flavored Nonfat Dry Milk



This may be found packaged in a variety of forms from a low calorie diet drink made with artificial sweetener to cocoa mix or malted milk. The key ingredient is the dry milk so buy and store these products accordingly. They have less calcium than plain milks.

Dry Whole Milk



This dry milk has a higher fat content and therefore a shorter shelf life than nonfat. Other than that, it can be used in exactly the same way. Dry whole milk is difficult to find, but can sometimes be found where camping supplies are sold and from a few online providers, or in the Mexican food aisle of the grocery store under the brand name of Nido by Nestle.

Buttermilk Powder



Dry buttermilk is for use in recipes calling for buttermilk. Since it has a slightly higher fat content than nonfat dry milk, it generally does not keep as long. The acid in buttermilk reacts with baking soda or baking powder in your recipes to make batters rise a bit. This is what gives you puffy pancakes and batter breads.

How Much & What to Store



The LDS Church recommended storing 16 lbs of powdered milk per person (5-#10 cans) as recently as 2002. (In 1982 the recommendation was 85 lbs; before that it was 100 lbs.) That 16 lbs per person is enough to make only 1-8oz. glass per day per person. This would give you 1/3 of your daily requirement of calcium. If you have a family of big milk drinkers, have pregnant or nursing mothers, or small children you will want to store more than this.

Storage: Milk is a big expense. However, it will store 20+ years if stored in dark, moisture and oxygen-free containers (#10 cans /mylar bags/buckets) at 68° or less. Date all of your milk containers and store in the coolest part of your house or basement. Use within 6 months after opening or repackage.

Rotating: You will want/need to rotate your milk. The easiest way is to use it in cooking. You can easily substitute any fresh milk with mixed-up powdered or canned milk. Another way to rotate it is to mix it 50/50 with your fresh milk and drink it. A third way to rotate it is to make yogurt or cheese from it. This isn't as difficult as you might think! Some recipes follow.

Using Your Powdered Milk



Milk is used in many different ways: Drinking, Mixes such as: Magic Mix, White Sauce Mix, or hot cocoa mix, baby formula, yogurt, sour cream, cream cheese, mozzarella cheese, evaporated and condensed milk, caramel sauce, drinks, shakes, whipped topping, breakfast pie, pudding, desserts, protein bars, soups, sauces, cottage cheese, casseroles, macaroni and cheese, bread, Pasta Carbonara, cakes, ice cream, or even milk baths! The possibilities are endless! (All underlined items were demonstrated)



Anything you can make with fresh milk you can make with powdered, one of my favorites being homemade ice cream. Take one of your family's favorite recipes that utilize fresh milk and convert it into one that uses powdered (use the conversion chart at the beginning of the recipe section) or try some new ones from the recipe collection I've attached. It is that easy!

Food Demonstrations

Yogurt



Measure 4 c. warm water into large saucepan. Stir in 2 c. regular/non-instant powdered milk or 3 c. instant (use cold



Whisk or stir until dissolved, then heat over med. heat. Stir continuously until temp reaches 105°.



Measure 1/4 c. plain yogurt (with live cultures) into small bowl. (*Dannon and Mountain High yogurt both have live cultures*)



Pour 1/4 c. hot milk into yogurt and stir; then pour mixture into pan. This keeps yogurt from curdling.



Whisk yogurt until dissolved. If you are adding flavoring, now is the time to stir them in. Then ladle into 2 clean, pint jars.



There are many ways you can “cook” the yogurt.

- 1) Put jars, along with one filled with boiling water into icebox cooker. Let sit undisturbed for 6-8 hours.
- 2) Put in dehydrator at 85-100° for 6-8 hours.
- 3) Set on heating pad on low, covered with blanket.



When done: eat, refrigerate or take it to the next step and turn it into sour cream or cream cheese. Always save 1/4 c. to make your next batch.

Sour Cream



Pour 2 pints of plain yogurt into a strainer that has been lined with 3 layers of cheesecloth or a thin flour sack towel.



Set strainer over bowl to drain. Cover top with dish towel. Every 30 minutes carefully scrape the thicker yogurt off of the bottom and sides to allow for quicker drainage. Let sit 1-4 hours, until desired thickness.



For a less sour, sour cream, drain in refrigerator instead of on counter. Finished product: 2 pints yogurt = 1 pint sour cream.

Cream Cheese



Keep sour cream in strainer over bowl an additional 1-4 hours, until desired thickness. (from yogurt stage 4-8 hours)



As with the sour cream, keeping the cream cheese in refrigerator while it is draining will make a milder sour flavor. Store in frig. Can be flavored and used like "real" cream cheese, including Cheesecake. Finished product: 4 c. yogurt = 1 c. cream cheese

Cheese



Mix 4 c. water and 3 c. dry non-instant milk in large saucepan, heat until 115°. Add 2/3 c. oil and 1 3/4 c. white vinegar. Stir and let sit for 10 minutes.



When curds (cheese clumps) separate from whey (watery stuff) then pour them into a cheesecloth lined strainer.



Mix salt into curds. Pull up sides of cheesecloth, twist just above cheese, squeezing out water as you twist. Tie with string and hang overnight, hanging over bowl. Unwrap and grate.

The Truth about Milk Products



I don't claim to be an expert in the yogurt or cheese making department, since my only experience has been watching 40+ YouTube videos about making it and then making it one time. To tell you the truth, it isn't very difficult BUT if you really want cheese to supplement your food storage you might want to think about another way because it takes A LOT of milk to make these products so store accordingly. Another interesting thing is that you can buy Freeze-Dried Cheese on sale for \$25 -#10 can (20 c.) from Emergency Essentials. It is great tasting comes in a variety of flavors: mozzarella, jack and cheddar, and is much faster to use. In fact it costs about the same as fresh cheese these days.

As far as the yogurt, sour cream and cream cheese. They are very easy to make and would make addition to my food storage. I will just plan on buying more milk for dishes that require them.

Milk Product Comparisons



1-#10 can
Instant milk



= 60 cups
Milk



= 28 cups
Yogurt



= 14 cups
Sour Cream



= 7 cups
Cream Cheese



= 10 cups
Shredded Cheese

Got Milk? ...Setting Goals



- Incorporate Your Food Storage into your Meals
- Save time, Saves Money, Healthier

My Week in Food Storage



As you can imagine putting together these classes takes lots of time, but I have really been trying to practice what I preach. So I wanted to share with you what I did during the past week. Tues: Canned 7 qts and 16 pints of stew meat and chicken; Wed: dehydrated some extra peppers and strawberries; Thur: made Pasta Carbonara with white sauce, DH tomatoes and bacon bits; Fri: made salsa w/canned tomatoes and dried peppers; Sun: cooked pot roast in solar oven; Mon: made Swedish meatballs w/ pasta, canned soup, meatballs and sour cream, all of which I have in my food storage. It was so FUN, food tasted great and I had such a feeling of accomplishment. You can do it too. Set goals to use your FS each day.

COMING IN 2010

- Preparedness Classes: 4th Thursday 7-8:30 PM
- Cooking Classes, Quarterly (4 times) Saturday Mornings: 3 classes-3 Hours
- Early Spring Ham Radio Class: For beginners and General- 5 Saturdays

Before I close, I want to share a little story I found...

"OK God, I'll buy the Milk"

Author unknown.

A young man had been to Wednesday Night Bible Study. The Pastor had shared about listening to God and obeying the Lord's voice. The young man couldn't help but wonder, 'Does God still speak to people?'



After service, he went out with some friends for dessert and they discussed the message. Several friends shared how God had led them in different ways. It was about ten o'clock when the young man started driving home. Sitting in his car, he just began to pray, 'God...If you still speak to people, speak to me. I will listen. I will do my best to obey.' As he drove down the main street of his town, he had the strangest thought to stop and buy a gallon of milk.

He shook his head and said out loud, 'God is that you?' He didn't get a reply and started on toward home. But again, the thought came, buy a gallon of milk. 'Okay, God, in case that is you, I will buy the milk.' It didn't seem like too hard a test of obedience. He could always use the milk. He stopped and purchased the gallon of milk and started toward home.



As he passed Seventh Street, he again felt the urge, 'Turn Down that street.' This is crazy he thought, and drove on past the intersection. Again, he felt that he should turn down Seventh Street. At the next intersection, he turned back and headed down Seventh. Half jokingly, he said out loud, 'Okay, God, I will.'

He drove several blocks, when suddenly, he felt like he should stop. He pulled over to the curb and looked around. He was in a semi-commercial area of town. It wasn't the best but it wasn't the worst of neighborhoods either. The businesses were closed and most of the houses looked dark like the people were already in bed.



Again, he sensed something, 'Go and give the milk to the people in the house across the street.' The young man looked at the house. It was dark and it looked like the people were either gone or they were already asleep. He started to open the car door and then sat back in his seat. 'Lord, this is insane. Those people are asleep and if I wake them up, they are going to be mad and I will look stupid.' Again, he felt like he should go and give the milk. Finally, he opened the door, 'Okay God, if this is you, I will go to the door and I will give them the milk. If you want me to look like a crazy person, okay. I want to be obedient. I guess that will count for something, but if they don't answer right away, I am out of here.'

He walked across the street and rang the bell. He could hear some noise inside. A man's voice yelled out, 'Who is it? What do you want?' Then the door opened before the young man could get away. A man was standing there in his jeans and T-shirt. He looked like he just got out of bed. He had a strange look on his face and he didn't seem too happy to have some stranger standing on his doorstep. 'What is it?'

The young man thrust out the gallon of milk, 'Here, I brought this to you.' The man stared at the milk for a moment then took it and rushed down the hallway. Then from down the hall came a woman carrying the milk toward the kitchen. The man was following her holding a baby. The baby was crying. The man had tears streaming down his face. He began speaking, 'We were just praying. We had some big bills this month and we ran out of money. We didn't have any milk for our baby. I was just praying and asking God to show me how to get some milk. His wife was in the kitchen yelled out, 'Ask him to send an Angel with some.' Are you an Angel?' The young man reached into his wallet and pulled out all the money he had on him and put in the man's hand. He turned and walked back toward his car and the tears were streaming down his face. He knew that God still answers prayers.



I know that God still hears and answers prayers. We have been commanded to store food, at least a year supply of it. Some people feel this is a stupid thing to do, that they are just wasting their time and money; others, store their year supply and sit by waiting to use it for their family and willing to defend, by force if need be; other's, quietly following the promptings of the Spirit; store their year supply and then store more, not really knowing why they feel the need to buy that bucket of beans or that *extra case of milk*. Could it be, that because we follow the command to store, and then follow that little voice that tells us to store some extra, that we will be in a position to be able to answer another's prayer and have milk for their crying baby?



It is my hope that these classes teach you and encourage you to follow the words of the Lord, the counsel of the Prophets and the whisperings of the Holy Ghost to be prepared for your family and for those who will need your help.

Keep moving on the Path to Preparedness and you WILL be blessed.

“THE DEGREE OF OUR PREPARATION WILL BE EQUAL TO THE EXTENT OF OUR OBEDIENCE, WHICH WILL DETERMINE THE MEASURE OF OUR PEACE OF MIND.”
Prophetic Statements on Food Storage for the LDS

The time is now to be prepared.

Resources

everydayfoodstorage.net : videos and recipes about powdered milk and much more

funwithfoodstorage.net: a gateway to several great food storage websites

youtube.com: Lots of yogurt and cheese making videos

Cookin' With Home Storage by Vicki Tate

Cookin' With Powdered Milk by Peggy Layton

Emergency Food in a Nutshell by Leslie Probert and Lisa Harkness

Mix-a-Meal by Deanna Bean and Lorna Shute

The Everyday Gourmet by Shari Haag

A special thanks to whitewaterlady at ldsavow.com for her work on this handout.



And don't forget to check out peaceofpreparedness.com for the latest class handouts and class videos along with lots of other great preparedness information.