



ATTENTION

If any components of this unit are broken,
do not operate properly, or for product returns,
please contact LEM Products at

1-877-536-7763

For the online catalog, log onto www.lemproducts.com.



FOOD DEHYDRATOR

6 Tray No. 873

8 Tray No. 874



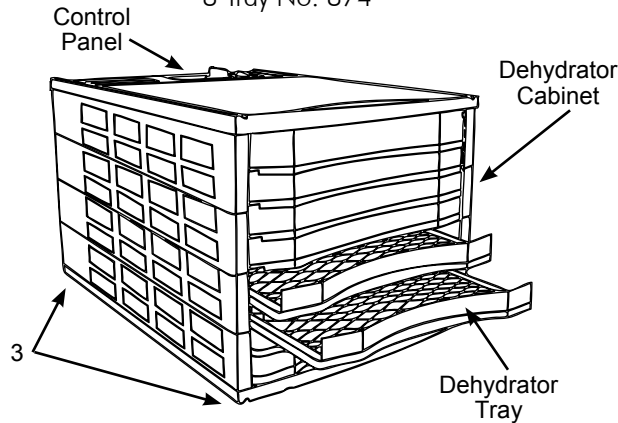
LEM Products
109 May Drive · Harrison, OH 45030
1-877-536-7763 · www.lemproducts.com

REV 062008



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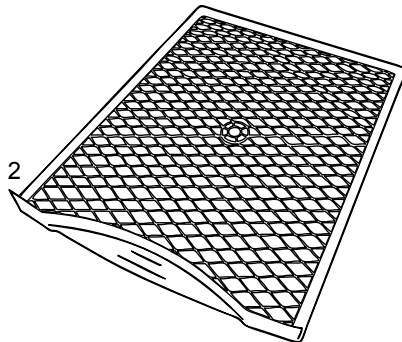


Control Panel

DRYING GUIDE		TEMPERATURE	
ITEM	°F	°C	
HERBS	95-125	35-52	
RAISING BREAD	110-115	43-46	
YOGURT	115	46	
VEGETABLES	120-135	49-57	
FRUIT & FRUIT ROLLS	135-145	57-63	
MEATS, FISH & JERKY	145-155	63-68	

Drying Guide

On/Off Power Switch



WARRANTY INFORMATION

SAVE THIS WARRANTY INFORMATION FOR YOUR RECORDS!

LEM warrants to the ORIGINAL RETAIL PURCHASER of this product that if operated in accordance with the printed instruction accompanying it, then for a period of 1 year from the date of purchase, the product shall be free from defects in material and workmanship.

The Warranty Card, along with a copy of the original receipt, must be received by LEM within 30 days from purchase date for the warranty to apply. Failure to send the completely filled out Warranty Card, along with a copy of the original receipt, will void the warranty.

The product must be delivered to or shipped freight prepaid to LEM for warranty services, in either its original packaging or similar packaging affording an equal degree of protection. Damage due to shipping is not the responsibility of the company. LEM charges a \$25.00 per hour bench charge. NOTE: No repairs will be started without the authorization of the customer. The return shipping cost to the customer will be added to the repair invoice.

LEM will repair (or at its discretion, replace) the product free of charge, if in the judgment of the company, it has been proven to be defective as to seller's labor and material, within the warranty period.

New or rebuilt replacements for factory defective parts will be supplied for one (1) year from the date of purchase. Replacement parts are warranted for the remainder of the original warranty period.

For non-warranty repairs, contact LEM's Customer Service at 1-877-536-7763 M-F 8am-5pm EST to obtain a Return Authorization Number (RMA Number). LEM will refuse all returns that do not contain this number. **DO NOT RETURN THE UNIT WITHOUT PROPER AUTHORIZATION FROM LEM.**

LIMITATIONS: The warranty is void if the product is used for any purpose other than that for which it is designed. The product must not have been previously altered, repaired, or serviced by anyone other than LEM. If applicable, the serial number must not have been altered or removed. The product must not have been subjected to accident in transit or while in the customer's possession, misused, abused, or operated contrary to the instructions contained in the instruction manual. This includes failure caused by neglect of reasonable and necessary maintenance, improper line voltage and acts of nature. This warranty is not transferable.

Except to the extent prohibited by applicable law, no other warranties whether expressed or implied, including warranty merchantability and fitness for a particular purpose, shall apply to this product. Under no circumstances shall LEM be liable for consequential damages sustained in connection with said product and LEM neither assumes nor authorizes any representative or other person to assume for it any obligation or liability other than such as is expressly set forth herein. Any applicable implied warranties are also limited to the one (1) year period of the limited warranty.

This warranty covers only the product and its specific parts, not the food or other products processed in it. **CUT ALONG THE DOTTED LINE AND SEND THE WARRANTY CARD ALONG WITH A COPY OF YOUR ORIGINAL PURCHASE RECEIPT TO:**

LEM Products
109 May Drive, Harrison, OH 45030

Register On-Line & Get Backwoods™ Seasoning FREE!



Product Warranty Registration

Please Print Clearly

Name _____

Address _____

City _____

State _____ Zip _____

Phone _____ Email _____

Product Purchased _____ UPC Code: 734494 _____

Product Purchased From: Catalog Internet Store _____

Product Purchased For: Personal Use Gift Work Purchased By: Male Female

1 Year Warranty covers parts and labor only.
Please keep your original sales receipt for service.
Return freight is the responsibility of the purchaser.
Toll Free: 1-877-536-7763 · FAX: 513-202-9494 · www.lemproducts.com/warranty

YOGURT

1 quart milk

1/2 cup powdered milk

2 Tbsp plain commercial yogurt (or 2-3 Tbsp of yogurt starter)

fruits & sweeteners

- In a saucepan mix milk, powdered milk together, heat to scalding.
- Remove from heat and let cool to 110°F (43°C).
- Mix the yogurt well with the cooled scaled milk (if using yogurt starter, add to 1/3 cup scaled milk and mix well, then return to the remaining milk).
- Set the dehydrator to 108°F (42°C) **NOTE: If the temperature is too high the yogurt will curdle. If the temperature is too low, the yogurt will take longer to thicken.**
- Pour the milk yogurt mixture into flat containers and cover with plastic wrap.
- Place the flat containers in the dehydrator for 2-4 hours or until thickened.
- Remove the yogurt from the dehydrator and allow to cool.
- Stir in the flavorings or fruits to taste.

PROBLEM SOLVING

MOISTURE IN THE STORAGE CONTAINER

CAUSE: Incomplete Drying. Food cut unevenly, causing incomplete or uneven drying.
Dried foods left at room temperature too long after cooling, cause moisture to re-enter the foods.

PREVENTION: Test food for dryness before removing from the dehydrator. Cut foods evenly. Cool quickly and package immediately.

MOLD ON FOOD

CAUSE: Incomplete drying. Food not checked for moisture content within a week. Storage container not air-tight. Storage temperature too warm/moisture in food. Case hardening may have occurred which means the food was dried at too high of a temperature and food was dried on the outside but not complete dried on the inside.

PREVENTION: Test several food pieces for dryness. Check the storage container within 1 week for moisture, then redry food if needed. Use air-tight containers for storage. Store foods in cool areas that are 70°F (21°C) or below. Dry foods at appropriate temperatures. Use the Drying Guide as a reference.

BROWN SPOTS ON VEGETABLES

CAUSE: Drying temperature too high. Vegetables were over-dried.

PREVENTION: Dry foods at appropriate temperatures. Use the Drying Guide as a reference. Check foods often for dryness.

FOOD STICKING TO THE TRAYS

CAUSE: Food was not turned over.

PREVENTION: After one hour of dehydrating, use a spatula and flip the foods.



COMPONENT LIST

DIAGRAM NUMBER	PART DESCRIPTION	PART NUMBER
	LEM 6 Tray Food Dehydrating System	873
	LEM 8 Tray Food Dehydrating System	874
1	Temperature Control Knob	873-1
2	Dehydrator Tray	873-2
3	Feet (4)	873-3

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ADDITIONAL ACCESSORIES FROM LEM

PRODUCT	CAT NUMBER
The Original Jerky Cannon®	468
LEM Jerky Gun	555
Backwoods Jerky Variety Pack	156
Professional Stainless Steel Mandoline Vegetable Slicer	829

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GENERAL SAFETY RULES



READ AND FULLY UNDERSTAND ALL INSTRUCTIONS AND WARNINGS PRIOR TO USING THIS UNIT. YOUR SAFETY IS MOST IMPORTANT! FAILURE TO COMPLY WITH PROCEDURES AND SAFE GUARDS MAY RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE. REMEMBER: YOUR PERSONAL SAFETY IS YOUR RESPONSIBILITY!

1. **CHECK FOR DAMAGED PARTS.** Before using the Dehydrator, check that all parts are operating properly and perform the intended functions. Check for alignment of moving parts, binding of moving parts, mounting and any other conditions that may affect the operation. Do not use if power cord is damaged or frayed.
2. Reduce risk of unintentional starting. Make sure the power switch is in the "OFF" position before connecting the Dehydrator to the power source.
3. **ALWAYS DISCONNECT** the Dehydrator from the power source before servicing, changing accessories or cleaning the unit. Unplug the Dehydrator when not in use.
4. **KEEP OUT OF THE REACH OF CHILDREN. NEVER LEAVE THE APPLIANCE UNATTENDED.**
5. The Manufacturer declines any responsibility in the case of improper use of the Dehydrator. Improper use of the Dehydrator voids the warranty.
6. Electrical repair must be done by an authorized dealer. Use only factory original parts and accessories. Modification of the Dehydrator voids the warranty.
7. **DO NOT** pull the power cord to unplug. Use care when using extension cords.
8. Be sure the Dehydrator is stable during use. All four feet should be secure on a level surface. The Dehydrator should not move during operation.
9. **DO NOT** operate the Dehydrator outdoors or near any flammable or combustible materials.
10. **DO NOT** block the air vents at the rear of the Dehydrator. Keep the Dehydrator at least 6" (15 cm) away from any wall to allow for proper air circulation.
11. **DO NOT** operate the Dehydrator on flammable surfaces such as carpeting.
12. **To prevent electric shock, DO NOT IMMERSE IN WATER OR LIQUID. Serious injury and electric shock could result. DO NOT use this machine with wet hands or bare feet. DO NOT operate near running water.**
13. **NEVER** open or remove the back panel of the Dehydrator.
14. Disconnect from power source before cleaning the components of this machine. **READ ALL DIRECTIONS** on how to clean this Dehydrator before attempting to clean it.
15. After cleaning, make sure Dehydrator is completely dry before reconnecting to the power source – if not; **ELECTRIC SHOCK** may result.
16. **DO NOT** operate the Dehydrator on a hot stove-top or inside an oven. **DO NOT** allow the power cord to drape over the Dehydrator or hot surfaces.
17. **BEWARE! Some surfaces may become very hot during use! Serious injury may result!**
18. **DO NOT** use while under influence of drugs or alcohol.
19. Household use only.

SAVE THESE INSTRUCTIONS!

Refer to them often and use them to instruct others.

APPLE & CREAM FRUIT LEATHER

6 Apples
1 cup Plain Non-Fat Yogurt

1/2 tsp Cinnamon

1/4 tsp Cloves

2-1/2 tsp Nutmeg

- Puree the ingredients in a food processor or blender until smooth.
- Place the fruit leather mats on the dehydrator racks.
- Spread the puree over the plastic mats until it is about 1/4" (0.6 cm) thick.
- Place the filled dehydrator racks in the dehydrator and dry until leathery and pliable but not sticky.

ORANGE JULIUS ROLL-UPS

1 1/2 cups Applesauce
2 tsp dried Orange Ground

1 small Apple, peeled, cored and chopped

1 1/2 tsp Vanilla

- In a blender mix all ingredients until pureed.
- Pour onto solid plastic mats; dry for 4 to 8 hours, or until leathery.
- Remove from sheets while still warm. Let cool slightly.
- Roll in plastic wrap and store in dark, dry cool place or in the freezer.

SUPER ENERGY BARS

1 cup Barley, soaked for 3 days
3/4 cup Dates

2 cups soft Wheat (sprouted 1 day)

3 Tbsp Raw Honey
1 tsp Cinnamon

1 tsp Vanilla

1 cup Walnuts, soaked & chopped

1/2 cup Almonds, soaked & chopped

- Process the barley, wheat and dates in a juicer using the solid plate.
- Add the honey, cinnamon, vanilla, walnuts and almonds. Mix well.
- Form the mixture into 1/4" (0.6 cm) bars and place onto a plastic mats on the dehydrator racks.
- Place the filled racks into the dehydrator for 6-8 hours, depending on the desired moisture and size of the bars.
- Halfway thru the dehydrating process, remove the plastic mats and turn the bars over.

NOTSO SUN-DRIED TOMATOES

7 lbs. of firm, ripe Roma Tomatoes, cleaned & stems cut out

1 tsp dried Basil

1 tsp dried Oregano

1 tsp dried Thyme

2 tsp Salt

- Cut the tomatoes into quarters.
- Scrape out all of the seeds without removing the pulp from the tomato.
- Sprinkle the seasonings over the tomatoes.
- Place the tomatoes, cut side up, directly onto the dehydrator racks.
- Set the dehydrator temperature to about 140°F (60°C).
- Place the filled racks into the dehydrator for 6-9 hours.
- A few hours thru the dehydrating process, gently turn the tomatoes over and press flat with your hand or a spatula. Repeat this step again in a few hours until dried.

CHEESY CORN CHIPS

1 cup whole kernel or creamed corn

1 tbsp chopped onion

1 cup freshly grated sharp cheddar cheese (the ready grated cheese is not as satisfactory for this)

1/2 cup diced red or green bell peppers

1/8 tsp cayenne pepper

1/8 tsp chili powder

Salt to taste

- Using a blender or food processor, mix all ingredients together at high speed.
- Spread mixture thinly onto plastic wrap
- Dry at 130°F (55°C) for approximately 10 hours or until dry on one side.
- Lift entire corn ring off of the plastic wrap, turn over and dry for two hours longer or until crisp.
- Break into pieces.

RECIPES

HAWAIIAN JERKY MARINADE

1 tsp Salt
1 Tbsp Brown Sugar
1 crushed Garlic Clove
1 lb. (0.5 kg) lean Meat, sliced into 1/8-1/4" (0.3-0.6 cm) thin strips

1 tsp ground Ginger
1/4 tsp Pepper
1/4 cup Soy Sauce

1/4 cup Pineapple Juice
1/8 tsp Cayenne Pepper

CAJUN JERKY MARINADE

1 cup Tomato Juice
1-1/2 tsp dried Thyme
1 tsp White Pepper
1 lb. (0.5 kg) lean Meat, sliced into 1/8-1/4" (0.3-0.6 cm) thin strips

1/2 tsp Garlic Powder
1-1/2 tsp dried Basil
2 tsp Cayenne Pepper (or more to taste)

1/2 tsp ground Black Pepper
1-1/2 tsp Onion Pepper

HOT JERKY MARINADE

1/3 cup Teriyaki Sauce
1 tsp ground Horseradish
1/2 tsp Chili Powder
1/4 tsp Tabasco Sauce
1 lb. (0.5 kg) lean Meat, sliced into 1/8-1/4" (0.3-0.6 cm) thin strips

2 tsp Brown Sugar
1 tsp Salt
1 Tbsp Olive Oil
2 Tbsp seeded & finely chopped Jalapeno Peppers

2 tsp ground Black Pepper
1/2 tsp Paprika
1 Tbsp minced Garlic

BURGUNDY JERKY MARINADE

2 cups Burgundy Wine
3 Tbsp Molasses Syrup
1 lb. (0.5 kg) lean Meat, sliced into 1/8-1/4" (0.3-0.6 cm) thin strips

1/2 cup Soy Sauce
1 Tbsp ground Black Pepper

3 Cloves Garlic, chopped

TURKEY JERKY MARINADE

1/4 cup Soy Sauce
1/4 tsp powdered Garlic
1 1/2 lbs. (0.7 kg) Turkey Breast, sliced into 1/8-1/4" thin strips

1 Tbsp fresh Lemon Juice
1/4 tsp Pepper
1/8 tsp Ginger

VENISON JERKY MARINADE

1/3 cup Soy Sauce
1/2 tsp Minced Garlic
1 lb. (0.5 kg) Venison, sliced into 1/8-1/4" (0.3-0.6 cm) thin strips

1 Tbsp Brown Sugar
1/2 tsp ground Black Pepper

1 tsp Salt

INSTRUCTIONS

- In a small glass bowl, combine all of the ingredients except the meat/poultry. Mix thoroughly.
- Place a layer of meat/poultry in a glass baking dish, spoon sauce mixture over each layer.
- Repeat until meat/poultry is 3-4 layers deep in the dish.
- Cover tightly and marinate for 6-12 hours in the refrigerator or overnight. Stir occasionally to keep the meat/poultry coated in marinade. The longer the meat/poultry stays in the marinade, the more the flavor will be absorbed into it.
- Remove the meat/poultry from the marinade, removing excess marinade.
- Lay the meat/poultry evenly onto the dehydrator trays, leaving 1/4" (0.6 cm) space between each strip of meat/poultry.
- Dry meat/poultry at 145-150°F (63-66°C) for 4-7 hours or until thoroughly dry.

NOTE: When using a Dehydrator, check the temperature of the Dehydrator with a dial thermometer before drying jerky. The minimum recommended temperature for drying meats is 145°F (63°C). Temperatures below 145°F (63°C) are not recommended. **IMPORTANT:** Before you place the meat in a dehydrator, it is highly recommended to heat the meat to 160°F (71°C) BEFORE the dehydrating process. This step assures that any bacteria present will be destroyed by wet heat. After heating to 160°F (71°C), maintain a constant dehydrator temperature of 130-140°F (55-60°C) during the drying process. You may need to blot fat droplets from the surface of the meat occasionally using a paper towel. Drying times may vary based on many circumstances including but not limited to: the relative humidity of the room, the temperature of the meat at the beginning of the drying process, the amount of meat in the dehydrator, leanness of meat, etc. Always allow Jerky to cool before taste testing.

CLEANING INSTRUCTIONS

! WARNING! Before cleaning or servicing the Dehydrator, make sure it is unplugged and the power switch is set to the "OFF" position.

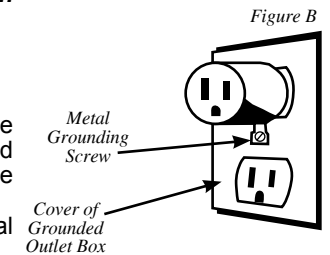
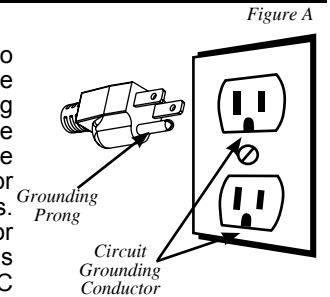
Clean the **Trays** and inside of the **Cabinet** before using the **Dehydrator** for the first time and after each use.

1. Set the **Power Switch** to the "OFF" position. Disconnect the electrical cord from the outlet.
2. Allow the **Dehydrator** to completely cool before cleaning.
3. Remove the **Trays** from the **Dehydrator Cabinet**.
4. Wipe the **Dehydrator Cabinet** clean (inside and out) with a damp sponge or soft cloth. Be careful not to splash water onto the **Heating Element** (located behind the **Screening** and the **Fan** in the back of the **Cabinet**) while cleaning the inside of the **Cabinet**. Water could damage the **Heating Element** and increases the risk of electric shock. **DO NOT** immerse the **Dehydrator** in water.
5. Clean the **Dehydrator Trays** with warm, soapy water. Rinse with clear water and dry immediately.

GROUNDING INSTRUCTIONS

GROUNDING

This appliance must be grounded while in use to protect the operator from electric shock. The appliance is equipped with a 3-conductor cord and a 3-prong grounding type plug to fit the proper grounding-type receptacle. The appliance has a plug that looks like Figure A. An adaptor, Figure B, should be used for connecting Figure A plugs to two-prong receptacles. The grounding tab which extends from the adaptor must be connected to a permanent ground such as a properly grounded outlet box as shown in Figure C using a metal screw. **DO NOT modify the plug in any way.**



EXTENSION CORDS

- Use only 3-wire extension cords which have 3-prong grounding-type plugs and a 3-pole cord connector that accepts the plug from the appliance.
- Use only extension cords having an electrical rating not less than the rating of the appliance.
- DO NOT use damaged extension cords. Examine extension cord before using and replace if damaged.
- DO NOT abuse extension cord and do not yank on any cord to disconnect. Keep cord away from heat and sharp edges. DO NOT allow the cord to drape over the edge of the workspace.

OPERATING INSTRUCTIONS

IT IS IMPORTANT TO READ & UNDERSTAND all of the instructions and safeguards prior to using the Dehydrator.

1. Operate the **Dehydrator** on a clean, dry surface.
2. Plug the **Dehydrator** into a standard 120 Volt, 60 Hz wall outlet.
3. Position the **Dehydrator** at least 6" (15 cm) from any wall during operation to allow for proper air circulation. **DO NOT** block the air vents at the rear of the **Dehydrator**.
5. Turn the **Dehydrator** "On" (-). When "On", the light should illuminate the **Power Switch**.
6. Preheat the **Dehydrator** for 5-10 minutes before loading food onto the **Dehydrator Trays**.
7. Remove any excess water from the food. (This can be done by patting the food with a paper towel or napkin.) Excess moisture may cause the **Dehydrator** temperature to drop.
8. Load the **Dehydrator Trays** with the items to be dried. Position the pieces so that they do not touch each other. Do not overlap or allow the product to touch. Allow ample space between the product for proper air circulation.
9. Water droplets may form on the surface of some products while dehydrating. These can be removed by blotting the product with a clean towel or paper towel.
10. Drying times may vary depending on several factors including relative humidity, air temperature and product thickness, temperature and fat content.

CHOOSING FOODS

- Use the best quality foods. Fruits and vegetables in peak season have more nutrients and more flavor. Meats, fish and poultry should be lean and fresh.
- Do not use food with bruises or blemishes. Bad fruits and vegetables may spoil the entire batch.
- Always use lean meats. Remove as much fat as possible before dehydrating.
NOTE: You can use a paper towel under meat when dehydrating to absorb fat.

FOOD SAFETY

There are basic rules to follow when handling food. They are **COOK, SEPARATE, CLEAN,** and **CHILL.**

COOK

It's crucial to cook food to a safe internal temperature to destroy bacteria that is present. The safety of hamburgers and other foods made with ground meat has been receiving a lot of attention lately, and with good reason. When meat is ground, the bacteria present on the surface is mixed throughout the ground mixture. If this ground meat is not cooked to at least 160°F to 165°F (71°C to 74°C), bacteria will not be destroyed and there's a good chance you may become ill.

Solid pieces of meat like steaks and chops don't have dangerous bacteria like E. coli on the inside, so they can be served more rare. Still, any beef cut should be cooked to an internal temperature of at least 145°F (63°C) (medium rare). The safe temperature for poultry is 180°F (82°C) and solid cuts of pork should be cooked to 160°F (71°C). Eggs should be thoroughly cooked too. If you are making a meringue or other recipe that uses uncooked eggs, buy specially pasteurized eggs or use prepared meringue powder.

SEPARATE

Foods that will be eaten uncooked and foods that will be cooked before eating **MUST ALWAYS** be separated. Cross-contamination occurs when raw meats or eggs come in contact with foods that will be eaten uncooked. This is a major source of food poisoning. Always double-wrap raw meats and place them on the lowest shelf in the refrigerator so there is no way juices can drip onto fresh produce. Then use the raw meats within 1-2 days of purchase, or freeze for longer storage. Defrost frozen meats in the refrigerator, not on the counter.

When grilling or cooking raw meats or fish, make sure to place the cooked meat on a clean platter. Don't use the same platter you used to carry the food out to the grill. Wash the utensils used in grilling after the food is turned for the last time on the grill, as well as spatulas and spoons used for stir-frying or turning meat as it cooks.

Make sure to wash your hands after handling raw meats or raw eggs. Washing hands with soap and water, or using a pre-moistened antibacterial towelette is absolutely necessary after you have touched raw meat or raw eggs. Not washing hands and surfaces while cooking is a major cause of cross-contamination.

CLEAN

Wash your hands and work surfaces frequently when you are cooking. Wash with soap and warm water for at least 15 seconds, then dry with a paper towel.

CHILL

Chilling food is very important. The danger zone where bacteria multiply is between 40°F and 140°F (4°C and 6°C). Your refrigerator should be set to 40°F (4°C) or below; your freezer should be 0°F (-17°C) or below. Simple rule: serve hot foods hot, cold foods cold. Use chafing dishes or hot plates to keep food hot while serving. Use ice water baths to keep cold foods cold. Never let any food sit at room temperature for more than 2 hours - 1 hour if the ambient temperature is 90°F (32°C) or above. When packing for a picnic, make sure the foods are already chilled when they go into the insulated hamper. The hamper won't chill food - it just keeps food cold when properly packed with ice. Hot cooked foods should be placed in shallow containers and immediately refrigerated so they cool rapidly. Make sure to cover foods after they are cool.

NOTE: Special considerations must be made when using venison or other wild game, as it can become heavily contaminated during field dressing. Venison is often held at temperatures that could potentially allow bacteria to grow, such as when it is being transported. Refer to the USDA Meat and Poultry Department for further questions or information on meat and food safety.

STORING JERKY

Wrap jerky in aluminum foil and store in a thick plastic food storage bag, or place jerky in a jar with a tight lid. Avoid storage in plastic containers or bags without first wrapping in aluminum foil or wax paper. Jerky should be stored in a dark, dry place between 50-60°F (10-16°C). You can store properly dried jerky at room temperature for 1 to 2 months. To extend the shelf life to up to 6 months, store jerky in the freezer. Be sure to label and date all packages.

FRUIT ROLL-UPS

1. Select ripe or slightly over-ripe fruits. Wash and remove blemishes, pits and skin.
2. Puree in a blender. Add yogurt, sweeteners or spices as desired. The puree should be thick in consistency.
3. Cover the **Dehydrator Trays** with plastic wrap.
4. Pour 1-1/2 to 2 cups of the puree onto the covered **Trays**. Carefully place the **Trays** in the **Dehydrator**.
5. The edges will dry quicker than the center, pour the puree thinner at the center of the **Tray**.
6. The average drying time for the fruit roll-ups is 4 to 6 hours.
7. Once the fruit roll-ups are shiny and non-sticky to the touch, remove them from the **Dehydrator** and allow them to cool.
8. Peel the fruit roll-up from the plastic wrap and roll into cylinders.

DRYING FLOWERS & CRAFTS

- The flowers should be dry to start with, best if picked after the dew has dried and before the night damp sets in. Dry the flowers as soon as possible after picking.
- The best condition for drying flowers is a dry, warm, dark, clean and well ventilated area, which makes a dehydrator an ideal setting. Flowers will retain the best color and condition when dried quickly.
- A low temperature should be used to retain the natural oils.
- Strip off the leaves. If you prefer to keep the foliage, discard any brown or damaged leaves.
- Place on the **Dehydrator Tray** in a single layer, avoid overlapping.
- Drying times will vary considerably depending on the size of the flower and the amount of foliage. Dry at 100°F (38°C).
- Dough art and beads can be dried in the **Dehydrator**. Temperatures may vary.

PRE-TREATMENT OF FOODS

As with most types of cooking, proper preparation is essential for successful results. Adhering to a few basic guidelines will greatly increase the quality of your dried foods and decrease the amount of time necessary to dry them.

Pre-treated foods often taste better and have a better appearance than non-treated foods. There are several methods to pre-treat food to prevent oxidation, which will darken apples, pears, peaches and bananas while drying:

- Remove any pits, skin or cores.
- Shred, slice or dice the food uniformly. Slices should be between 1/4" (0.6 cm) and 3/4" (1.9 cm) thick. Meats should be cut no more than 3/16" (0.5 cm) thick.
- Steam or roast meat to 160°F (71°C) and poultry to 165°F (74°C) as measured with a food thermometer (*available at LEM*) before dehydrating.
- The temperature of the **Dehydrator** must be maintained at 130-140°F (55-60°C) throughout the drying process.
- Drying fish into jerky requires a lot of attention. It must be cleaned and de-boned properly and rinsed thoroughly to ensure that all the blood is washed away. Steam or bake the fish at 200°F (93°C) until flaky before dehydrating.
- Soak cut fruit in either lemon or pineapple juice for a few minutes before placing on the **Dehydrating Trays**.
- Use an ascorbic acid mix which can be purchased in most health food stores or pharmacies. It may come in either powder or tablet form. Dissolve approximately 2-3 tablespoons in 1 quart (1 liter) of water. Soak the fruit slices in the solution for 2-3 minutes, then place on the **Dehydrating Trays**.
- Fruits with a wax coating (figs, peaches, grapes, blueberries, prunes, etc.) should be dipped in boiling water to remove the wax. This allows moisture to escape easily when dehydrating.
- Blanching can pre-treat food for dehydrating. Blanching does not destroy helpful enzymes and helps retain nutrients. There are two ways to blanch food:
 1. **WATER BLANCHING:** Use a large pan; fill it half way with water. Bring water to a boil. Place food directly into boiling water and cover. Remove after three minutes. Arrange food on the **Dehydrating Trays**.
 2. **STEAM BLANCHING:** Using steamer pot bring 2-3" (5-7 cm) of water to a boil in bottom section. Place food in steamer basket and steam for 3-5 minutes. Remove steamed food and arrange on **Dehydrating Trays**.

TIPS

- Do not overlap foods. Lay foods flat on the **Dehydrating Trays**.
- Check dryness after 6 hours, then check every 2 hours until crisp, pliable or leathery depending on the product.
- Check foods to make sure they are completely dry before removing. Open or cut down the middle of a few samples to check internal dryness. If the food is still moist, dehydrate longer.
- Label each container with the food name, date of drying and the original weight. Keep a journal to help improve drying techniques.
- Proper storage is essential to maintain quality food. Package the food when cool. Foods can be kept longer if stored in a cool, dark, dry place. The ideal storage temperature is 60°F (16°C) or lower.
- Place dried foods in plastic freezer bags before storing in metal or glass containers. Remove as much air as possible before sealing.
- Vacuum sealing is ideal for keeping dried foods.
- Remember, foods will shrink approximately 1/4 to 1/2 their original size and weight during the dehydration process, so pieces should not be cut too small. One pound of raw meat will yield approximately 1/3 lb. (0.2 kg) to 1/2 lb. (0.2 kg) of jerky.
- Use the **Drying Guide** on the **Control Panel** as a reference for proper temperature settings. If the heat is set too high, food may harden and dry on the outside...yet be moist on the inside. If the temperature is too low, the drying time will increase.

REHYDRATING

While it is not necessary to reconstitute your dried foods, you can do so with ease. Vegetables can be used as a side dish or in recipes very effectively after being reconstituted in the following way.

- Dehydrated food can be re-hydrated by soaking in cold water for 3-5 minutes. Use 1 cup of water for 1 cup of dehydrated food. Once re-hydrated, the food can be cooked as usual. Soaking foods in warm water will speed up the process, however, it may result in loss of flavor.
- Dehydrated fruits and vegetables can be soaked in cold water for 2-6 hours in the refrigerator. **WARNING! Soaking at room temperature allows harmful bacteria to grow.**
- Do not add seasoning. Adding salt or sugar during re-hydration may change the flavor of the food.
- To make stewed fruits or vegetables, add 2 cups of water and simmer until tender.
- Consume dehydrated foods as soon as possible once the storage container is opened. Keep any unused portions in the refrigerator to avoid contamination.

MAKING JERKY

Your meat should be as lean as possible. Using lean meat will help the meat dry faster and aid in cleanup by decreasing fat drippings. Ground meat should be 80% to 90% lean. Ground turkey, venison, buffalo and elk are other excellent choices for jerky.

Jerky seasonings are available for all tastes (*available at LEM*), or you can get creative and make your own. Whenever you make jerky, you should cure the mixture with cure (sodium nitrite) (*available at LEM*). The cure is used to help prevent botulism during drying at low temperatures. Follow the manufacturer's directions on the cure packet.

Keep raw meats and their juices away from other foods. Marinate meats in the refrigerator. Do not leave meats un-refrigerated. Prevent cross-contamination by storing dried jerky away from raw meat. ALWAYS wash hands thoroughly with soap and water before and after working with meat products. Use clean equipment and utensils.

Keep meat and poultry refrigerated at 40°F (5°C) or slightly below; use or freeze ground beef and poultry within 2 days; whole red meats, within 3 to 5 days. Defrost frozen meat in the refrigerator, not on the kitchen counter.

Special considerations must be made when using venison or other wild game, as it can become heavily contaminated during field dressing. Venison is often held at temperatures that could potentially allow bacteria to grow, such as when it is being transported. Refer to the USDA Meat and Poultry Department for further questions or information on meat and food safety.

When using a **Dehydrator**, check the temperature of the **Dehydrator** with a dial thermometer (*available at LEM*) before drying jerky. The minimum recommended temperature for drying meats is 145°F (63°C). Temperatures below 145°F (63°C) are not recommended. **IMPORTANT:** Before you place the meat in a dehydrator, it is highly recommended to heat the meat to 160°F (71°C) beginning the dehydrating process. This step assures that any bacteria present will be destroyed by wet heat. After heating to 160°F (71°C), maintaining a constant dehydrator temperature of 130-140°F (55-60°C) during the drying process is important because:

- 1.) the process must be fast enough to dry food before it spoils; and
- 2.) it must remove enough water so that microorganisms are unable to grow.

If you are using a marinade, shake off excess liquid before placing the meat in evenly spaced single layers approximately 1/4" (0.64 cm) apart on the **Dehydrator** racks.

Dry meat at 145-150°F (63-66°C) for 4-7 hours. You may need to blot fat droplets from the surface of the meat occasionally, using a paper towel. Drying times may vary based on many circumstances including but not limited to: the relative humidity of the room, the temperature of the meat at the beginning of the drying process, the amount of meat in the dehydrator, leanness of meat, etc. Always allow jerky to cool before taste testing.