

STX DEHYDRA STX 800W FOOD DEHYDRATOR OPERATING MANUAL

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Introduction

Drying food for preservation dates all the way back to The Ancient Egyptians. The Spaniards were the first explorers known to use dehydration to prep food for their expeditions. This method was used extensively in the days of the Lewis and Clark expeditions as they charted to the expanse of the Louisiana Land Purchase. Buffalo, elk and deer were plentiful, but their success relied heavily upon the proper use of this preserving method.

The information in this manual is intended to help you get the best results for this equipment. Please read this booklet carefully and contact The Mercantile Station if you have any questions.

Dehydration

There are no exact rules that apply to food dehydration because your results can be affected by room temperature, relative humidity and moisture levels in the food that you are drying. To become proficient it will be necessary to experiment with your drying techniques. If you use too much heat, food may harden on the outside while still being moist inside. However, with too little heat, your drying times will be very long, with a little practice you will be creating tasty, ready to eat snacks in no time.

Important Safeguards

- 1) Read ALL of these instructions thoroughly before using your dehydrator.
 - 2) Save these instructions for future reference.
 - 3) Never leave your dehydrator unattended at any time.
 - 4) Supervision is required if the unit will be used around children/pets.
- 5) Only for use indoors in a clean, dry, well ventilated location, free of flammable fumes and/or objects and/or humidifiers/products that cause condensation.
 - 6) This unit gets hot. Do not touch surfaces while operating.
- Continuous operations above 155*F is not recommended as surface will become very hot and in some cases melt/warp the dehydrator trays.
 - 8) This unit will scratch household surfaces.
 - 9) Do not use if the cord or controls have been damages in any way. Contact the Manufacturer before attempting to make any repairs.
 - 10) Do not use utensils inside the unit.
- 11) Turn off the unit before plugging into or unplugging from any electrical outlet.
 - 12) Keep unit unplugged when not in use.
 - 13) Allow unit to cool before cleaning.
 - 14) NEVER immerse unit or cord in water or other liquids.
 - 15) NEVER plug unit into a damages electrical outlet.
- 16) DO NOT allow the cord to contact the edge of a counter, table or hot surface.
- 17) The use of attachments or accessories is not recommended by the manufacturer and will VOID THE WARRANTY.
 - 18) DO NOT attempt to move the unit while it is in operation.
- 19) READ THE BACK COVER OF THIS MANUAL FOR ADDITIONAL SAFETY RULES AND PRECAUTIONS.

Preparations of Foods (Pre-Treatment)

For best results, select the freshest foods available to dehydrate. Note that immature fruits and vegetables do not have as much color and flavor as do those that are fully matured. Foods should be dehydrates as soon after purchase as possible. Foods high in sugar such as apples, pears, peaches, and bananas are prone to darken as a result of oxidation of the sugars. Below are some pre-treatments that will help reduce this oxidation effect.

Lemon and Pineapple Juice are natural antioxidants. Place the slices in the juice for a few minutes. Remove, drain and place on the dehydrator shelf. For extra flavor, try sprinkling with cinnamon, Jello powders or other sweeteners.

Ascorbic acid mix, a form of vitamin C which is available at most health food stores, comes in either tablet or powder form. Use about 2-3 tablespoons of powder or ground tablets per 1 quart of water. Stir to completely dissolve powder. Place fruit into the solution for 2-3 minutes. Remove, drain and place on the dehydrator shelf.

Preparation of Food (Pre-Treatment), cont'd

Blanching is used primarily to prepare fruits and vegetable for dehydrating that have skins that will toughen when drying. This process helps lock in the color and flavor as well as soften the skin of grapes, cherries, prunes and plums. There are two blanching methods: water and steam.

Water Blanching – Fill a large pan about half full of water. Bring water to a rolling boil. Use tongs to place food directly into the water, cover the pot and boil (Blanch) for about 3 minutes. Remove using tongs, drain and place on dehydrator shelf.

Steam Blanching - Using a steamer pot such as used in Chinese cooking, put 2-3 inches of water in the pot and bring to a boil. Place food into the steamer basket, place in pan and cover. Steam food for about 5 minutes. Remove and place on dehydrator shelf.

Operating Instructions

For best results. Read all of the instruction manual first.

- 1) Examine the carton and the unit for any damage that may have occurred during shipping. Contact the seller to report any damages.
- 2) Fill out the guarantee card with date of purchase, where purchased, name and address of where the product was originally shipped to for verification.
- 3) Make sure the power switch is turned off. Place the unit on a well-ventilated, clean, dry surface away from children and pets. Plug into an undamaged electrical outlet. DO NOT use an extension cord with this dehydrator.
- 4) Turn the unit on. The unit will begin to heat up.
- 5) Heat the unit to 90* F for 45 minutes to make sure the unit is functioning properly.
- If the unit stops for any reason, turn off, unplug and then repeat steps 3 and
 If the unit does not operate normally, turn off, unplug and call 402-742-2586.
- 7) Follow your recipe to prepare the food that you wish to dehydrate.
- 8) Using oven mitts, slide the dehydrator trays out of the unit and load the product to be dehydrated onto the trays. Do not overlap the food when placing onto trays, keep all food inside the recessed tray area.
- 9) Using both hands for maximum stability, slide the dehydrator trays back into the unit. Do not push too hard. Trays will hitch or lock into place.
- 10) Set temperature by turning the knob on top of the unit. Monitor the internal temperature and adjust as needed. Do NOT leave unattended!

Food Storage

Dried foods should be allowed to condition before being placed into a storage container. Generally, let stand about 1 week in a dry, well ventilated and protected are. The conditioning time allows for further drying and removes most of the remaining moisture in the food. Dried food can be placed into clean, dry, insect resistant containers, preferably glass jars. Heavy gauge plastic freezer bags can also be used. Eliminate as much air as possible before sealing the bag.

When properly used, vacuum sealers provide ideal storage. The less air present, the less potential for the formation of molds. Stored foods should be checked monthly for insects and mold. If mold is present, discard the whole container and start over. Double checking with your next batch, to make sure that moisture levels in food are low and container is air tight.

Reconstitution

Dried foods do not need to be reconstituted for consumption. Many people prefer to want them in their dried state. If you want to reconstitute your food, here are some basic guidelines. Soak food in unsalted water for 3-7 minutes and then prepare as usual. If you are boiling them, use the same water they soaked in to preserve nutrients.

If you plan to soak foods for more than 1 hour, they should be placed in the refrigerator to prevent bacterial growth. One cup of dried vegetables will reconstitute to about 2 cups. One cup of fruit will reconstitute to about 1 $\frac{1}{2}$ cups. Reconstitute times will vary depending on the thickness and the water temperature used. Warm water will speed reconstitution but may result in flavor loss.

Food Drying Guide

The following charts are guidelines for the preservation of various fruits, vegetables, and meats. Drying times will vary depending on the room temperature, relative humidity and moisture levels in the food you are drying. If the moisture level is low, the drying time will be on the high end of the range.

Keep in mind that drying times are also affected by the amount of food placed on the shelves. Over loading the shelves will slow the drying times and may produce poor results. When dehydrating foods, it is important to check on the dryness of the product. If the product is not thoroughly dried, mold may form during storage (See Food Storage). To test for dryness, remove a piece of food from the dehydrator and allow to cool to room temperature. Bend and tear the piece to check for internal moisture.

Vegetables at 125*F

Food	Preparation	Test	Time
Asparagus	Wash and cut into 1" pieces	Crunchy	4-6 hours
Beans, Greens Or waxed	Wash, remove ends and cut into 1" pieces or French style	Crunchy	9-12 hours
Beets	Remove ½" of the top, scrub thoroughly, steam blanch until tender. Peel and cut into ¼" thick slices	Pliable	9-12 hours
Broccoli	Wash and trim. Cut stems into ¼" pieces. Dry florets whole.	Crunchy	10-14 hours
Cabbage	Wash and trim. Cut into 1/8" strips.	Crunchy	8-11 hours
Carrots	Wash and trim tops. Peel or scrape if desired. Cut into 1/8" thick slices.	Pliable	7-11 hours
Celery	Wash, separate leaves and stalks. Cut stalks into ¼" strips.	Crunchy	3-10 hours
Corn	Shuck corn and trim silk. Steam until milk is set. Cut kernels from cob and spread on plastic screen. Stir several times during drying.	Crunchy	7-10 hours
Cucumber	Wash and trim. Cut into 1/8" slices.	Pliable	4-8 hours
Eggplant	Wash and peel. Cut into ¼" slices.	Pliable	4-8 hours
Mushroom	Wash and cut into 3/8" slices.	Pliable	4-7 hours
Parsnips	Scrub thoroughly, steam blanch until tender. Peel if desired and cut into 3/8" thick slices.	Pliable / Tough	7-11 hours
Peppers	Wash and remove stems, seeds and white section. Pat dry. Cut into ¼" thick strips or rings.	Pliable	4-8 hours
Potatoes	Use new potatoes. Wash, peel if desired. Steam blanch 4-6 minutes, Cut French style ¼" slices, 1/8" thick circles or grate.	Crunchy / Pliable	7-13 hours
Summer Squash	Wash and peel. Cut into ¼" slices.	Pliable	10-14 hours
Tomatoes	Wash and remove stems. Slice into ¼" circles. For cherry tomatoes, slice in half, dry skin side down.	Pliable	5-9 hours
Zucchini	Wash. Peel if desired. Cut into ¼" slices or chips.	Crunchy	7-11 hours

Fruits at 135* F

Food	Preparation	Test	Time
Apples	Wash, core and peel if desired. Cut into ¼" slices. Dust with cinnamon if desired.	Pliable	7-15 hours
Apricots	Wash, halve and remove pit. Slice if desired and dry skin side down.	Pliable	21-29 hours
Bananas	Wash, peel and slice 1/8" slices	Pliable	7-10 hours
Figs	Wash, cut out blemishes, quarter. Dry skin side down.	Pliable	22-30 hours
Kiwi	Wash, peel and slice in ¼" slices.	Crisp	8-15 hours
Nectarines	Wash halve and remove pit. Slice if desired and dry skin side down.	Pliable	8-17 hours
Peaches	Wash, halve and remove pit. Slice if desired and dry skin side down.	Pliable	8-16 hours
Pears	Wash, core and peel if desired and dry skin side down.	Pliable	8-16 hours
Pineapple	Peel, remove fibrous eyes, remove core. Cut into ¼" slices or wedges.	Pliable	11-18 hours
Rhubarb	Wash, cut into 1" lengths.	Pliable	6-10 hours
Strawberries	Wash, cut our caps, sliced ¼" thick.	Crisp	7-15 hours
Watermelon	Cut off rind, cut into wedges and remove seeds.	Pliable	8-10 hours

Jerky at 145* F

Food	Preparation	Test	Time
Jerky	Use lean meat and remove as much fat as possible. Fat tends to go bad with time. Cut into uniform ¼" thick or less slices. Do not overlap on shelves while drying.	Pliable	3-4 hours Meat temp should reach 145-150* F

Sodium Bisulfate can be purchased at your local pharmacy. If you or anyone who will be eating the food has any known chemical allergies, you should check with you physician before using this chemical. Be certain to ask for food grade (SAFE) product only. Mix 1 teaspoon of sodium bisulfate in 1 quart of water. Dip the slices in the solution for a few minutes. Remove, drain and place on the dehydrator shelf.

Cleaning

Wipe off both exterior and interior surface of the unit with a damp cloth and mild dish soap. The dehydrator shelves are dishwasher safe. Be certain ALL parts are completely dry before plugging in and powering up the product.

NEVER IMMERSE THE UNIT OR POWER CORD IN WATER OR OTHER LIQUIDS!!!

Reviewing the Dehydrating Process To obtain the best results:

- 1) Use high quality foods: the better the food the better the result.
 - 2) Wash food, use clean utensils and keep work area clean.
 - 3) Pre-treat foods to prevent discoloration.
 - 4) Do not overlap food on shelves.
- 5) Drying times will vary depending on food thickness, moisture in the food, relative humidity and temperature of the room.
 - 6) Cool food before testing for dryness.
- 7) Let food condition in a clean, dry, ventilated area for a week before placing them in air tight containers.
 - 8) Reconstitute as needed.

9) Only dehydrate food items. Do not dehydrate nonfood items or items that can combust or cause fire. Be sure the food items you dehydrate are suitable for dehydrating.

10) Last but not least, Enjoy!

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