

*Excalibur*<sup>®</sup>  
NOURISH LIFE.



## *Dehydration Guide*

[www.drying123.com](http://www.drying123.com)



## INTRODUCTION

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Working on a simple premise, the Excalibur® Dehydrator removes water from food by a continuous circulation of thermostatically-controlled warm air. A variety of foods, from bright golden kernels of farm-fresh corn to rings of island-sweetened pineapple can be dehydrated. Produce, however, is not the only food commonly preserved in a food dryer! Slices of beef, chicken, fish or even venison can be marinated in a combination of sauces and spices and easily transformed into homemade jerky. A carton of yogurt spread over a sheet of Paraflexx™ or plastic wrap, dries, and becomes a vividly colored, taffy-like snack or fruit roll.

Operating cost for your Excalibur® Dehydrator is approximately 3 - 6 cents per hour. Using your dehydrator compared to traditional canning or freezing methods will prove to be well worth your initial low-cost investment.





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## SAFEGUARDS

**IMPORTANT SAFEGUARDS** When using electrical appliances, follow these basic safety precautions.

1. Read all instructions. **SAVE THESE INSTRUCTIONS.**
2. Do not touch hot surfaces.
3. To protect against electrical hazards do not immerse any part of the dehydrator, cord, or plug in water or other liquid.
4. Close supervision is necessary when any appliance is used near children. Keep the appliance and cord away from children under the age of 8 years old.
5. Unplug from outlet when not in use and before cleaning. Allow to cool before putting on or taking off parts.
6. Do not operate any appliance with a damaged cord or plug or after the appliance malfunctions, or has been damaged in any manner. Return appliance to the nearest authorized service facility for examination, repair, or adjustment.
7. The use of accessory attachments not recommended by the appliance manufacturer may cause hazards.
8. Sharp utensils should not be used inside the dehydrator.
9.  **CAUTION HOT SURFACE: THE DEHYDRATOR DOES GET HOT TO THE TOUCH.**
10. Do not let cord hang over the edge of the table or counter, or touch hot surfaces.
11. Do not use outdoors.
12. Do not place on or near a hot gas or electric burner, or in a heated oven.
13. Always plug cord into the wall outlet before turning machine on. To disconnect, turn switch to "off" before removing plug from wall outlet.
14. Do not use appliance for other than intended use.
15. Do not remove the ground pin on your power cord.
16. Avoid contacting moving parts.
17. Clean only sides and bottom, don't wipe any electrical components.
18. This appliance should not be used by children under 8 years old or persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge of using the

appliance. Only persons who properly understand the safe use of the appliance the hazards involved shall use this appliance. Children should only operate the appliance under close supervision and in no case should they play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

19. This appliances is not intended to be operated with an external timer or separate remote control system.
20.  The symbol on the product or its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for recycling of waste, electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste for recycling, please contact your local authority, or where you purchased your product.
21. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
22. This appliance is not intended to be operated by means of an external timer or separate remote-control system.

## OPERATING INSTRUCTIONS

# OPERATING INSTRUCTIONS

Operating your dehydrator is extremely simple! Begin by plugging in your unit. Then using both hands (to prevent tipping) carefully slide trays loaded with food into position. Once the trays are in place, replace door\* and set the thermostat to the correct temperature.

1. Place the dehydrator on a smooth, dry surface.
2. Load the trays with food. Place the door on machine.\*

3. Plug the power cord into standard 120 volt outlet or 220/240 volt outlet depending upon your voltage.
4. Set the thermostat to desired temperature.\*\*
5. When the food is dehydrated and dry, allow it to cool. Then package in an airtight food storage container.

## TIME & TEMPERATURE GUIDE

For your convenience, a colorful temperature guide has been affixed to your Excalibur® unit. Following this guide will ensure the use of proper temperatures when drying foods. If the heat is too high, the food may “case harden” which means it will feel dry on the outside; yet inside, it is still moist. If the heat is set too low, drying time and use of electricity is increased.

### Timing

Approximate amount of time need to dehydrate food is listed on pages x – x. However, drying times vary based on a few factors:

**Humidity:** Check your local weather service to determine the day’s humidity level. The closer the humidity level is to 100%, the longer it will take food to dry.

**Moisture Content:** The actual amount of water in the food you are drying is also a major consideration. Remember, water content of a fruit or vegetable can vary due to growing season, rainfall and environmental factors, as well as the ripeness of the food.

**Slicing:** The amount of water in the food can vary due to the growing season’s rainfall, environmental factors, and the ripeness of the food. This will effect drying times. If you wash produce before dehydrating, make sure you towel off excess water prior to drying.

<p>TEMPERATURE</p> 	<p><b>Temperature</b></p> <p>The thermostat range is 85° to 165° F.</p> <p>The 5 &amp; 9 tray units without a timer have the on-off switch in the thermostat. Turn counter-clockwise for off.</p> <p>Turn thermostat clockwise to desired temperature setting.</p>
	<p><b>Timer</b></p> <p>On timer units, the timer is the on/off switch.</p> <p>In order to select timed operation, turn knob to desired time setting. While timing, the knob will indicate remaining time.</p> <p>Consult the drying times pages 8-12 for timing information.</p>

### Cleaning

Wipe dehydrator with a damp cloth and warm, soapy water. Rinse well. Trays can be placed on top rack of dishwasher. Removable mesh inserts can be soaked in warm, soapy water. Wipe down with a damp sponge. Door can be cleaned using warm, soapy water. Wipe down with a damp sponge.



# PREPARATION



## Pre-treatment

Pretreating food isn't essential but may help maintain the food's color, nutrients and texture.



## Dipping

A treatment used to prevent fruits and vegetables from oxidizing. After using one of these treatments, blot off excess moisture with paper towels before placing food in dehydrator. Excess moisture extends drying time.

- **Sodium Bisulfite:** Available directly through Excalibur. It is the most effective and least expensive anti-oxidant. Use only food-safe grade. When mixed with water, this is the liquid form of sulfur. Before using, check with your physician regarding allergies.
- **Fruits:** Mix 1-1/2 tablespoons of Sodium Bisulfate in 1-gallon of water. Soak fruits slices for 5 minutes. Rinse.
- **Vegetables:** ecommended for steam blanching only. Also highly recommended for vegetables to be stored in excess of 3 months. Add 1 teaspoon of Sodium Bisulfate to each 1 cup of steam water and blanch.
- **Ascorbic Acid-Citric Acid Dip:** Available directly through Excalibur. Simple form of Vitamin C. Found in all citrus fruits. Soak prepared produce in a solution of 2 tablespoons of powder to 1 quart of water for 2 minutes.
- **Fruit Juice Dip:** A natural anti-oxidant. Stir 1 cup of citrus juice into 1 quart of lukewarm water. Soak prepared produce for 10 minutes. NOTE: Fruit juice is only 1/6 as effective as pure Ascorbic Acid and may add taste to your food.
- **Honey Dip:** A common treatment for dried fruits sold in the grocery store or in health food stores. This will make fruit considerably sweeter and add calories as well. Dissolve 1 cup of sugar in 3 cups of hot water. Cool mixture to lukewarm. Add 1 cup of honey. Dip fruits in small batches. Remove with slotted spoon and drain thoroughly before dehydrating.



## Blanching

A treatment using boiling water or steam. Also known as checking or crazing. Use on tough-skinned or fruits with a natural protective wax like graphs, plums, cranberries, etc. This method reduces drying time significantly. er.

- **Water Blanch:** Bring pot of water to a boil. Stir in food. Cover and let sit for approximately 3 minutes. Remove food. Place it in ice water to cool. Skins of fruit should be cracked so moisture can escape during drying process. Blot off excess moisture with paper towels before placing food in dehydrator. Excess moisture extends drying time.
- **Steam Blanching:** Using a steamer, fill the lower portion with 2 inches of water. Fill the upper, perforated section with food. Let water boil rapidly for 5 minutes. Remove food. Place it in ice water to cool. Blot off excess moisture with paper towels before placing food in dehydrator. Excess moisture extends drying time.
- **Electric Steamers:** Follow the directions provided with your steamer's operating manual for blanching fruits and vegetables..

## STORAGE & RECONSTITUTION

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The ideal temperature for food storage is 50° – 60°F / 10° – 16°C. Use containers safe from moisture and insects. Glass jars with tight lids, sealed bags, and vacuum-sealed bags are recommended. You can store bags in metal coffee cans or cookie tins.



### Reconstitution

Reconstituting foods adds yet another dimension to the versatility of daily food preparation. Properly dried food, rehydrate well. They will retain much of the aroma, flavor, minerals and vitamins. Here are some common reconstituting methods. It is important to not add salt, sugar or spiced during the first 5 minutes of reconstitution.

- **Electric Steamer:** Place food in a rice bowl and cover with liquid. Follow the directions provided with your steamer's operating manual for reconstituting fruits and vegetables.
- **Soaking:** Place dried food in a shallow pan. Cover with liquid. Allow 1 to 2 hours for rehydration process to occur.
- **Boiling Water:** Vegetables: Place 1 cup of dried vegetables in 1 cup of boiling water. Soak for 5 to 20 minutes. Fruits: Place 1 cup of dried fruit and 1 cup of boiling water into a pan. Let simmer until tender.
- **Cooking:** For vegetable sides, fruit toppings, or compotes: Use 1 part liquid to 1 part dried food. For food used in soufflés, pies and quick breads, add 2 parts of liquid to 3 parts of dried food. When cooking fruits, place into a saucepan with boiling water, turn heat to low. Simmer 1 to 15 minutes or until tender.



# FOOD DRYING GUIDE - FRUITS

Dry best at 135°F/57°C



Food	Preparation	Test	Time
Apples	Pare, core & cut into 1/4" slices or rings. May be sprinkled with cinnamon if desired.	Pliable	7-15 hours
Apricots	Wash, cut in half, slice and remove pit. Push in backs dry skin side down.	Pliable	20-28 hours
Bananas	Peel & cut into 1/8" slices.	Leathery or Crisp	6-10 hours
Berries	Leave whole. For wax skin berries pretreat by crazing.	Leathery	10-15 hours
Cherries	Remove stems & pits. Cut in half & place skin side down & sticky on tray. Will be like raisins, watch to prevent over drying.	Leathery & Sticky	13-21 hours
Cranberries	Same process as berries.	Pliable	10-12 hours
Figs	Wash, cut out blemishes, quarter & spread one layer deep, skin side down.	Pliable	22-30 hours
Grapes	Wash, remove stems & cut in half or leave whole, skin side down. Blanching will reduce drying time by 50%.	Pliable	22-30 hours
Nectarines	Wash, pit and peel. Cut into 3/8" slices, dry skin side down.	Pliable	8-16 hours
Peaches	Wash, pit and peel-if desired 1/4" slices.	Pliable	8-16 hours
Pears	Wash, remove core, peel 1/4" slices, or 1/4 the pear.	Pliable	8-16 hours
Persimmons	Wash, remove cap & peel 1/4" slices.	Leathery	11-19 hours
Pineapple	Peel, remove fibrous eyes and core. Cut into 1/4" slices or wedges.	Pliable	10-18 hours
Prune Plums	Wash, cut in half, remove pit and pop the back to expose more surface to the air.	Leathery	8-16 hours
Rhubarb	Wash, cut into 1" lengths.	Leathery	6-10 hours
Strawberries	Wash, cut off caps, slice 1/4" thick.	Leathery & Sticky	7-15 hours
Watermelon	Cut off rind, cut into wedges and remove seeds.	Pliable & Sticky	8-10 hours

\*for raw & living foods - use 105°F/the drying time is extended

# FOOD DRYING GUIDE - VEGETABLES

Dry Best At 125°F/52°C



Food	Preparation	Test	Time
Asparagus	Wash & cut into 1" pieces.	Brittle	5-6 hours
Beans, Greens or Wax	Wash, remove ends, cut 1" pieces or French style.	Brittle	8-12 hours
Beets	Remove all but 1/2" of the top scrub thoroughly, steam until tender. Cool, peel & cut 1/4" slice or 1/8" cubes.	Leathery	8-12 hours
Broccoli	Wash & trim, cut stems into 1/4" pieces. Dry florets whole.	Brittle	10 -14 hours
Cabbage	Wash, trim & cut into 1/8" strips.	Brittle	7-11 hours
Carrots	Wash, trim tops, peel if desired. Cut into 1/8" cubes or circles.	Leathery	6-10 hours
Celery	Wash thoroughly, separate stalks, cut into 1/4" strips.	Leathery	3-10 hours
Corn	Shuck corn, trim silk & steam until milk is set. Cut off from cob & spread on tray, stirring several times while drying.	Brittle	6-10 hours
Cucumber	Wash, slice 1/8" thick.	Leathery	4-8 hours
Eggplant	Wash, peel, slice 1/4" thick.	Leathery	4-8 hours
Greens	Wash thoroughly, trim, remove tough stems, spread over trays so leaves aren't matted together. For more even drying, stir several times.	Brittle	3-7 hours
Mushrooms	Brush off dirt or wipe with damp cloth, slice 3/8" slice from cap through stem ends. Spread in single layer on tray.	Leathery	3-7 hours
Okra	Wash, trim, slice 1/4" circles.	Leathery	4-8 hours
Onions	Remove root, top and skin, 1/4" slices, 1/8" rings or chop. Dry at 145°F/63°C.	Leathery	4-8 hours
Parsnips	Scrub, trim and peel if desired Cut into 3/8" slices.	Tough/ Brittle	7-11 hours
Peas	Shell peas, wash and steam only until they indent, rinse with cold water, blot dry with paper towel.	Brittle	4-8 hours
Peppers	Remove stem, seeds and white section. Wash and pat dry, chop or cut 1/4" strips or rings.	Leathery	4-8 hours
Popcorn	Leave kernels on cob until well dried, then remove from cob and dry until shriveled.	Shriveled	4-8 hours
Potatoes	Use new potatoes, wash and steam for 4-6 minutes. Cut French style, in 1/4" slices, 1/8" circles or grate.	Brittle or Leathery	6-14 hours

# FOOD DRYING GUIDE - VEGETABLES

Dry Best At 125°F/52°C



Food	Preparation	Test	Time
Pumpkin	Cut into pieces, remove all seeds. Bake or steam until tender, scrape pulp from skin and puree in a blender. Pour onto Paraflexx™ sheets or kitchen parchment paper. When dry cover with plastic wrap & roll.	Leathery	7-11 hours
Summer Squash	Wash, peel if desired, cut into 1/4" slices.	Leathery	10-14 hours
Tomatoes	Wash & remove stems, slice 1/4"; Circles & for cherry/grape tomatoes, slice in half, dry skin side down.	Leathery or Brittle	5-9 hours
Turnips	Peel & cut into 3/8" slices.	Brittle	8-12 hours
Winter Squash	Wash & cut into pieces, bake or steam until tender, puree pulp in blender, pour onto Paraflexx™ drying sheets.	Brittle	7-11 hours
Yams	Wash, steam until just tender, peel and cut into 1/4" slices.	Brittle	7-11 hours
Zucchini	Wash & cut into 1/4" slices or into 1/8" slices for chips.	Brittle	7-11 hours

\*for raw & living foods - use 105°F/the drying time is extended



## LEATHERS & FRUIT ROLLS

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Puree yogurt, leftover fruit or vegetables. Sweeten or spice. Spread 1 ½ to 2 cups of pureed produce thinly (about 1/8" thick at the center and ¼" on the edges) on Excalibur Paraflex sheets or wax paper and dehydrate at 135°F / 57°C for 4-6 hours. When leather has dried it will be a bit shiny and not-sticky. Let it cool and peel it from the tray. Roll and serve as a quick-energy, chewy snack. Strawberries and rhubarb or bananas and pineapple make great combinations.

### Fruit

Tart fruits (rhubarb and cranberries) require sweetening before drying. Add ¼ to ½ cup of honey or sugar to the fruit puree. Flavor apple leathers with cinnamon or nutmeg. Peanut and banana leathers can be made with 4 bananas and 1 cup of peanut butter. Be sure to refrigerate leather using nuts as the oil in nuts may shorten the leather's shelf life. Try adding coconut or chopped nuts to the leather for more taste and texture. Dehydrate at 135°F / 57°C for 4-6 hours.

### Yogurt

Yogurt when dried becomes a taffy-like snack. Make yogurt, add flavoring like strawberries or peppermint extract. Dry. Then cut the yogurt leather into 1/2" pieces. Re-dry for 1 hour to seal the edges. Dehydrate at 135°F / 57°C for 4-6 hours.

### Vegetables

Steam until tender, puree, and mix with herbs and spices. Tomato puree mixed with Italian herbs can be dried and later rehydrated for use as tomato past or sauce. Gazpacho leathers made from tomato, cucumber, onion, green pepper and herbs is a delicious, low calorie treat. Carrot leathers can be the base for cream soup. Dehydrate at 125°F / 52°C for 4-6 hours.



# JERKY

For jerky, pick lean cut of raw meat as free from fat as possible. The higher the fat content, the shorter the storage life of jerky. Cut in uniform pieces 1" wide, 3/8" thick and as long as you want. Once sliced, cut off all visible fat. Jerky cut with the grain will be chewy; cut across the grain will be very tender but more brittle. Season with Soy, Worcestershire, Tomato, or BBQ sauce; garlic, onion or curry powder; salt or pepper.

To preserve jerky better, apply dry or brine cure prior to dehydrating. Dry cures are salt and seasoning mixtures rubbed into the meat surfaces. Brine cures or marinades combine water with salt and seasoning. Meat is soaked in the brine cure until the salt is absorbed.

## The Process

Using dry cure, sprinkle evenly the curing mixture on both sides of meat strips. Layer the strips one of top of another in a container that is sealed. Using brine cure, layer the meat and pour cure over the top layers. Marinate for 6-12 hours in refrigerator. Turn the strips over a few times to ensure thorough curing.

## Dehydrating

Shake off any excess cure. Spread a single layer of meat strips on a dehydrator tray. Dry at 155°F-165°F /68°C for approximately 4-6 hours. Occasionally blot off fat droplets that appear on the surface. Always test jerky using a cool piece. Properly dried jerky, when bent, will crack but not break.

## Storage

For best flavor retention, package jerky in an air-tight container and store in a cool, dark, dry place. If beads of moisture form on the inside of the storage container, the jerky is not dried enough and could mold. Dry longer.

<b>Fish/Shellfish</b>	<b>% Fat</b>	<b>Fish/Shellfish</b>	<b>% Fat</b>
Catfish*	5.2	Rockfish	0.2
Cod	0.5	Salmon*	9.3
Croaker	2.5	Sea Bass	1.6
Flounder	1.4	Sea Herring	2.8
Greenland Turbot	3.5	Sea Trout	3.8
Grouper	1.0	Shark*	5.2
Haddock	0.5	Shrimp	1.6
Halibut	4.3	Smelt	2.0
Lake Trout*	11.1	Snapper	1.1
Mackeral*	9.9	Sole	1.4
Monkfish	1.5	Tuna*	5.1
Mullet*	6.0	Whitefish*	7.2
Ocean Perch	1.4	Whiting	1.3
Pollock	1.3	Yellow Perch	1.1
Rainbow Trout*	6.8		



# RAW & LIVING FOODS

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## What are Living Foods?

Raw foods or living foods are uncooked, free from animal products, easy to digest, rich in enzymes, and highly nutritious. As you bit into a raw fruit or vegetable, you are experiencing the full potential of vitamins, minerals and enzymes in one compact package. Raw foods are high in nutritional value because no nutrients have been lost by the heat of cooking. They are easier to digest because of the active enzymes, therefore your body doesn't have to work as hard to digest foods, which give you more energy. Dehydration is the best way to preserve the essence of raw fruits and vegetables

## Why Excalibur® is Superior for Living Foods

Excalibur uses the proper control of temperature and time. With the patented Parallex Horizontal-Airflow Drying System, patented Hyperwave Technology and the adjustable thermostat, you can control the temperature and Excalibur controls the airflow for fast and even drying. Air temperature fluctuates up to evaporate moisture from the surface of the food and fluctuates down to move moisture from the center of the food to the outside. This keeps the food temperature low enough to preserve the enzymes.

## Food Temperature vs. Air Temperature

During the dehydration process the food temperature is generally 20 to 30 degrees F cooler than the air temperature, due to the effects of evaporation. As the warm air blows across the food, moisture is evaporated from the food's surface, creating a cooling effect that keeps the food temperature cooler than the air temperature. Keep in mind that the dial settings represent air temperature, so the air temperature may be as much as 25 degrees higher.

## How to use your Dehydrator for Living Foods

To preserve living enzymes Hippocrates Health Institute recommends setting the dehydrator at the highest temperature for the first two or three hours, then turn it down to less than 120°F/49°C for the remaining time.



## OTHER DEHYDRATOR USES

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### Herbs and Spices

Create special seasonings and tea. It's simple. Trim off any dead or discolored plant parts. Wash in cool water. Blot with towel. Preheat dehydrator 95°F/35°C - 115°F/46°C. Line the tray with the provided mesh screens. Over the mesh screen, lay a solid Paraflexx® sheet. Load the herbs on top of the Paraflexx® sheet and put another polyscreen on top of the herbs to weigh down the herbs. Dry 2 to 4 hours. Time can vary greatly. If it takes longer than 4 hours, turn the temperature higher. Store in an airtight container.

### Nuts

Rich in necessary dietary fats and a concentrated source of protein. Dry in natural state or spiced. Spread nuts in a single layer. You may want to blanch nuts prior to dehydrating. Dry at 115°F/46°C - 125°F/52°C. Dry 8 to 12 hours. Store in an airtight container. Note: Nut meats may turn rancid if not refrigerated due to high oil content.

### Raising Bread

The perfect environment for raising bread exists right inside your dehydrator. Remove the A dehydrator is the perfect environment for raising bread. Preheat dehydrator at 115°F/46°C. Place a shallow pan of water on the bottom of the dehydrator. Insert a drying tray directly above the water and place the bowl of dough on the tray. Cover the dough with a cloth. Allow the dough 30 minutes to 1 hour of time to rise. Once it has risen, continue with preparation according to your recipe.

### Pasta

No need for separate pasta racks. Place strips of fresh pasta onto drying trays. Dry 2 to 4 hours at 135°F/57°C. Store in airtight containers.

### Recrisping

Recrisp crackers, chips, cookies or cereals by placing them on a drying tray and drying at 1 hour at 145°F/63°C.

### Yogurt

Easy to make! Add 1 cup of powdered milk to ½ gallon of low-fat milk. Scald for 2 seconds. Remove from heat and cool to 115°F/46°C. To the cooled milk, add 2 tablespoons of non-pasteurized plain yogurt. Pour into containers, cover and incubate in dehydrator at 115°F/46°C for 5 hours. Use a candy thermometer for best results. Do not open door while yogurt is incubating. When finished, refrigerate. Before serving, add fresh fruit if desired.



## OTHER DEHYDRATOR USES

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### Cheese

Make un-ripened cheese, such as cottage cheese. You'll need: 1 gallon of pasteurize milk, 4 tablespoons of unflavored yogurt, ½ cup fresh buttermilk, or ¼ tablet of rennet dissolved in ½ cup warm water.

Pour the milk into a crock, warm to room temperature about 72°F/22°C. Mix in yogurt, buttermilk or rennet. Cover crock with cheesecloth. Place in dehydrator at 95°F for 12 to 18 hours until clabbered (when the milk has separated to form thick, solid “curd” and the watery liquid “whey.”) Next, cut the curd into ½” sections using a long bladed knife. Here's how:

1. Hold knife vertically. Make straight up and down cuts across the curd.
2. Slant the knife and make diagonal slices down through the cheese following the cuts from step 1. Make the first cut at 45° angle, gradually straightening blade so last cut is nearly vertical.
3. Repeat step 2, only slant knife in the opposite direction.
4. Turn the crock 180° and make a final set of vertical cuts to form a crosshatch pattern on the surface. This process helps the sour whey drain out.

Place several inches of water in a large place, set the crock in it and heat to 115°F/46°C. Hold the cottage cheese at this temperature for 30 minutes. Stir occasionally. Line a colander with cheesecloth and pour in the curds and whey. Allow the whey to drain off. Dip the colander in cold water and gently stir the curds to wash away the last traces of whey. Let the curds drain thoroughly. If desired, add 1 teaspoon of salt per pound of cottage cheese and 4-6 tablespoons of cream. After refrigeration, cottage cheese will be ready to eat.

Semi-soft and hard cheeses can also be made using an Excalibur. Refer to Excalibur's Preserve It Naturally book for more “how-to's.”

### Drying Photographs

Treat and prewash as usual. Shake or squeegee off the excess liquid and place photos on drying tray Dry until no wet spots remain. Only dry photos printed on resign-water stock. Other type will wrinkle unless pressed flat.

### Whole Meal Preparation

Outdoor enthusiasts and survivalists will prepare and dehydrate whole meals only to be rehydrated. Lightweight and nutritious! Dried meats with powdered tomato and dried vegetable bits can be mixed with dried pasta, cooked in a kettle over a campfire for a “gourmet” meal.



# RECIPES

## *Banana Blush Leather*

- 1 cup strawberries
- 1 banana

Puree fruit in blender. Pour onto Paraflexx™ sheets or plastic wrap and dehydrate at 135°F/57°C until leathery.

## *Peachy Pear Leather*

- 1 cup peaches, peeled
- 1/2 cup pears, peeled

Blend together and sweeten if desire. Pour onto Paraflexx™ sheets or plastic wrap and dehydrate at 135°F/57°C until leathery.

## *Persimmon-pineapple Leather*

- 1 cup persimmon pulp
- 1/2 cup crushed pineapple

Puree in blender. Spread onto Paraflexx™ sheets or plastic wrap and dehydrate at 135°F/57°C until leathery.

## *Spaghetti Sauce Mix*

- |                               |                                 |
|-------------------------------|---------------------------------|
| 1 tbsp dried onions           | 1 tbsp dried parsley            |
| 3 tsp cornstarch              | 1 tbsp dried green peppers      |
| 1 1/2 tsp dried garlic powder | 1 tsp sugar                     |
| 1/2 tsp dried oregano         | 1/2 tsp dried basil             |
| 1 cup tomato powder           | 1/4 cup dried, sliced mushrooms |

Mix all ingredients and store in a tightly sealed glass container. To prepare sauce, add 3 cups of water to mix and simmer until thick. Serves 4.

## *Beef Jerky Ole'*

- |                                    |                               |
|------------------------------------|-------------------------------|
| 1 jar of mild salsa                | 1 package chili seasoning mix |
| 1 tsp oregano powder               | crushed red pepper            |
| 5 lbs lean beef, sliced 1/4" thick |                               |

Remove all visible fat from beef. Combine all ingredients except crushed red pepper in a large bowl. Place meat into a zip-top plastic bag and add marinade. Place in refrigerator overnight, turning occasionally.

Place piece of meat in a single layer on the drying trays. For extra zest sprinkle crushed red pepper sparingly over the meat.

Dehydrate meat for 6-10 hours at 155°F/68°C. Test for dryness; when meat is bent, it should crack, but not break. Store in air-tight container or vacuum sealed bags.

Visit [www.drying123.com](http://www.drying123.com) for more recipes and to submit your own.

# RECIPES

## *Creamy Mushroom Soup*

1 1/2 cups dried mushrooms	1/2 cup dried onions
2 cups hot beef bouillon	1/4 cup margarine
4 cups milk	1 tsp salt
6 tbsp flour	parsley or garnish

Saute mushrooms and onions in margarine in a heavy saucepan for 5 minutes, stirring occasionally. Combine bouillon, milk, salt & flour. Blend until smooth. Add to sautéed mushrooms and onions. Cook over low heat until the mixture comes to a boil, stirring constantly. Garnish with parsley. Makes about 8 servings.

## *Sweetheart Yogurt Leather*

Strawberry, cherry or raspberry pre-stirred yogurt	Paraflexx™ sheets
Heart shaped cookie cutter	

Cover each drying tray to be used with a Paraflexx™ sheet or plastic wrap. Use 1 carton of yogurt per tray. With yogurt at room temperature, empty cartons onto sheets. With a spatula, smooth the yogurt into an 8-10" circle. Dry at 135°F/57°C for 4-5 hours. When dried, yogurt will be shiny and non-sticky when lightly touched. With a heart shaped cookie cutter, cut 4-5 hearts out of the cooled piece of yogurt. Cover each with plastic wrap and store.

## *Potatoes O'Brien*

2 cups dried, chopped potatoes	1/4 cup dried onion
Fresh ground black pepper to taste	1/2 cup crumbled bacon (optional)
1/4 cup chopped dried green onion	1/4 cup dried red peppers
4 tbsp oil	salt to taste

Rehydrate potatoes, onion & pepper, letting stand about 20 minutes, drain. In a skillet, over medium heat add oil. Cook potatoes, onion & pepper until crisp & golden brown. Add crumbled bacon, salt, & pepper. Serves 6 – 1/2 cup serving each.

## *Summer Salad Topping*

3/4 cup dried onion flakes	1/2 cup dried crumbled carrots
1/4 cup dried red peppers	1/4 cup dried green peppers
1/4 cup dried parsley	1/4 cup sunflower seeds
1/2 cup dried tomato flakes	1/2 cup grated parmesan cheese

Coarsely chop all ingredients in a blender. Be sure that all ingredients are thoroughly mixed. Refrigerate mixture in glass jar with tight lid. To serve, sprinkle mixture over salads.

## *Aztec Corn*

3/4 cup dried onion	1 1/2 cup dried corn, rehydrated
1 cup sour cream	1/4 cup mild red salsa
1/4 teaspoon pepper	3 tablespoons butter
1/4 cup water	1 cup shredded Monterey Jack cheese
3/4 teaspoon salt	1 can chopped black olives

Saute onion in butter until soft. Add corn & water. Cover tightly & cook over medium heat for 5 minutes. Remove cover and over high heat, boil away most of the liquid. Stir in sour cream, cheese, salsa, olives, salt & pepper. Heat thoroughly, but do not boil. Serves 6

# QUESTIONS & ANSWERS

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*One side of my drying trays seems to be dried before the other.*

*What should I do?*

Because your dehydrator may dry one side faster than the other, halfway through the drying cycle you may want to turn the trays 180°. This will speed up the dehydration process and will reduce energy consumption.

*My apples and pears have darkened to a rusty-brown color while drying.*

*Are they safe to eat?*

Yes. Fruits that have turned brownish color are safe to eat. Many fruits will oxidize during the drying process. Oxidation happens when the flesh of the fruit is exposed to air. By pretreating fruits oxidation is reduced.

*Why should the edges of my fruit leather be thicker than the center?*

With fruit leathers, the edges of the mixture tend to dry first. If the edges are the same thickness as the center, they will dry too quickly and become brittle.

*My fruit leathers are very thin and brittle. I'd like to make them like the ones sold commercially. How can I do that?*

Juicy fresh fruits, such as strawberries, can be too runny to create a thick, chewy leather like the commercial types. By simply adding a banana when pureeing, the mixture will become thick and the fruit leather will as well. Be sure to pour 3/4 to 1 cup of puree on each tray and allow it to spread out. Remember, the poured puree should be 1/4" thick at the edges.

*If I powdered my dried vegetables, what could I use them for?*

Powdered onion and garlic, of course, are favorite seasonings for meats and sauces. Powdered tomatoes can be reconstituted into tomato sauce, paste, catsup, juice or soup. Powders are easy to make. A blender or food processor will give you the finest texture. Simply place pieces of dried vegetables into a blender and process. Store in air-tight bottles or jars.

*As items dry, should they be removed to allow better circulation for still moist foods and avoid over drying?*

Yes. As foods dry, remove them from the trays and package. The other still moist pieces should remain in the dehydrator until they are completely dry. However, if you have sliced your food into uniform pieces and have turned your trays 180° halfway through the cycle, your load should be finished at the same time.

*Do you have more detailed information in your book *Preserve It, Naturally!* Does it include guidelines or is it just recipes?*

Preserve It, Naturally! over 250 page book. It contains hundreds of color pictures and diagrams! The book completely details every aspect of drying from mint leaves to pistachio nuts. It has detailed directions for craft ideas, instructions for yogurt and cheese making, dehydrating grains and even making baby food! There are 275 recipes using home dried fruits, vegetables, meats and grains for you to try, experiment with or use as a guideline while concocting your own!

# TROUBLE SHOOTING GUIDE

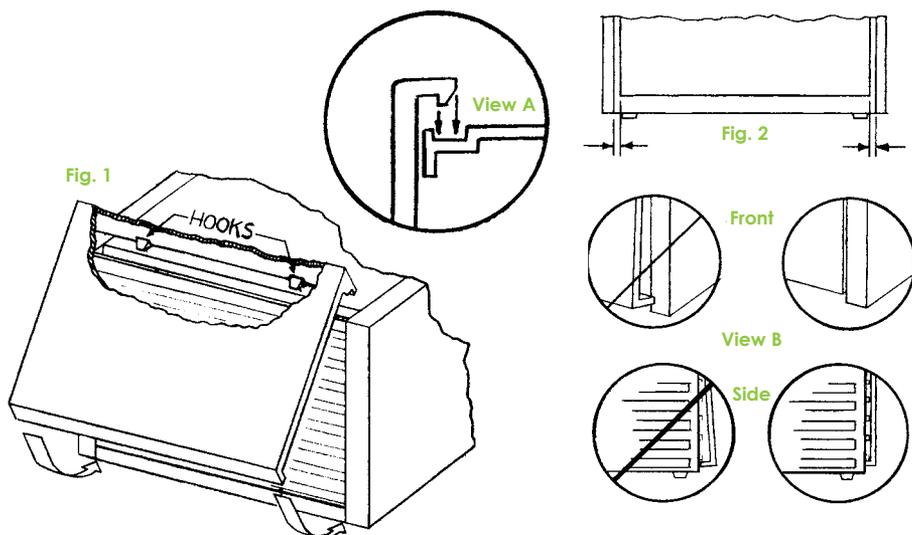
All Excalibur® Dehydrators are checked three times for any electrical or mechanical problems. They are shipped in perfect working order. If you see any damage to the machine due to rough shipping you must report it to the shipper or dealer you purchased from. Excalibur® will not be responsible for damage due to shipping. Technical support may be contacted at (800) 875-4254 or (916)381-4254 from 8am-5pm Mon-Fri Pacific Standard Time.

Problem	Answer
<b>Nothing turns ON</b>	Test the outlet with another appliance that works. Test the dehydrator on another outlet that you know has power.
<b>Fan makes a rubbing noise</b>	Due to rough shipping the trays may have been forced into the fan's protective screen. Take out the trays, and blow on the fan blade to locate where it is rubbing against the screen. You may need to turn the fan on and press gently against the screen and listen where the noise increases. With a pair of needle nose pliers pull the screen away from the fan blade at point of contact.
<b>No heat, but fan works</b>	Remove trays and check for any loose wires. There may be a piece of dust or shipping debris blocking the tiny electrical points in the thermostat, or it may simply be stuck due to rough shipping. With the fan running, turn the knob back and forth between the highest and lowest settings pausing for a moment on each setting. Repeat for 40 knob rotations. Then with the fan turning, stop the rotation of the fan by pressing against the metal mesh screen towards the fan blade until it stops. This will make a loud noise - this is OK. Use your flattened hand - never place any object through the square holes in the screen. With the fan blade stopped look for glowing, if you see glowing, immediately let go of the screen, you have cleared the points and your unit is fixed. If there is no glowing you must replace the fuse. Fuses are available on-line.
<b>Polyscreens missing</b>	The polyscreens are all placed on the bottom or top tray. Take out all the trays and look inside the dehydrator with sufficient light so you can see them. They are there.
<b>Accessories are missing</b>	Kitchen accessories are shipped in the dehydrator box with exception of larger items like the apple peeler, v-slicer, jerky gun or cannon. They are placed on the side of the dehydrator and may have slid underneath. Double check by removing all packaging. Paraflexx™ sheets are the same color as the corrugated box, so look closely.
<b>Door seems to be broken or scratched at bottom</b>	Most high-quality plastic parts are injection molded. A mold is put into a plastic injection-molding machine, where the plastic is melted and injected under extremely high pressure into the mold. Where the plastic enters the mold is called the gate. All plastic parts must have a gate. Most gates are in an area that is not seen. The best place for the gate on the door was the center on the bottom. We break the gate off and if necessary file off any sharp edges. Due to design constraints this is the best we can do.

# EXCALIBUR'S® CONVENIENT LIFT-OFF DOOR

## Medium 5 Tray and Large 9 Tray Models

To install the door hold it at a slight angle, (see Fig. 1). Place the hooks on the inside top of the door on the ledge at top of dehydrator, (see View A). Be sure there is an even space between the door and the side of dehydrator, (see Fig. 2), and that the bottom of the door does not hit the sides, (see front and side View B). This allows moist air to exit.



## HELPFUL HINTS & TIPS

- **Cut all your items the same thickness.** If you don't, they'll dry at different times. A slicer is helpful.
- **Do small or Large batches.** If you are doing a small batch, put the remaining empty trays in the dehydrator. Your dehydrator is designed to work with all or none of the trays.
- **Purchase the Preserve It Naturally Book!** This book covers everything you need to know about dehydration and how to make the most of your dehydrator.
- **Experiment with your drying times.** Everyone's tastes are different. You may like some food dried longer for a crispier texture. You may like other dried less for a chewier texture. Be sure to write down the food and times so you remember what you like!
- **Store your Paraflexx® sheets in the bottom of the dehydrator.** This is a great way to protect your sheets when you're not using them. They can also double as a drip liner at the bottom of your dehydrator for easy cleaning.
- **Cleaning tips for Paraflexx® sheets.** DO NOT SOAK your Paraflexx® sheets. This will damage them. Simply wipe down with a warm, soapy cloth. Then again with clean water. That's it.
- **Not sure your foods are dry enough?** Put some of your foods in an air-tight bag and check it in a few minutes – if you see water droplets in the bag then you need to dry the food more. Some small fogging is normal as the food cools off.
- **Register your Excalibur online at [www.Drying123.com](http://www.Drying123.com)**





# Excalibur®

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