

HOW TO USE YOUR FOOD DEHYDRATOR

1. Make sure unit is OFF and unplugged before using.
2. Always wash the dehydrator trays and lid before each use to avoid any food contamination.
3. Place base on a flat, smooth countertop surface where it will not fall or be pulled by the plug.
4. Prepare food to be dehydrated as instructed in this manual; preparation depends on the type of food. Do not overlap food or overload trays.
5. Arrange food on trays, but do not place trays on the base; stack up the trays first and set them aside.
***NOTE:** It is recommended to put all trays on to the appliance during use, no matter how many trays are empty.*
6. Now, place the prepared stacked trays onto the base, cover the top tray with the lid, and allow food to dry for the recommended length of time; drying time may vary depending on the type of food.
7. Plug the Food Dehydrator unit into an electrical wall outlet, press the **START/TIME** button. The display will show **0000** and flash.
8. Press the **START/TIME** button to set the desired time. 1 press = 1 hour; up to 48 hours. (If the controls are left unattended for 3 seconds, the Dehydrator will automatically set and start the dehydration cycle.)
9. Press the **TEMP** button to set the temperature from 104°F to 158°F, 1 press = 9°F. (If the controls are left unattended for 3 seconds, the Dehydrator will automatically set and start the dehydration cycle.)
10. You can adjust the temperature at any time by pressing the **TEMP** button. (If the controls are left unattended for 3 seconds, the Dehydrator will automatically set and start the dehydration cycle.)
11. You can also stop the dehydrating process at any time by pressing and holding the **START/TIME** button for 3 seconds. This will power **OFF** the unit.
12. Check on the dehydration cycle periodically. Check for desired dryness.
13. Remove individual pieces and store in containers or food bags. If some pieces are not yet done, leave them on the dehydrator and check frequently until all food dehydration is completed.
14. Turn the unit **OFF** and unplug after using.
15. Always wash the dehydrator trays and lid after each use. Wipe the base with a soft damp cloth or sponge; do not allow water or any other liquid to get into the base. Make sure the trays and lid are completely dry before replacing them on the base.

TEMPERATURE CHART

TEMPERATURES	USES
104°F	Herbs, Flowers, Dough
113°F	Soft Vegetables
122°F	Hard Vegetables
131°F	Citrus Peel
149°F	Fruit
158°F	Meat Jerky, Fruit Rolls, Fish

SELECTING THE TYPE OF FOOD TO DEHYDRATE

Food to be dried should be in good condition. Select fruits that are just ripe; they have the highest natural form of sugar and are best for drying. Fruits that are not ripe may have a flat, bitter taste. Vegetables should be fresh and tender. Check fruits and vegetables for marks or bruises and cut away these portions before preparing for dehydration. Avoid using overripe fruits and vegetables with spoiled portions. Meat, poultry and fish should be fresh and lean. Preparation, dehydration time and storage of foods also influence their quality and taste. Follow the preparation, dehydration and storage instructions in this manual to ensure the best-quality dried foods.

WARNING: *If you suspect food is contaminated, freeze at 0° for 48 hours to prevent bacteria growth, or heat at 175°F for 15 minutes to pasteurize it. Some nutrition may be lost, but it will stop the contamination process.*

PREPARATION & PRETREATMENT OF VEGETABLES

Vegetables dried at home require a little more effort in processing and storage than do fruits because they are low in acid and have little sugar. Some vegetables have a poor quality when dehydrated and are better frozen than dried. Others, such as potatoes, are available at reasonable prices all year round, and it may not be worth your time to dry them unless they are used for lightweight camping. Be selective in the vegetables you choose to dry.

Preparation:

Select only the highest quality, fresh, crisp and tender vegetables for drying. Wash vegetables carefully just before processing to remove dirt and bacteria. Most vegetables should be peeled, trimmed, cut, or shredded prior to drying.

Pretreatment:

Blanching vegetables prior to drying destroys the enzymes that produce off flavors during storage, resulting in poor texture and poor re-hydration. Steam blanching is preferred over water blanching because there is less flavor and vitamin loss. Microwave blanching is also excellent and usually keeps a brighter color in the vegetables.

Steam Blanching:

Layer prepared vegetables in the top portion of a steamer, no more than 2 to 2 ½ inches deep. Steam until vegetables are heated all the way through but are not cooked enough to eat (usually 2 to 3 minutes). Small pieces may need occasional stirring to steam blanch evenly. Transfer steamed vegetables directly to drying trays, working as quickly as possible.

Microwave Blanching:

Microwave ovens are convenient for blanching fresh vegetables. Prepare vegetables as for steam blanching. Place vegetables with a small amount of water (refer to your microwave oven cooking chart) in a covered casserole dish. Cook for only ¼ to ½ the time specified in the chart, stirring well after half of the blanching time. Microwave blanched vegetables will be more brightly colored than those that are steam blanched. Transfer blanched vegetables directly to drying trays, working as quickly as possible.

VEGETABLE DRYING CHART

VEGETABLE	PREPARATION & PRETREATMENT	ESTIMATED TIME
Asparagus	Cut in half to divide tips from stems. Tips are best for drying, but dried stems can be crushed and used for seasoning.	17-19 hours
Beans (green)	Snip off ends and cut as desired. Blanch, then quick freeze for 30-45 minutes.	17-19 hours
Beets	Trim, leaving about an inch of the top and root. Blanch and allow cooling, then cutting off the top and root, and slicing.	22-24 hours
Broccoli	Trim and cut as usual. Steam for about 4-5 minutes.	17-19 hours
Carrots	Wash and peel. Cut into ½" thick chunks and steam for about 4-5 minutes until tender.	11-13 hours
Corn	Remove husk, wash and steam blanch corn on the cob. Allow to cool, and then cut corn from the cob.	8-10 hours
Celery (Stalks)	Wash and separate leaves from stalks. Cut stalks into 1/2" chunks. Place stalks separate from leaves in trays.	12-14 hours
Celery (Leaves)	Break leaves apart from their stems. Place leaves separate from stalks in tray(s).	6-8 hours
Chives	Wash and mince.	5-7 hours
Cucumber	Wash, trim and slice about ¼" thick.	11-13 hours
Garlic	Separate and peel cloves. Cut cloves in halves or slice.	16-18 hours
Mushrooms	Brush clean and remove stem. Leave whole, cut in halves or slice.	11-13 hours
Onions	Trim ends and peel. Cut in rings or dice.	13-15 hours
Peppers (pimentos)	Wash and remove core. Cut in halves, quarters, rings or strips.	13-15 hours
Peppers (jalapeños)	Wash and dry whole.	11-13 hours
Potatoes	Wash and peel. Cut or slice as desired and steam blanch. Rinse under cold water and pat dry before placing on tray(s). Note: If you wish to leave the skin on the potatoes, wash and scrub with vegetable cleaning brush, then prick and remove all "sprouts" and "scars," using the tip of a potato peeler or paring knife.	14-16 hours
Tomatoes	Wash and remove stems. Dip in boiling water and then in cold water. Remove skin and cut in halves, quarters or thick slices.	18-20 hours
*Approximate times are offered as guidelines only. Drying time may vary, depending on quality and quantity of vegetables being dried.		

PREPARATION & PRETREATMENT OF FRUITS

Almost all fruits are suitable for drying at home, but some fruits will require more drying time than others; the guidelines offered in this manual will help you get started. Some fruits might not be suitable for drying all year round, so it will be helpful to learn which fruits are in season and experiment with those first.

Preparation:

Wash fruits well and remove any bruised or overripe portions. Peel if desired. Larger fruits may be halved. If pieces of fruit vary in size, they may be sliced 3/8" to 1/2" thick for more even drying. Smaller fruits such as grapes and cherries may be dried whole. Remove pits or stones from fruits such as prunes, cherries, apricots, etc. Fruits that have been artificially waxed to prevent moisture loss should always be peeled. Peeling is optional with other fruits. Dried pear skins tend to be grainy, and peach peels are a little fuzzy. Most fruits can be placed directly on the drying trays as they are prepared such as pineapples, grapes, strawberries, prunes, etc. However, apples, apricots, peaches and pears turn brown when the cut surface are exposed to the air, due to oxidation and the continuous reaction of enzymes, these fruits may be pretreated to slow this browning and to prevent loss of vitamins A and C, but your attention is called to the cautions set forth below, which are for your protection. If you are drying these fruits, and you intend to pre-treat them, cut pieces can be prevented from browning while they are being prepared by keeping them in a holding solution until you have sufficient fruit to pre-treat.

Pretreatment:

Below are listed several optional methods of pretreatment. You need not pre-treat food in order to dry it. However, pretreatment often makes food look better, increases the shelf life and can even enhance the nutritional value of some foods. Experiment with both treated and untreated food in your storage to see which will best suit your needs. Remember, proper storage is critical to the quality of the stored product, whether treated or untreated.

- **Natural Pre-Dips:**
Use pineapple or lemon juice as a natural alternative to other pretreatments to reduce browning. Slice fruit directly into juice. Remove promptly (about 2 minutes) and place on trays. Fruits may also be dipped in honey, spices, lime or orange juice, jello powders or sprinkled with coconut to give them a snappy dried flavor. Use your imagination and make your own flavorful dip.
- **Sodium Bisulfate:**
Ask for food-safe, (USP) grade only. Dissolve 1 teaspoon of sodium bisulfate in one quart of water. Prepare small amounts of fruit and dip for 2 minutes in the solution. This helps prevent loss of vitamin C and maintains a bright color. Sodium bisulfate is available in most pharmacy/drug stores.
- **Popping Backs:**
When drying fruit halves, especially apricots, it has been suggested that popping the back ("inside out") will speed the drying time. This is true, but it also results in the loss of the nutritional juices to the bottom of the dehydrator. Instead, cut each half in half again to give the end product more nutritional value, a brighter color, and faster reconstitution capabilities.

FRUIT DRYING CHART

FRUIT	PREPARATION & PRETREATMENT	ESTIMATE TIME
Apples	Wash, and peel if desired. Cut in halves and remove core, then cut into chunks or slice. Can be pretreated with a little lemon juice to prevent browning.	22-24 hours
Apricots	Wash, cut in halves and remove pit. Cut further into quarters, if desired.	30-35 hours
Bananas	Peel and slice. Can be pretreated with a little lemon juice to prevent browning.	22-24 hours
Cherries	Wash and remove pit	22-24 hours
Coconut	Drain milk, crack and remove coconut. Pat dry and cut into ¼" thick chunks.	24-30 hours
Figs	Wash and remove stems. Cut into halves or quarters (dry skin side up)	22-24 hours
Grapes	Wash and remove stems. Leave whole.	23-25 hours
Papaya	Wash and peel. Cut into large or small chunks, as desired.	30-35 hours
Peaches	Wash, cut in halves and remove pit. Cut further into quarters, if desired.	35-42 hours
Pears	Wash, and peel if desired. Cut in halves and remove core, then cut into chunks or slices. Can be pretreated with a little lemon juice to prevent browning.	28-32 hours
Pineapple	Remove core and cut into chunks, or slice into wedges.	22-25 hours
Prunes	Wash, cut in halves and remove pit. Cut further into quarters, if desired.	30-35 hours
Strawberries	Wash and leave whole, cut in halves or slice.	12-15 hours
*Approximate times are offered as guidelines only. Drying time may vary, depending on quality and quantity of fruits be dried.		

PREPARATION & PRETREATMENT OF MEAT

CAUTION! The United States Department of Agriculture recommends meat be precooked prior to or cooked after dehydrating to reduce the risk of foodborne illness. Normally raw meat is used for making jerky. However, cooked meat as well as raw meat can be dehydrated.

Make sure to always cut meat down to bite size before dehydration. It is much easier to work with beforehand.

Be extra careful when making jerky from raw chicken or turkey because salmonella bacteria may be present in poultry when it is purchased. It is extremely important to cut raw chicken or turkey into portions that do not exceed 1/4" thickness. Any marinade must thoroughly penetrate and soak into the meat, up to 10 minutes or more.

It is not recommended to remove any excess marinade sauce.

Never consume food that tastes, smells or looks improper.

RAW MEAT FOR BEEF JERKY: Only use meat that is at least 93% fat-free to make jerky. Make sure to trim off all the fat before slicing into bite-size portions. It is recommended to slice meat about 1/8" - 1/4" thickness.

Marinating beef has many different combination recipes. Please see some recipe samples below for your preference:

TRADITIONAL JERKY: (Good for approximately 3-5 lbs of beef, fish, or poultry)

½ lb brown sugar

3 cups soy sauce

*Spices of your choosing

½ cup liquid smoke (optional)

Mix all ingredients together. Make sure the brown sugar is dissolved. Let mixture sit for approximately 15 minutes. Place cut up meat into the marinade and cover. Let stand for 10 minutes refrigerated. Make sure to turn meats periodically to coat thoroughly. Drain any excess liquid.

Place meats onto trays and dehydrate. Drying time for a full 5-tray set up will take approximately 24-36 hours.

OTHER DRYABLE ITEMS

NUTS:

Remove shells to the nuts and rinse nuts with warm water. Pat dry and spread on trays. Most nuts will take approximately 20-30 hours to dehydrate; they should be allowed to dehydrate until brittle.

After dehydrating, allow to cool. Nuts that will not be consumed within a day or two should be frozen to ensure freshness. Remove nuts from the freezer and allow them to defrost before using.

HERBS:

Rinse and pat dry. Remove any dead, mushy or discolored portions, but leave the stem and do not break apart until drying. Spread herbs or flowers on tray and allow them to dehydrate for about 2-7 hours, depending on their type. When drying is complete, remove from tray and allow to cool.

Remove from stem and break leaves or buds apart, or crush if desired.

If dehydrating seeds, choose when pods have changed in color.

OTHER DRYABLE ITEMS (cont.)

FLOWERS:

For best results, pick flowers after the morning dew rises and before the evening mist sets in. Do not use flowers that have been sprayed with insecticides or other harmful chemicals. If dehydrating at the same time as herbs intended for consumption, place flowers on the bottom trays and herbs on the top trays; this is to prevent any “drippings” from the flowers to fall onto the herbs.

HELPFUL HINTS

- Always preheat the dehydrator for at least 5 minutes before using.
- If the dehydrator has been stored away for some time, wash and clean before using.
- Fresh vegetables and fruits are best for dehydrating. Canned goods do not dehydrate as well.
- Vegetables and fruits should always be cleaned before preparation and pretreatment.
- For best results, always prepare and pre-treat fruits and vegetables as outlined in this manual.
- It is relatively safe to leave the dehydrator on when dehydrating foods take a long time, but make sure to set the dehydrator in a safe place. Read the “Important Safeguards” on page 1 of this manual, and exercise safety when using this product.
- Exact dehydrating time varies greatly depending on several factors: Type, size and quality of food, quantity placed on trays and personal preference. It will help to keep a personal notepad where you can write down your own notes. Keep notes on the type of food, weight before and after drying, total drying time and final results

FOOD PACKAGING & STORAGE

- Dried foods need to be properly packaged to prevent reabsorption of moisture and microbial deterioration. Pack food in clean, dry, airtight containers. Glass jars or freezer containers with tight-fitting lids are good for storage. Resealable plastic freezer bags are also acceptable.
- Store packaged dried food in a dry, cool location away from light. Higher temperatures and exposure to light will shorten the storage time and result in loss of quality and nutrients. Most dried fruit, when properly packaged and stored, will be good for 1 year at 60°F or 6 months at 80°F. Fruit leather/rolls should keep for up to 1 month at room temperature. Vegetables have about half the storage life as fruit. If food is to be kept longer, then store it in a freezer.
- Package vegetables and fruits in separate storage containers to avoid flavor transfer.

Packaging:

DRIED FOODS MUST BE PROPERLY PACKAGED IN ORDER TO KEEP WELL.

Package your dried foods in **freezer** plastic bags, squeezing out as much air as possible. Heat-sealable bags may also be used. Store the plastic bags inside of airtight metal, plastic or glass containers. Storing foods in rigid containers without first putting them into the freezer bags exposes the dried foods to air. Vacuum packaging equipment for home use is available in some stores around the country. Vacuum packaging will greatly extend shelf life.

FOOD PACKAGING & STORAGE (cont.)

Storage Conditions:

Store properly packaged dried foods in a cool, dark place. The cooler the food is kept, the longer the optimal quality will be maintained. For every 18°F drop in temperature, the shelf life increases 2 to 3 times. If you have room in a refrigerator or freezer, keep your dried foods there. Otherwise, find the coolest place in your home to store dried foods. Light also causes the quality and nutritive value to deteriorate. Keep dried foods in the dark or in opaque containers.

Shelf Life:

Fruits have a naturally high sugar and acid content, which allows them to dry well and store for longer periods of time than vegetables. When properly packaged and stored at room temperature or below (70°F or less), most fruits will maintain a high quality and nutritional value up to a year. Most vegetables are best when eaten within six months.

FRUITS AND VEGETABLES KEPT BEYOND THE RECOMMENDED TIME MAY NOT BE AS NUTRITIOUS OR TASTE AS GOOD BUT WILL NOT SPOIL UNLESS THE PACKAGING IS NO LONGER INTACT.

CLEANING AND MAINTENANCE

This appliance requires little maintenance. It contains no user serviceable parts. Do not try to repair it yourself. Refer it to qualified personnel if servicing is needed.

Always unplug the dehydrator from electrical outlet when not in use and before cleaning.

TO CLEAN:

1. **NEVER IMMERSE BASE (MOTOR HOUSING) IN WATER.**
2. Be sure unit is switched "OFF" and unplugged.
3. Separate trays from the base. Wash trays and lid with warm, soapy water, using a soft cloth or sponge.
4. Rinse well and dry thoroughly.
5. Wipe base (motor housing) with a slightly damp cloth or sponge.

DO NOT wash parts in dishwasher.

DO NOT use scouring pads or any type of harsh cleanser to clean the dehydrator, as this may damage the finish.

TO STORE:

Unplug unit; store in its box in a clean, dry place. Never store it while it is hot or still plugged in. **Never wrap cord tightly around the appliance.** Do not put any stress on the cord where it enters the unit, as it could cause the cord to fray and break.