

Homemade Yogurt

Yogurt is often a favorite food for kindergarten kids, though nowadays they often think of it as a pink or blue substance in a plastic sleeve. And as a matter of fact, yogurt is a great project for curious kindergarten scientists for whom a frequent core science topic is, “what is alive”? And while they’re at it, perhaps they can discover some new flavors that go with this common food!

What You Need:

- Saucepan
- 3 cups 2% milk
- 3 tablespoons plain yogurt with active cultures
- 4 tablespoons nonfat dry milk
- Cooking thermometer



What You Do:

1. Start by heating your milk very gently over low heat, until it is warm—no more than 105°. Remove from heat.
2. Now use a wire whisk to blend in the yogurt and dry milk. Stir thoroughly until everything is well blended.
3. Put the mixture into a Pyrex or ceramic bowl in a warm place for 4-6 hours, and don't move it around or stir. What's a good warm place? Some people place the bowl in a pan of hot water on top of a radiator or inside a 100° oven; others warm a thermos with boiling water, pour the water out and cool slightly, and then pour the milk into that. Whichever you choose, by 6 hours, you and your kindergarten scientist will see that the mixture has thickened.
4. Now put the yogurt into the refrigerator, where it will thicken even more. After another three hours, it's ready to eat! Your child will probably want to add sweetening—try honey or maple syrup for a change, or mix in fruit.

What happened? When you put the yogurt “culture” into the milk, you released living bacteria into the milk, and they were in “bacteria heaven”—they feasted on the natural sugar in milk, called “lactose.” As a result of their digestion, bacteria then released lactic acid, which is what makes yogurt slightly sour. Then the proteins in the milk clumped together to thicken the mix. Temperature was very important in all of this—if it had gotten too hot, the bacteria would have died. So in case there's any doubt—there really is stuff inside yogurt that is alive!