



TREA How-To Workshop Series on Local Food Today's Discussion : Food Dehydrator with Pamela Reid



Why Dehydrate?

Dehydrating reduces food moisture content through evaporation, which hinders the growth of bacteria, yeast, and mold. There are various types of dehydrators and dehydrating methods, including solar/solar drying, oven drying, and electric dehydrating, which will be the focus of this handout. There are many benefits of dehydrating, which include saving money by dehydrating foods that are in season, preserving perishables, and a healthier alternative through the use of fewer chemicals, which are often found in commercial snacks, such as artificial colouring, flavour, and preservatives.

How to Prepare your Food for the Dehydrator?

Before preparing your fruit and vegetables for the dehydrator, different processes should be considered to retain colour, flavour, improve rehydration time and texture, and increase the shelf life, which include the following:

- To ensure consistent thickness, consider using a food processor, grater, mandoline, palm peeler, or paring knife for slicing, dicing, and chopping ingredients.
- Often, people blanch or steam vegetables, fruits, and meats that take longer to cook to retain their colour and prevent flavour loss before drying.
- To prevent fruits from darkening, consider dissolving 1 tablespoon of powdered ascorbic acid into 2 cups of water, and let it sit for no longer than 1 hour before draining.
- To give fruits a tarter taste, then soak sliced fruits covered in lemon, lime, or orange juice for 3 to 5 minutes before draining. Note, this method is not as effective as ascorbic acid.
- To increase the storage life, consider soaking either fruits or vegetables by dissolving 1 tablespoon of sodium bisulfite powder into 4 cups of water for 2 minutes before removing.

What Can You Dehydrate?

• Fruits

Spread thinly sliced (apples, bananas), cut into a smaller piece (pineapple), left as it is (blueberries, raspberries), or pureed and dried into fruit leathers in a single layer between 135 to 145 Fahrenheit, in which the drying time varies depending on the fruit. Note, the fruit is ready once it is leathery or no longer sticky.



- **Vegetables**

Vegetables should be thinly sliced or cut into smaller pieces and dehydrated between 125 to 135 Fahrenheit until crisp or hard, which can take approximately 4 to 12 hours depending on many factors, such as the type of vegetable, size, etc.

- **Herbs**

Place the herbs in a single layer and dry between 95 to 105 Fahrenheit for 2 to 4 hours. Note, herbs are ready once it is brittle or forms into crumbles easily when touched.

- **Nuts and Seeds**

Soak nuts or seeds overnight in water and salt solution (1 tablespoon of salt to 4 cups of water), and drain before spreading it in a single layer at 145 Fahrenheit for 12 to 24 hours.

- **Grains, Legumes, and Pasta**

Prepare and cook rice and quinoa as usual and dry rice at 125 Fahrenheit for 5 hours, while quinoa at 135 Fahrenheit for 8 to 10 hours. For pasta, cook al dente, drain, and dry at 135 Fahrenheit for 2 to 4 hours until it hardens. Lastly, dry, drain, and prepare beans and let it dry at 125 Fahrenheit for 6 to 8 hours.

- **Meat and Seafood**

Slice, cut and spread pre-cooked meat and seafood in the dehydrator between 145 to 160 Fahrenheit, which takes about 6 to 12 hours to fully dry. Also, consider using only fresh, lean, or low-fat varieties for fish as extra fat can lead to spoilage.

How to Store Your Dehydrated Food?

Ensure food has cooled down before storing it in either vacuum sealer, air-tight container, freezer bags, canning, or mason jars to prevent the growth of bacteria, yeast, or mold. If the food is going to be consumed within a year, consider keeping it in either an air-tight container or freezer bags. For longer preservation use vacuum-seal. Lastly, store the products in a cool, dry, and dark area.

What Precautions Should be Taken?

- Slightly bruised or damaged products can be dried, however mold can spread to other food.
- Always clean the dehydrator thoroughly to ensure cross-contamination does not happen, particularly if a different category of items is being dried, such as meat.
- Dehydrate food at a high enough temperature to reduce moisture to prevent bacteria growth, but not too hot, where it impacts food quality.
- Avoid fats, such as nut butter, avocado, and olives, as it will leave moisture in the food, which can lead to spoilage.
- Avoid dehydrating dairy products or eggs due to the high chance of food poisoning.

To Learn More About Dehydrating Food, Visit:

- The beginner's guide to making and using dried foods : preserve fresh fruits, vegetables, herbs, and meat with a dehydrator, a kitchen oven, or the sun by Teresa Marrone
- Dehydrating food : a beginner's guide by Jay Bills and Shirley Bills
- Batch : over 200 recipes, tips and techniques for a well preserved kitchen by Joel MacCharles & Dana Harrison ; photographs by Reena Newman & Margaret Mulligan