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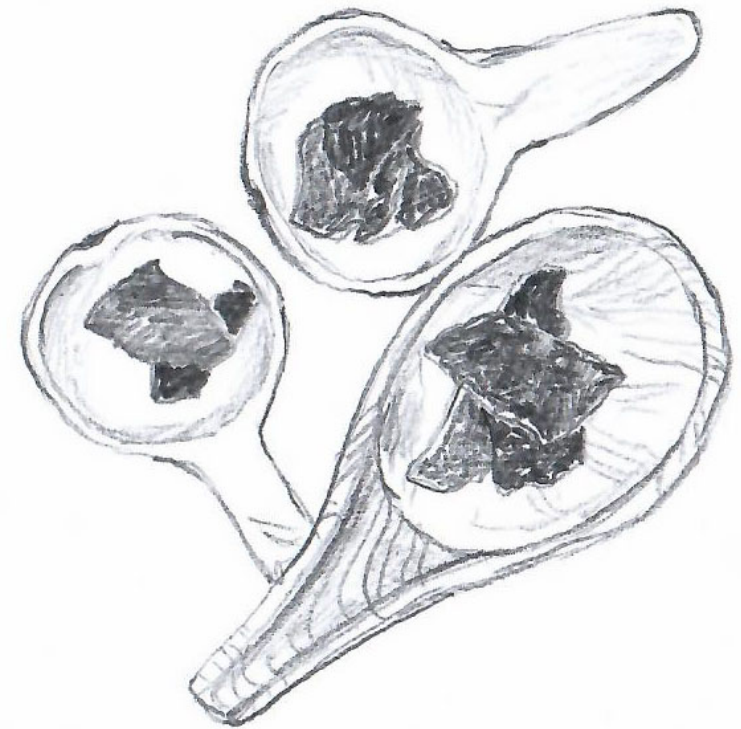
Please feel free to copy and share this booklet widely! Or, see the PDF/printable version available from our website:

www.dehydrationnations.com

Dehydration Nations is a grassroots, indigenous-led project that seeks to share the traditional skill of food dehydration, making connections between communities and working toward facilitating a network of trade in dehydrated foods between all nations.

Join our Facebook group: Dehydration Nations

This knowledge-sharing project was made possible by the Community Futures Manitoba Indigenous Business Development Program and by the leadership, vision and teachings of Audrey Logan. Zine written by Anna Sigrithur and Audrey Logan and illustrated by Anna Sigrithur. Produced by whole team at Dehydration Nations: Laura Tyler, Audrey Logan and Anna Sigrithur.



Out to Dry

An Urban Bushwoman's Guide
to the Traditional Art and Science of Food Dehydration

Audrey Logan

with Dehydration Nations

Dehydration is a Natural Preservation Art: The Lesson of the Squirrel

In the time of the great learning when the plants and animals were teaching the humans how to live with nature, each had a gift to give them: the great Bear taught about medicines and even the Squirrel had a lesson to teach them. This is that lesson.

Since during the snow time, fresh foods were not to be found, even when the humans traveled to warm places, but when the ice came they needed to store foods that were easy to carry and would not go bad. The squirrel showed the way to dry the foods by making it into smaller pieces and drying the pieces in the sun up on branches. The humans saw how the items dried and would not go bad, up in the branches where the wind blew and the sun cleaned the goods well.

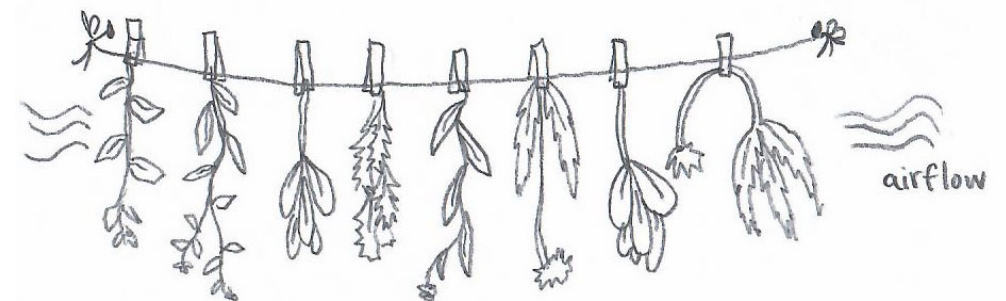


These items can still be found along branches today as squirrel still dries their goods to store for winter in their nests. Following these teachings the peoples were able to preserve their foods for trade and turned into many foods and flours for winter use. Water ceremony was done when rehydrating the foods, as water returned life to the dried goods so many could be fed.

These goods can still be found in caches across Turtle Island in bogs and in-ground graineries as well buried well into the earth as pemmican. These tools for storage and food preservation can be revitalized for future food security using old knowledge with new tools. - Audrey Logan

Now you are a Food Dehydrator, too!

We hope you will use this wisdom and add to it your own, enjoying many delicious adventures as you do, and help make *A Dehydration Station in Every Nation!*



Dehydration Stations in Every Nation!

As we know from the Lesson of the Squirrel, food dehydration is a naturally occurring process and so has been used by people around the world for thousands of years to preserve foods and make seasonings. Here are some examples of peoples from around the world and how they are also *Dehydration Nations!*

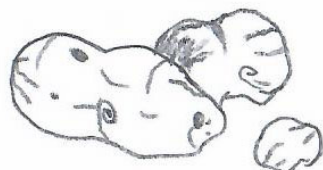
Kashk is a dehydrated sour milk, made by forming the curds into moulds and letting it dry. Kashk is found Lebanese, Palestinian, Egyptian, Kurdish, Iranian, and Central Asian cuisine.



Black lime is a seasoning created by boiling limes in salt water and then sun drying them until their insides turn black and hard, before being ground into a powder. It is used in many Middle Eastern dishes.



Chuño is a freeze-dried, preserved potato product traditionally made in many South American communities such as the Quechua and Aymara of Bolivia and Peru.



Klippfisk is codfish which has been preserved by air drying after salting, and is traditionally made in Norway, and the Faroe Islands. It is beloved by Portugal too, who buys it by the bushel to make their famous dish, Bacalao!



About storyteller and knowledge sharer, Audrey Logan



Audrey Logan is a Nehiyaw (Cree)/Métis woman from Northern Alberta, then a global traveller, now living in urban Winnipeg, Manitoba. She is a longtime community gardener and traditional foods educator, and you can find her in the garden in almost any weather, with her brightly coloured shawl and a pitchfork made of deer antlers. Food dehydration came into Audrey's life at a time when she was suffering from extreme health issues. As a person living with permanent disabilities stemming from childhood abuse (Audrey is a 60's Scoop survivor), as well as living on the meagre disability assistance provided by the provincial government, she had fewer resources than many do when it came to dealing with her health:

"I'm laying in bed at 300-some pounds thinking how am I going to make this better, when I can't afford the food that's going to make me better? Doctor said i can only have this and this, but i can't afford this and this. But I think about my auntie and my kookum, and they didn't have all the fancy materials, all the way up there in the bush, how did they do it? I'm sitting here in the middle of everywhere, food dripping from the trees. What's my excuse?"

Audrey's kookum and auntie were tough Cree bush women who lived up near Fort McMurray, AB, and lived off the land while also working respectively as a camp cook for the mining companies and a professional trapper. When she reconnected to her birth family in her twenties, Audrey spent a good amount of time with her Auntie in the bush that helped awaken the blood knowledge within her.



Reclaiming Blood Knowledge

“But I want to make sure to claim the knowledge of what I learned on my own as being my own knowledge— to say that I didn’t have to live with her in the bush, to know all this stuff that’s already in my blood. So blood knowledge, as we now know, the DNA of our grandmothers are in us when our mothers carry us, and everyone has it, it’s in our DNA. So to acknowledge that instead of— she shared with me some stories, and I gathered some too, by following the old trade route trails unknowingly.”

“We have a lot of young kids, they have it in their genes, their blood, but if they don’t acknowledge it and if they think that they can’t get it because they haven’t gotten it through their ancestors that they could never meet because of a system of separation— that would be wrong. But they can actually hear their ancestors who are there with them, their voices— if they learn to listen. There are times when auntie speaks, when I hear her, and i’m like ‘whoah!’ And when I was younger that was called crazy. But now we know it’s not craziness, it’s connection.”

Storing Dehydrated Foods

So, now that you’ve got all these fantastic dehydrated foods, how do you store them? Well, it’s rather easy. The only trick is to keep them pest-free and dry— i.e., not let too much humidity back in. Here’s how Audrey does it:

- Store in airtight containers that are insect and mouse-proof!
- Line your containers with a brown paper bag (not newspaper since the ink isn’t great for flavour), so that the bag can provide a buffer against moisture.
- Keep out of direct sunlight and heat— either in a metal, ceramic or wooden container, or if in a glass jar, keep in a darker place in your home.
- For fruit leathers, roll up with pieces of wax or parchment paper between so they don’t stick together.

Here’s a picture of Audrey’s kitchen, with all her dehydrated foods in jars on the shelf for easy access, her dehydrator, and slow cooker— and no refrigerator!



Dehydrated Seasonings

Once you start dehydrating, you'll notice how the flavour concentrates and sometimes changes subtly in the foods you dry. The potency, and the long shelf life of dried vegetables and herbs makes them a great addition to your spice cupboard.

If you plan to get into dehydrating and making your own seasonings, it may be helpful to get an inexpensive coffee grinder and use it just for grinding up your flavour seasonings!

tips

Dehydrate and grind onions and garlic for flavourful home made onion or garlic powders

Dehydrate red bell peppers and grind them up to make a bright, sweet paprika that is amazing on eggs.

Try dehydrating and powdering cucumber and celery for a delicious additions to eggs, soups, popcorn seasonings. Dehydrated celery is a source of natural nitrites which can be used in curing meats and keeping brined meat pink.

Dehydrate meat or veggie stocks to make home made bouillon that you can rehydrate easily for soup any time.

Pemmican

Pemmican is a nutrient-dense travelling food traditionally made all over central Turtle Island from dehydrated meat, berries, and fats. There are many ways to make pemmican your way! (And check out the section on dehydration and food safety for information about dehydrating meats.)

"I use sunflower seeds as my fat since they are a native local seed, and are high in good fats. I like to grind them in a the blender until they become like a mealy consistency. Then I blend them with my shredded, dehydrated bison, sometimes some rendered bison tallow, and berries or chokecherries."

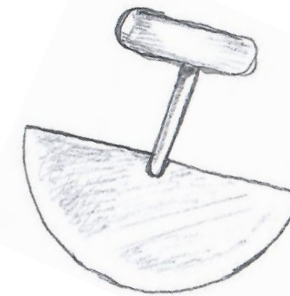
"Chokecherry pits have been found to be medicinal and having cancer-fighting properties, so I like to dehydrate them whole and grind the seeds up with the fruits so you get all the parts at once."

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Thinking of her auntie and her blood knowledge, Audrey finally told herself:

"I need to get my ass out of bed, get a pail and get picking. So that's how I got started on drying. My first dehydrator was some stackable racks from the dollar store, I used a flat stone to pound my meat, laid it on the rack in front of the south facing window and used my oscillating fan to go back and forth in front of it and by afternoon my meat was dry, and I'm going, if this is this easy, why not! Let's do some carrots, let's slice up this, slice up that, let's see how long that takes, let's see how hard this is going to be on my hand. So that's why I use the ulu, since I find the mandolin is hard with the repetition."

Audrey has several ulus (pictured) that she likes to use, since they're easier on her hand than some western kitchen tools. In fact, Audrey's kitchen looks very different from most kitchens- and it's because she cooks almost entirely with dehydrated foods and a combination of ergonomic modern tools and traditional ones.



"Dehydrating has become my lifestyle, changing your food means changing your lifestyle. I'm surrounded by this food system, but by changing my lifestyle which includes tools and changing the set up in the kitchen.

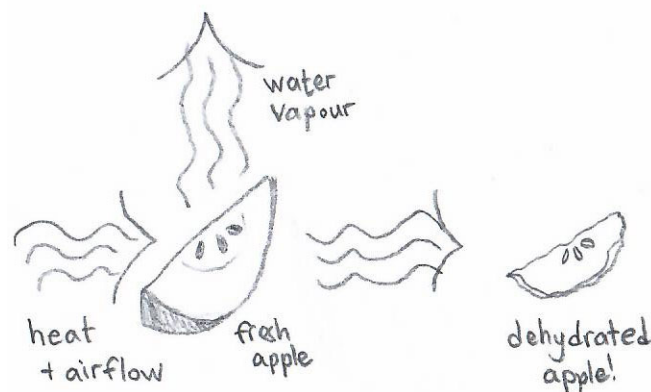
I don't use a fridge anymore. I don't have to store anything fresh in winter besides eggs, so i have a little bar fridge. I don't use a 220 volt stove or oven. That was the first thing that went in the apartment, I asked my landlord to move it so i could get my dehydrator in, and the table for my re-hydrators-- my slow cookers!"

We will come back to Audrey and her kitchen in a moment. But first, as introduced in the Squirrel's lesson, here is some practical information about the principles at work in food dehydration, and why they are so important and easy to use.

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Why Dehydrate?

While there are several reasons to dry food, the main reason is to preserve it. Covering virtually all surfaces of the world are microorganisms; bacteria and fungi. Some (but certainly not all) of these microorganisms cause our food to spoil and can be dangerous to our health. Most are harmless, while some microorganisms are actually beneficial and will make our food ferment, but that is another story. All microorganisms need two main things to grow: nutrients and water. If we take away either of these things, the microbes will not grow and multiply, and therefore our food will be safe from spoilage. Taking the water out of our food is one of the simplest, and low-energy ways to keep it safe from spoilage- and it is one that, hopefully with this simple guide and a little effort, you can get started today, and join us in the goal of having **A Dehydration Station in Every Nation!**



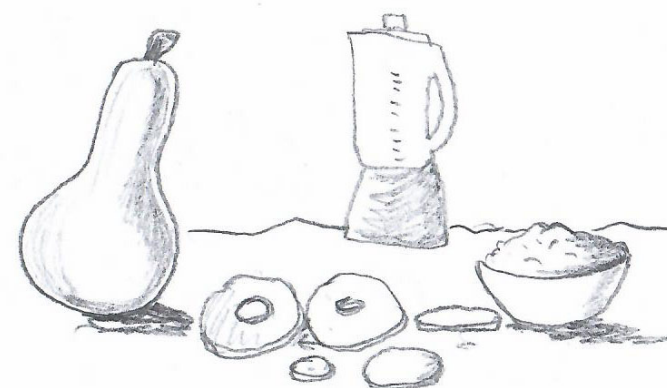
Here's how it works: Heat helps the water inside the object to begin to turn into vapour while the airflow blows that evaporated water away. For thousands of years, dehydration has been done outdoors using the sun and wind. Smoke is also frequently used as a way to help with dehydration while also changing and preserving the food in other sometimes very desirable ways.

It should be noted that dehydration **is not cooking!** Most dehydration happens at temperatures BELOW 140F, which is the temperature that most of the natural chemicals in our food change dramatically, making that food become *cooked*. Dehydrated foods are for the most part, technically raw. The exception to this is some dehydrated meats— but more about that in the food safety section

Squash Flour & Other Vegetable Flours

A long time ago, people on Turtle island didn't make bread out of wheat like we typically do today. Instead, they used a wide variety of other grains and vegetables to make flat breads, porridges and cakes— things like corn, quinoa, amaranth but also vegetables like squash!

Audrey picks squash from her garden that aren't quite ripe yet and dehydrates those to make squash flour to make all kinds of things. The reason that underripe squashes work better is that they have a higher quantity of a sticky starch in their flesh that hasn't yet turned to sugar. That helps make it bind together in a dough.



tips

Slice squash into rings or slices and dehydrate until very hard (not bendy).

Powder dehydrated squash in a high power blender or grind in a hand-crank food mill until it reaches the texture of corn meal

You can also powder other vegetables to make flours— dehydrated mushrooms make an earthy delicious flour that can be used in addition to cocoa powder in brownies and cakes. Yams and sweet potatoes work amazingly well too, as does any other starch-heavy vegetable.

Use as you would flour to mix with water, a bit of oil and salt and maybe some herbs or spices to make a stiff dough to roll out into crackers. Bake at 300F on a cookie sheet until hard and golden brown, or, dehydrate to keep the crackers raw.

Use squash flour mixed in with corn masa flour in tamales, arepas or pupusas for a nutty and delicious flavour and added vitamins.

Use squash flour as a breading on fish filets before baking or frying them— but be careful, since squash has sugar in it, you'll want to make sure they don't burn if you're frying fish at a hot temperature.

Veggies

Dehydrated Soup Mixes



Make any kind of ready-made almost-instant soup mix by taking whichever vegetables you like, grating or chopping them finely, and then dehydrating! Add seasonings and herbs to the mix, or even dried soup noodles, or wild rice or lentils. Pack in small bags or containers for a healthy, home made soup on the go!

To rehydrate, simply bring to a boil and cook until vegetables are tender and any other additions like rice, lentils or noodles are cooked.

- **Borscht**

Dehydrated beet, carrot, celery, onion, garlic, and dill fronds, plus salt, pepper.

- **Bison Stew**

Dehydrated onion, celery, carrot, mushroom, bison or beef, and dried bouillon, dried thyme, wild rice, plus salt and pepper if desired.

Dehydrated “Super Foods” for Smoothies etc!

Try dehydrating any greens or vegetables— like spinach, kale, broccoli, collards, cabbage, or even wild greens like plantains, purslane, curly dock, and wild mustard. Grind them up into powders to use in smoothies as your very own low cost “superfood” powders. But really, all good food is super food :)

Tea

One of the most simple dehydrated foods is medicinal tea. You can let medicinal plants air dry easily by hanging whole plants or branches in a breezy spot in your home, until dry and brittle.

A note on dehydrating potatoes, grains, and pulses:

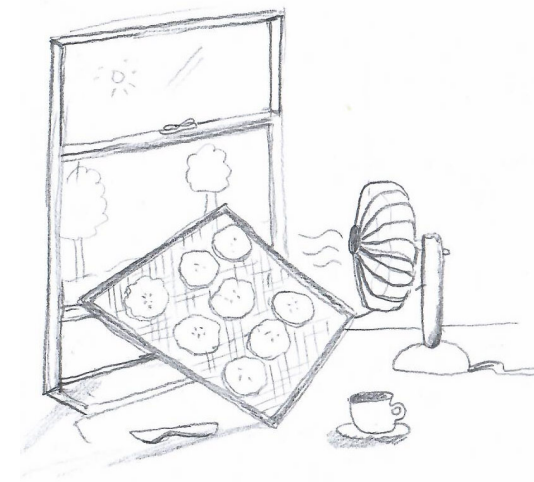
When dehydrating potatoes, or other starchy vegetables (sweet potato, taro, camas root), grains (quinoa, wild rice, etc) or pulses (beans, lentils etc), it is best to dehydrate AFTER they have been cooked. This will make them rehydrate and cook faster, almost instantly!

Try your own recipe— there are endless things to do with dehydrated vegetables. This is just a start!

A Note on Getting Started

Food dehydration doesn't need to be fancy, high-tech or expensive. Audrey got started by getting creative with thrifted items, and today uses a combination of methods to get her dehydrating done.

“Initially i thought, ok how much is this going to cost me, because I looked at the rack I had in my window and the fan i already owned, and the racks cost me fifty cents each. So I started hitting up the second hand stores.”



Second hand stores can supply you with almost everything you need to get started dehydrating (more about that in the next section). And if you do decide to get an electric food dehydrator, running it is a low-energy option. When we use canning or freezing to preserve our food, it takes a lot of special supplies or constant electricity. Dehydration, as the squirrel taught us, is a natural process. So at-home dehydration is simple: the only two basic elements you need for this are heat and air!

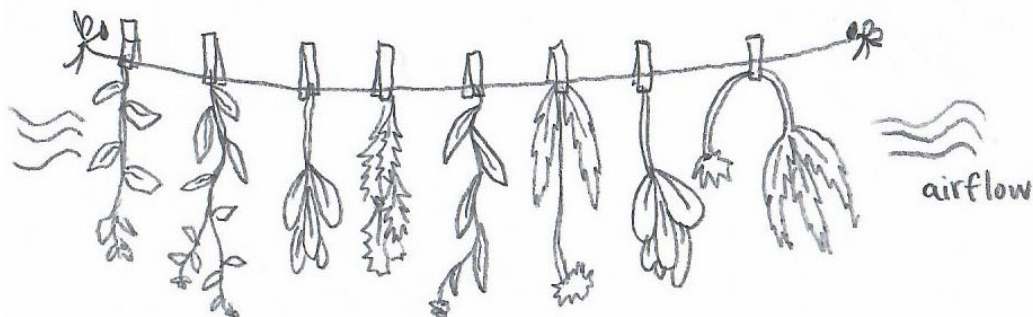
“Even a commercial dehydrator only takes \$1 per 24 hour use. For a buck I got my bouillon (concentrated meat broth) that will last me far longer than a dollar of pre-made bouillon powder from the store. No waste. So garlic powder, I have the same jar that i keep my garlic powder in for more than 10 years-- i don't have all these little bottles to toss in the recycling bin.”

So keep that in mind, and remember: dehydration is a naturally occurring process-- we are just here to help it help us.

Finding the Right Dehydrator for YOU!

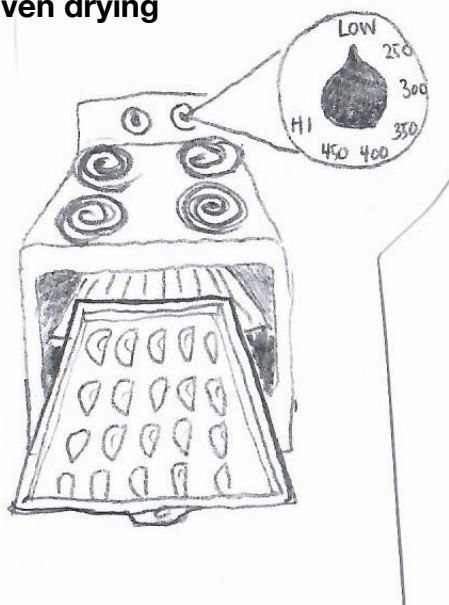
Food will usually dry out on its own, but simply leaving some foods out at room temperature can lead to spoilage before dehydration fully occurs. This is why we want to *speed along* the dehydration process with the addition of gentle heat and air flow. Anything that helps add heat and/or airflow is a dehydrator! Here are a few different options for you to consider:

1. Air Drying



Simply hang up thinner items like greens or medicinal herbs in a breezy location and let nature do its dehydrating work.

2. Oven drying



Turn your oven to its lowest setting and put a sheet of food inside to dry.

While this isn't the most ideal dehydrator for delicate items or very sugary things (they may burn over time), it is a good option for jerky and dried vegetables

Recipes!

Now that you see how it's done, here are some recipes to whet your appetite!

Fruits

Fruit Snacks

Cut your favourite fruit — maybe that's apples, pears, mango, melon, berries, the options are endless— into bite sized pieces and dehydrate whatever way you like until they are chewy and leathery.

Fruit roll ups/ leather

Try taking any kind of fruit and pureeing it in a food processor until it makes a nice smooth paste. Spread it on a non-stick sheet (you can get silicone sheets for your dehydrator, or use parchment paper) and place in the dehydrator. When they're done, the sheet will be glossy and leathery, and you can still bend it. Roll up and store in a jar for snacking!

Dehydrator Jam

Go for a low-sugar, all natural jam by taking any of your dehydrated fruits, adding a bit of boiling water, and then blending it or mashing with a fork. Enjoy on toast or in a dessert.

Fruit "Punch"

Take the same idea as the jam, but add more water to your fruits as you rehydrate them, and blend until smooth using a blender. Chill and serve for a refreshing drink. You can try add herbal tea instead of plain water for a more medicinal cordial. Try adding some honey for sweetness!



Rehydration and Healing

You can take rehydration as an opportunity to add in more flavours and even medicines, and to reconnect with water in a personal way.

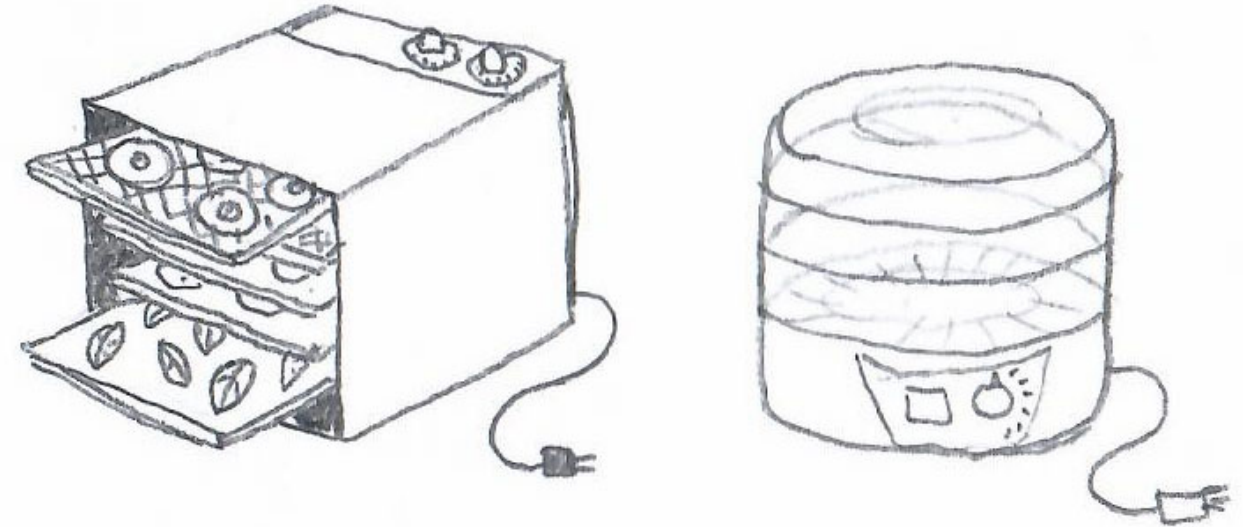
"I started infusing my rehydrated foods with different teas, at that time I was growing teas- the bergamot bee balm gives a spicy, almost vanilla flavour, the sweetgrass tea- that was delicious! You can experiment with these different teas to your own palette. I like spicy tastes, but I don't like the afterburn that chilis give, so these herbs give me the spicy on my tongue but not elsewhere. I like infusing things any kind of fruit, even meat-- i did some deer ribs with labrador tea-- or even chicken with cloves, or cloves into apple sauce to make the apple fruit roll up.

"When I rehydrate, it is my own personal water ceremony. It doesn't have to be fancy, I just spend time putting good intention and thoughts into the water. Scientists have proven that water has memory— that it stores emotions, so I try to set intentions with that water I am rehydrating back into my foods. Anyway a person wants to connect with that water, give it energy, is their own water ceremony."



3. Electric Dehydrators

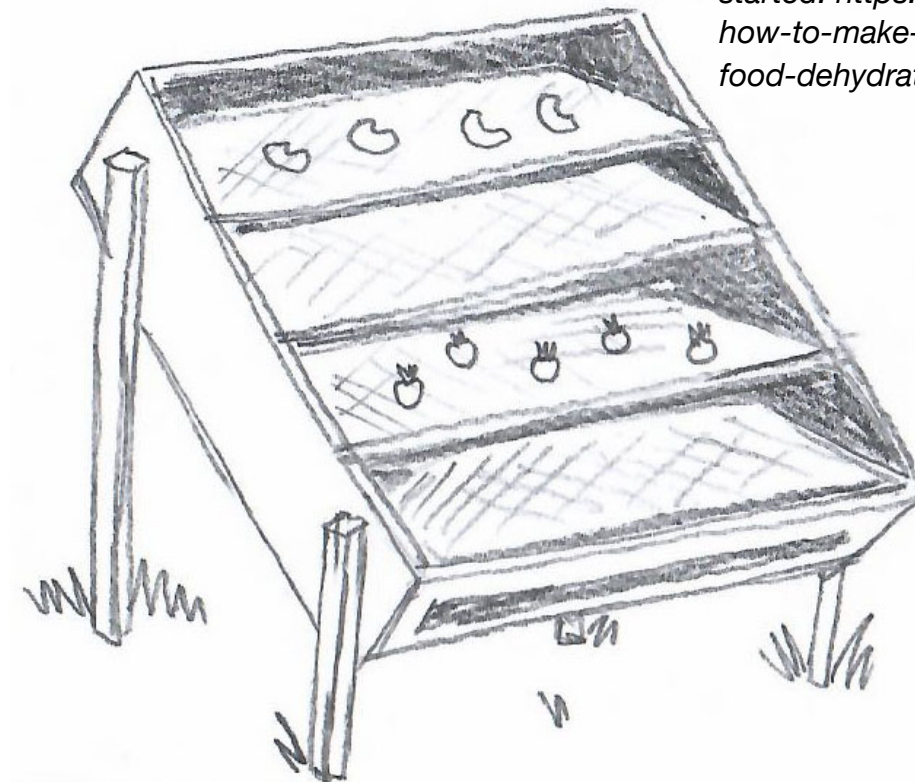
There are many kinds of electric dehydrators to choose from. Look at your local hardware or thrift store, or you can always buy one online.



4. Solar Dehydrator

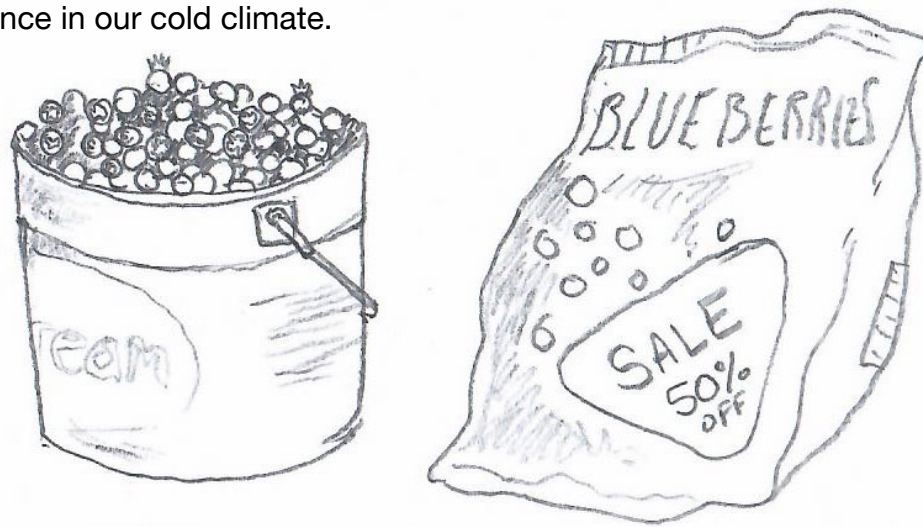
There are many ways to build a solar dehydrator!

This is a good link to get you started: <https://offgridworld.com/how-to-make-a-solar-powered-food-dehydrator/>



Harvesting and Sourcing Foods

Audrey lives predominantly off of dehydrated foods year-round, but she spends only certain times of the year doing the dehydrating— during the short but plentiful times of abundance in our cold climate.



“The work is mostly when the produce is coming out of the ground. When it is, you do have a certain amount of time to get them chopped up. July August September October those are the months when I’m busy processing. Whatever you get extra over the course of the week, dehydrate it. But then for the rest of the year (winter) when things aren’t fresh, you don’t have to do any prep!”

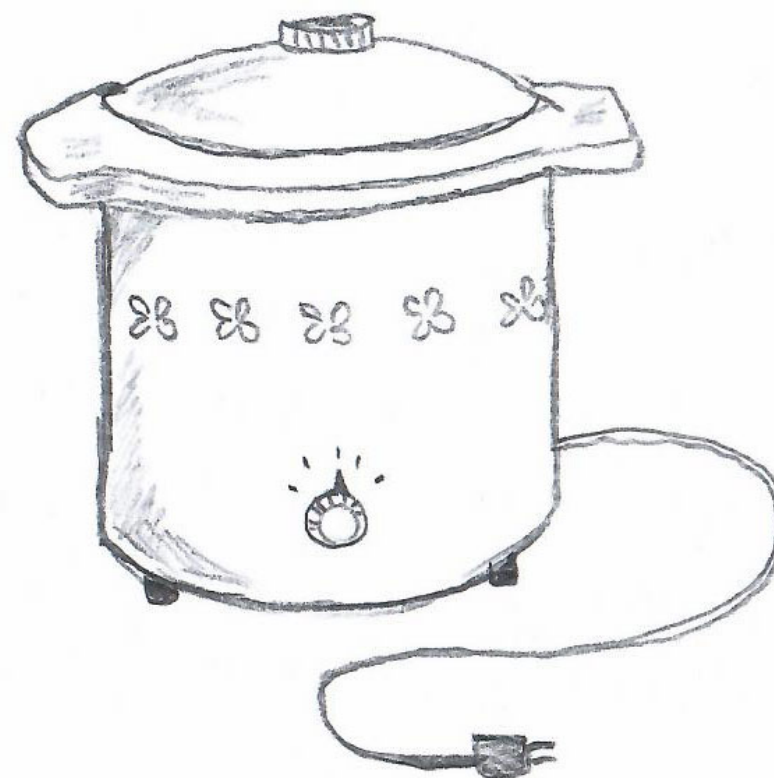
Because of this, she eats good locally grown produce all winter, some of which she grows herself in her permaculture garden. But she also dehydrates when she comes across large quantities of commercial foods- often discounted produce that is soon to go bad.

“One time I was given a bunch of bananas, so I peeled them and put them in the freezer in baggies and when they thawed, all the golden juice separated from the bulk and I could tip that off and then dehydrate the pulp left behind, they’d still be chewy, but not as wet and not take as long to dehydrate! So it’s removing a percentage of the juice, which then I dehydrated by itself anyway, and it looked clear like golden glass!”

Slow Cookers: The Dehydrator’s Best Friend

“When i look at a slow cooker, i look at it as being equivalent to historical pots that were cone shaped, snuggled into the coals just as they did thousands of years ago. They were hot pots, filled with vegetation and foods, that could be kept on the stove-- enough of a temperature to keep it from going bad, but not hot enough to make it go to mush.”

“So i have quite a few slow cookers now, so there are times when I want to make a bone broth and i have access to turkey bones which i have access to from a community dinner-- and they have clippings of all their vegetables which i then use to also make my vegetable stock from winter. Because I do it in the slow cooker, i can also dehydrate it some, to make a bouillon, meat broth, vegetable broth, bone broth.”



A Note About

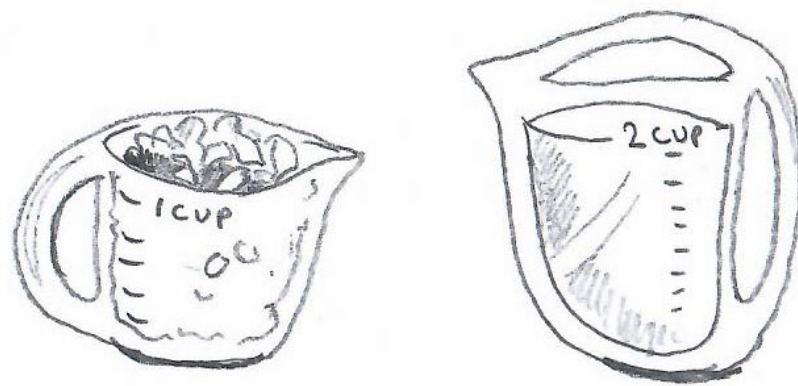
“You’re going to have to change your recipes! With this type of food, you don’t have to use the same amount because the concentration is so high. Enough dried mixed vegetables that can fit into the palm of your hand can sometimes be enough to fill a whole 2 gallon slow cooker.”

Rehydration 101

While many dehydrated foods make great snacks to nibble on dry, the majority of Audrey's dehydrated foods eventually get rehydrated and used in her cooking and we hope you will try the same. Depending on what you plan to make, there are different ways of getting rehydration right. The following pages provide some tips to getting started.

How much water should I use to rehydrate?

As a rule of thumb, the amount of water required to rehydrate something is approximately 2x the amount of dried food. So for 1 cup dried carrots, you'd use about 2 cups water to rehydrate them back to their original size.



Straight into a soup!

- Add dehydrated foods straight into a pot of soup or stew and they will rehydrate as the stew cooks! Remember, they will absorb liquid from the soup so you may have to add in some more to balance things out.

Rehydrate the food on its own

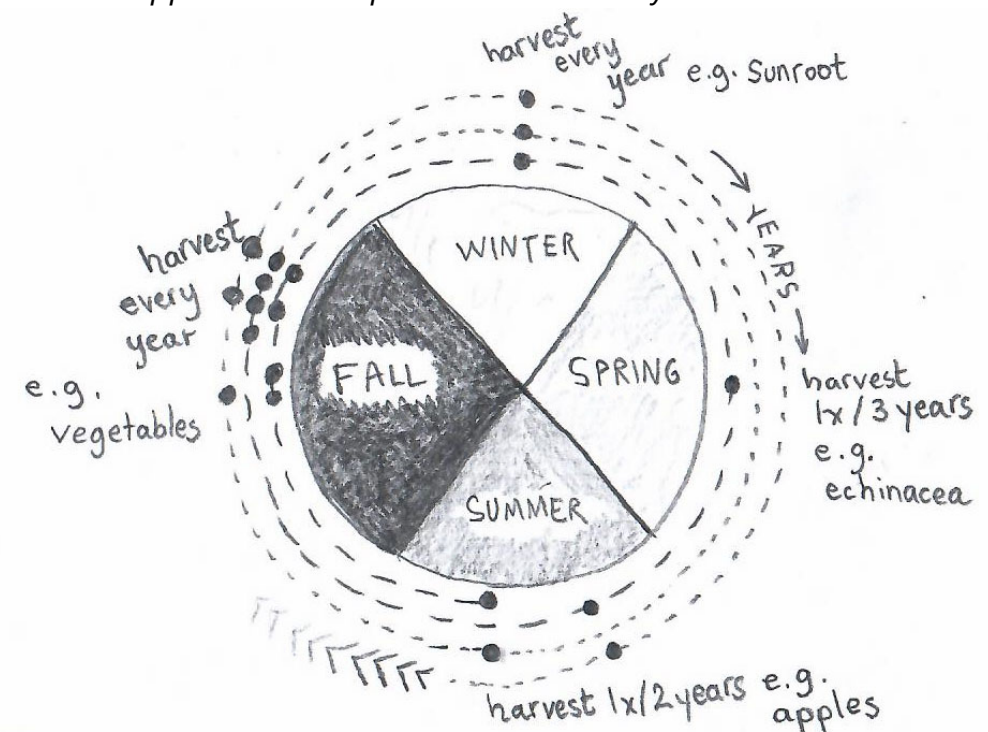
- Cover dried food with cold water and keep covered for 1 hour and up to about 8 (in the fridge) until it is plump and soft but not mushy.
- Put your dried food in a bowl, add boiling water, cover and sit 20-30 mins. Food should again be plump and soft but not mushy.

Rhythms of Abundance

Preserving food can help to tune you into cycles and seasons of abundance in the world around you. This may be obvious but it's worth saying again: Dehydration is a food preservation tool, and usually **we preserve foods when we have an abundance that we want to hold onto**. It would not make sense to dehydrate when you buy a pint of berries from the grocery store— dehydration is for when you pick 10 litres of blueberries, or even when you find a lot of blueberries on sale at the store because they will soon spoil!

Audrey observes the rhythms of production in plants, and the rhythms in her own usage to figure out how best to balance between having enough and not over-harvesting. In this way, she is observant of the rhythms of abundance.

"I like doing things in periodic chunks, so maybe you only need to do certain medicine plants every three years! We live a sedentary lifestyle, we don't need to move around as much. You can store larger amounts of things. All plants produce in cycles. Trying to expect a plant to produce for you out of cycle is unfair. So having trades with other people allows for those kinds of resting periods to be staggered. Opportunity to do things in a community way: harvest is abundant. One apple tree produces more apples than one person can eat in a year."



Abundance and Trade

One of the traditional purposes of dehydrated foods was being used for trade, since they kept for a long time and were light enough to carry over distance. If you had extra amounts of something, you could trade it for something you don't have a lot of!

Why not use this logic today, with friends or other communities and bring back the traditional trade routes? **Join our facebook group** (information on back of zine) to see other people who are dehydrating, and start a trade with them!

The Garden Trapline

Auntie Katie was a professional trapper with a fur trapline up in Northern Alberta. But she also showed Audrey her “garden trapline”- places in the forest where she had spent time with the plants, cultivating and nurturing berries, vegetables and medicines. In that way, abundance was distributed along the paths she often walked, and the different spots would bloom and could be harvested at different times. At the beginning of her healing journey, Audrey started doing the same thing in an urban environment.

“A lot of times in the beginning what I was doing was in my health walks, in my community, I started looking at people’s trees and bushes and noticed there was a lot of unwanted or unused fruits. There were apple, cherry, red currants, black currants, grapes, plums, pears. Also initially Winnipeg Harvest (a local food bank) was tossing away some fruits -- so I could glean extras from that too. It’s all about where you look!”

“With gathering that fruit, I did the same with extras of all the other things people have-- this woman had too much of the herb called savoury and asked if I wanted some, I said heck ya! I don’t know what you want to call it, string theory or god or whatever, but one thing leads to another. And next thing you know you’re given four cases of cranberries and I’m like, heck let’s dry them all!”

Dehydrating Meat and Eggs

Dehydrated meat is a great snack on its own, blended into pemmican, or added into soups and stews. But you must take extra precautions in order to make sure that dangerous bacteria like e. coli and salmonella don't grow on your meat, as the warm moist conditions of a dehydrator can be the perfect place for these dangerous microbes, commonly found on meat, to grow.

To avoid this, the USDA advises:

- Cook meat to an internal temperature of 160F (or 165F for poultry) before dehydrating
- Blanch fish for 1 min in a pot of boiling water before putting in dehydrator.
- Cook (scramble) eggs first

However: this is not necessarily the traditional way of dehydrating meat in many cultures, particularly here on Turtle Island. Meats have been safely dried for millennia using nothing but sun and wind and the expertise of the people to know how to prepare these foods safely.

If you want to dry your meat from raw, we recommend:

- Use fresh meat from a small scale farm, or fresh wild game or fish. Chicken and poultry should always be cooked first because of the risk of salmonella.
- Cut your meat into small pieces so they dehydrate quickly and do not spoil. Salt your meat briefly if you can. If you want to marinate your meat ahead of time, keep it cold while you are marinating it.
- When dehydrating, make sure there is plenty of airflow and ventilation, and dehydrate at as hot a temperature as you can-- 140 to 160F. (160F provides a kind of dehydration/ cooking that is typically used in jerky making). Cooler temperatures and longer drying times allow more opportunity for the meat to go bad. If you are ever not sure about whether something is safe, do not risk it!
- Smoking is another form of dehydration— try smoking your meat if you have the space and materials! Smoke adds flavour and keeps bacteria away.

Dehydration and Food Safety

When you prepare any food for dehydration, follow the same hygiene precautions that you would when cooking-- clean hands, clean surfaces, clean utensils.

Then, if you recall the two things that microbes need to survive, they are nutrients and water. We need to make sure that we take out enough water from the food to keep it from spoiling and be truly shelf-stable.

Properly dried foods can store for years, even decades, at room temperature.

How do I know if it's dehydrated enough?

Because the time food takes to dehydrate is so variable (depending on the humidity of your climate, the size of your pieces, and the kind of dehydrating set up you have) it isn't very helpful to tell you how long it will take for your food to dry. That is something you will figure out as you go along. What is more helpful is to know first what temperature it is best to dry at for different items, and what to look for to know it is finished drying.

Here is a basic table to help you on your way.

Food	Drying Temperature	When properly dehydrated, it will feel:
herbs	90-100F	Brittle and crumble when rubbed between fingers
fruits	125-130F	Tough and pliable, no moisture can be squeezed out. Fruit leather should separate easily from tray/ sheet.
vegetables	125-135F	Should be leathery or brittle. Leathery vegetables should be pliable and spring back if folded.
grains, beans, legumes	135F	Should shatter if hit with a hammer
meats	140-160F	Hard, dark and fibrous, and should form sharp points when broken.
eggs, cooked	130F	Should be hard and shatter if hit with a hammer.

The garden trapline provides-- whether it's neglected fruit trees, overgrown medicinal plants in someone's yard in a city, food banks, or friends and community who have extra harvests to share. Often Audrey will pick someone's trees, dehydrate the lot and give back some to the person whose yard the tree grew on. In that way, Audrey has used dehydration and her foraging trapline as a way of building up her own health, and as well her community and relationships.

What could you find along your very own garden trapline?



important tip: always try to ask someone if the plant you are harvesting is free to take, and whether pesticides have been sprayed in the area or whether the soil in your area is contaminated. Your local government should be able to answer such questions if the people around you cannot.

Now Let's Get Dehydrating!

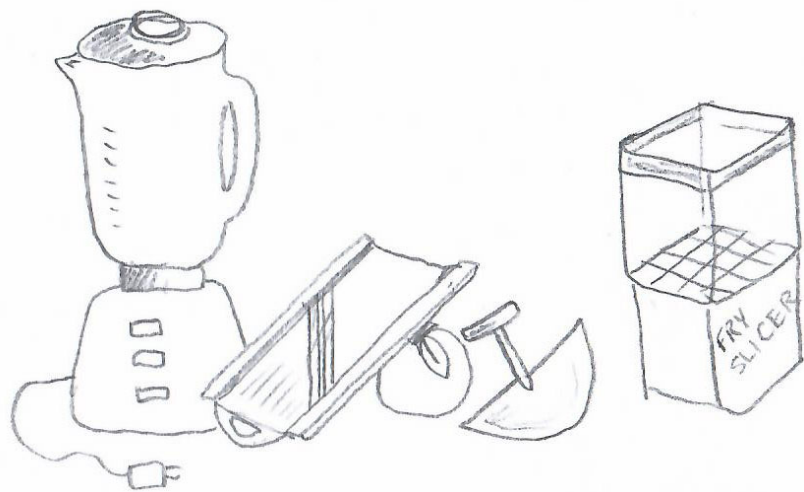
Was that enough information for you yet? Now let's get down to the nitty gritty.

During dehydration, the only way that the water can evaporate out of a food item from its surface. Therefore, the smaller the pieces, the faster the water can escape from it. This is why we typically do not want to dehydrate large food items whole but instead to slice them up- slicing creates more surface area. This is common sense: a whole carrot will dry much more slowly than carrot slices would!

Keeping this in mind, remember that when things dehydrate, they shrink. If you slice an apple into 1" slices, after they're dehydrated they might end up being only ¼" thick! So consider the balance of drying time and how thick you'd like your dehydrated pieces to end up. You'll get the hang of it as you go.

Tools

You may want to try your hand at some various tools to make slicing easier and help keep the thickness of slices more consistent— consistency means your batch will dry at the same rate. Pictured: blender, mandoline, ulu, french fry cutter.



You might also want to find some silicone baking sheets for dehydrating fruit leathers, or other more liquidy foods. They can be found online, at dollar stores or the baking section of housewares stores.

Food Processing Tips

- Slice zucchinis or squash into long thin slices that can be used later as gluten-free lasagna noodles, or spiralize them into spaghetti.
- Slice apples and pears into rings or wedges and toss with lemon juice before dehydrating to stop from browning.
- Grate beets, carrots and other root vegetables before dehydrating to prep for easy addition to soups and stews later.
- Puree fruits and pour onto parchment paper or silicone sheet-lined trays to dehydrate into delicious sheets of no-sugar-added fruit leather.
- Dehydrate already-cooked grains, beans or tubers (potatoes, yams, etc) to make an 'instant' mix for camping or trips into the bush.
- Freeze berries or fruits before dehydrating to separate out some of the juice — which you can then keep to drink or use— and then the rest of the fruit will take less time to dry!
- Marinate strips of bison or wild game before dehydrating for use in making pemmican or energy bars (See Food Safety section).
- Blanching (briefly cooking in either boiling water or steam for about 30 seconds) your foods before you dehydrate them is helpful in that it kills most surface microorganisms, shortens both the drying and rehydration times, and keeps the food hold its colour and taste while it dehydrates. Blanching is not a necessary step, but try it and you may find it's worth the extra effort.