



Dehydration Experiment

On SCOPE's Future Foods episode, Bonnie experimented with dehydrating food. Here's how you can try it at home!



What you need:

- Oven
- Linseeds (1/2 cup)
- Sweet potato, banana, apple, pear (thinly sliced)
- Lemon juice
- Water
- Baking trays



What to do:

1. To make crackers, soak about half a cup of linseeds in water.
2. After a few hours, once the seeds are slimy, spread the mixture in a thin layer onto a baking tray.
3. Put the tray into the oven and carefully prop the door open to let the moisture escape.
4. To make sweet potato chips, lay out your sweet potato slices on another tray with plenty of space between them, and add them to the oven.
5. To test whether lemon will stop the food from going brown, mix the lemon juice with about three times the amount of water.
6. Dunk half of your fruit into the mixture for about 30 seconds.
7. Lay out your fruit onto another baking tray, mark which side had the lemon juice treatment, and put it all in the oven
8. Check the oven regularly, as dehydrating food can take several hours.
9. When it's done, it should feel completely dry. Some food will be stiff and crunchy, like the crackers and the banana, and some will be a bit leathery, like the pear and apple.
10. Store your food in an airtight container in a dark place. You can either eat it as it is, or soak it in water to return it to the way it was!

What's happening:

Soaking the linseeds allows them to release a special substance called mucilage, which will help hold the crackers together.

The acid in the lemon should stop the fruit from changing colour by preserving it until the dehydration takes effect. When Bonnie tried this experiment, adding the lemon juice didn't make much of a difference to the pear or banana, but seemed to help with the apple. Did you get a different result?

Once the food is preserved, it can last a really long time as the lack of moisture means that bacteria and other organisms can't grow.

