How to Turn Your Non-Fat Powdered Milk into Whole Milk

If you're one of those who can't stand drinking non-fat powdered milk (or have children that won't touch it) but still nonetheless have it as part of your food storage — there's hope. Turning your non-fat powdered milk into whole milk (or 1% or 2%) is a relatively easy process.

From Powdered Milk to Whole Milk

All it involves is a little understanding of chemistry and some extra items that should be part of your food storage anyways.

The only difference between reconstituted non-fat powdered milk and whole milk is the absence or presence of fat (this is what allows non-fat powdered milk to store for so long). But improving the taste by getting the fat back into the milk is not as easy as pouring some in and shaking. I'm sure you've seen what happens when you try to combine water and oil.

And now for the chemistry.

In order to mix two liquids together that otherwise would not blend (oil and milk in this case) requires what is called an emulsifier. And two of the most common emulsifiers used in recipes are eggs and honey — both of which are excellent long-term food storage items.

In the tables below I've put together some simple recipes that you can use to make 1%, 2%, or whole milk from a combination of powdered milk, vegetable oil and either powdered eggs or honey.

To prepare, just mix the ingredients specified in the tables below according to how much milk you want to make along with the desired fat content. It helps to use a shaker or a whisk but even a fork stirred vigorously works fine.

Keep in mind that the mixture is not homogenized so over time it will begin to separate again. If it does just shake it up, whisk it, or stir vigorously and viola! you got yourself some great tasting

powdered milk. Try both recipes to see which one you and your family prefers (I'm partial to the honey mixture). Enjoy!

Using Honey

Desired Fat Content	Desired Milk	Honey	Reconstituted Powdered Milk	Vegetable Oil
1%	Cup	1/4t	1 cup	1/2t
	Quart	1t	1 quart	2t
	Gallon	1T + 1t	1 gallon	2T + 2t
2%	Cup	1/2t	1 cup	1t
	Quart	1/2T + 1/2t	1 quart	1T + 1t
	Gallon	2-1/2 T	1 gallon	1/4C + 1T
Whole (4%)	Cup	1t	1 cup	2t
	Quart	1T + 1t	1 quart	2T + 2t
	Gallon	5T	1 gallon	1/2C + 2T

Using Powdered Eggs

Desired Fat Content	Desired Milk	Egg Powder	Reconstituted Powdered Milk	Vegetable Oil
1%	Cup	1/8t	1 cup	1/2t
	Quart	1/4t	1 quart	2t
	Gallon	1t	1 gallon	2T + 2t
2%	Cup	1/4t	1 cup	1t
	Quart	1/2t	1 quart	1T + 1t
	Gallon	2t	1 gallon	1/4C + 1T
Whole (4%)	Cup	1/2t	1 cup	2t
	Quart	1t	1 quart	2T + 2t
	Gallon	1T,+1t	1 gallon	1/2C + 2T