

Benefits of Food Dehydration

by Steve Meyerowitz, Sproutman®

In biblical times, the dehydration of foods was more than the delicacy it is today. It was a sheer necessity. Refrigeration had not been invented yet, foods fresh from the garden had to be eaten or they would perish. People would hang their food out to dry much like their laundry and they could then store it for months.

Nowadays, we have refrigerators, freezers, pasteurization and canning for food storage. The process of drying food outdoors is simply out of place in the modern world where time is of the essence and sunshine is not as strong or air as pure. In fact, most of the dried food we consume today still comes from the middle East where the sun is hot and the days long. Turkey, Greece and the Arab countries export figs, dates, raisins, papayas, currants, etc. Dried vegetables, on the other hand, are rare except for mushrooms and tomatoes, still they are considered delicacies and are high priced.

Dehydration has been neglected these days and is just now making a culinary comeback and for good reason. A home dehydrator has several uses and many advantages over other kitchen tools and provides opportunities for a whole new cuisine of exciting tastes and textures. Take your dried foods on the trail, in your backpack, use them as snacks for kids (of all ages) and store your summer vegetables all year long.

PRESERVATION

Originally, dehydrators were known as food preservers. For example, many fruits, such as apples, store fresh in coolers for barely a year, but once dried, last forever. How else can you preserve fruits? Freezing apples and many others does not work and canning makes them taste watery and soggy. That is why many fruits such as dates, figs, raisins and currants are actually known and used mostly in dried form. It is simply the best method for storing and distributing them. Zucchini, on the other hand, cannot be stored fresh for very long at all and does not lend itself to freezing or canning, and there are many vegetables just like it. Carrots, however, can be successfully frozen or canned. But even though it is possible, who wants to do it! Canning is a time consuming and exacting process. If you make a mistake, your food could turn bad without your necessarily knowing it. It can be dangerous. With dehydration, however, since as the food is perfectly dry, it is completely safe from spoilage. What about the issue of space? Once dried, you can fit a 25 lb bag of onions into a 1 gallon jar once dried. That's just one jar and 4 inches of shelf space! Compare that to canning 25 lbs of anything!

NUTRITION

What a difference dehydrating makes. Canning requires boiling intentionally to destroy microbial life. In the process it also destroys vital enzymes and nutrients. Freezing, though much less destructive, still alters the structure of the many

nutrients and of fiber. Dehydration, however, gently evaporates the moisture content of the food that's all. It is the least destructive method of preservation. In fact, in some respects it is even healthier than the food it replaces because dried food is concentrated giving it a higher nutrient density than most foods.

TASTE AND TEXTURE

Sugars are concentrated too. In fact, dried fruits are so sweet, they make a natural candy. The richness of flavors and aroma that comes out of these foods is amazing. The taste of home dried foods is even better than those that are commercially prepared. The difference is because the drying temperature. Home equipment is much more gentle using temperatures between 95 and 145 degrees F. Commercial equipment dries at much higher temperatures and actually produces a partial baking effect which destroys nutrients and diminishes taste. Compare for yourself. You can taste the difference.

A NEW CUISINE

No kidding! Drying foods is a lot more than just a means for preservation. It is a way of introducing new foods into your diet.

Banana Leather

Sun Dried Tomatoes

Cashew Yoghurt Chips

Sunflower Parmesan Cheese

Radish Pepper

Zucchini Chips

Wheat Nuts

Dried foods also means a lot more than dates, figs, raisins, apples, pears, pineapple, papaya, etc. Yes, you can buy all these foods commercially even though they taste better dried at home, but there is a whole world of other foods you can create that are not available anywhere. And then there is the economic incentive. Dried tomatoes are an expensive delicacy selling for \$9.00+ lb, but not when you do them at home. Last summer, I bought a crate of tomatoes that the farmer said were overripe. I got them for a song and now I have a full winter's supply at a price and quality that are impossible to match.

I also make zucchini and sweet potato "chips" which come out brittle and are a great substitute for potato and corn chips. Onions form rings with terrific flavor and without the hard to digest fried oils. Sunflower "cheese" is a non dairy cheese made from sunflower "milk" which is slowly aged and dried in the dehydrator. Sprouts such as alfalfa, radish, cabbage, can be dried and powdered making zesty condiment. Sprouted wheat dries into brittle snacks with a nutty flavor. Fruits make wonderful fruit leathers. Just blend bananas, apples, pears or your favorite fruit and pour the puree onto the non porous dehydrator sheet. A leather or fruit jerky is created, mmm.

THE MACHINE

Unfortunately, the sun isn't what it used to be and most of us do not have hot sun all year round. Proper dehydration would require sunshine all day. A cloudy day, high humidity, lack of wind, insects, can all sabotage an effort to dry food outdoors. Indoor drying is more reliable. Dehydrators work by removing moisture through a system of air circulation and exchange along with warm temperatures. They differ from ovens in that they do not bake or cook the food. They really are extractors of moisture. Trays provide the platform for the food and the number of trays or total square footage of drying area has a lot to do with the price. Prices range from \$100 to \$350 depending also on whether the chasis is steel or plastic. The majority of the models are plastic and they are also the most economical. Purists don't fret. The plastic does not contaminate the food. Temperatures in a dehydrator are equivalent to a hot summer's day and are completely adjustable.

You can save money by purchasing fewer trays. It is always good to start out modestly and expand as you recognize your needs. Some models allow you build trays as you go. If you have a garden and it is full of dill, parsley, zucchini and tomatoes, you'll want more drying space. Drying takes time and if you are up to your elbows in sliced bananas, you'll want to load the entire lot into the dehydrator rather than deal with it again and again. That is why extra trays come in handy.

HOW MUCH TIME?

Most things dry in 6 to 15 hours. Two factors determine how fast a food will dry:

- 1) The moisture content of the food.
- 2) The thickness of the slices.

Compare a zucchini to a tomato. Tomatoes are loaded with water while a zucchini is relatively dry. Zucchini's may take 7 hours to dry but a tomato could take 15. On the other hand, both vegetables can dry in as little as 6 hours if you slice them thinly enough. A 1/8 inch slice can dry 8 hours faster than a 1/2 inch slice no matter what the fruit or vegetable. Thin slices tend to be brittle while thick slices have a more leathery texture. You also have the option of drying the fruit only 90% of the way. This provides yet a different taste and texture but must be refrigerated. Ordinarily, no refrigeration is necessary if the foods are kept perfectly dry. Cool temperatures are preferable and containers should be either tightly sealed plastic bags or jars with rubber seals inside the lids.

Some machines have timer devices which turn the dehydrator off at a predicted hour, but they add \$40 to the price and, in my opinion, are a luxury because one never knows exactly how long drying is going to take anyway. And why worry? You can never damage your food by letting it get too dry. Whenever you come home, there will be new surprises waiting for you in your dehydrator. So discover dehydration. It's healthy fun.

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