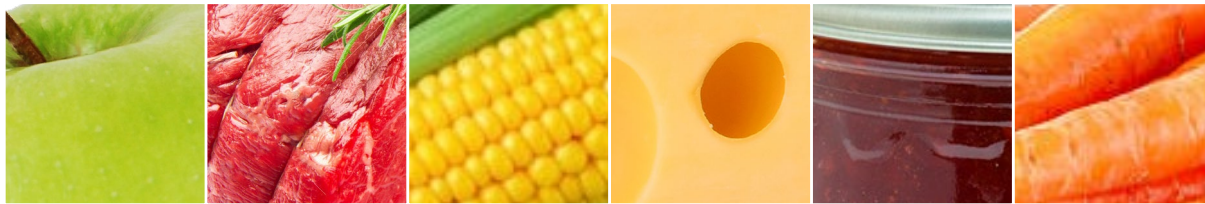


ENHANCING THE SAFETY OF LOCALLY PREPARED FOODS



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What do I need to know to sell PACKAGED MEALS (refrigerated/frozen) at the farmers market?

What are packaged meals (refrigerated/frozen)?

A meal that has been prepared, fully cooked, packaged and refrigerated or frozen with the intent of being sold as a packaged meal, for the consumer to prepare at home. Some examples of these include:

- ▶ Soups & stews
- ▶ Meat products such as BBQ
- ▶ Egg rolls & dumplings
- ▶ Macaroni and cheese
- ▶ Lasagna and other casserole dishes

*** ALL Packaged, refrigerated or frozen meals will require inspection of the facility by the Virginia Department of Agriculture and Consumer Services (VDACS).

***Meals prepared and served on site are regulated through Virginia Department of Health.

Why prepare packaged meals (refrigerated/frozen) meals?

Meal-sized portion products appeal to many consumers that do not wish to produce more food than they intend on consuming for a given meal. Packaged meals also provide convenience and timesavings.

What are the steps if I want to produce packaged meals (refrigerated/frozen) for sale?

- 1) Complete a food safety course - For example ServSafe™ for Managers (which is provided by many Extension offices). This is not a regulatory requirement for packaged foods, but a food safety course will provide a thorough background in safe food handling practices.
- 2) Decide where you are going to produce your product. Please note that meat based meals can not be prepared in a home kitchen.
 - Out of your inspected home kitchen?
 - Out of an inspected community or commercial kitchen?

- 3) Familiarize yourself with the regulatory process of starting a food business.
Refer to VDACS Home and Commercial Kitchen based business website for more information.
- 4) Complete and submit the correct application that pertains to where you will be producing your refrigerated or frozen food (Application for Home Food Processing Operation or Application for a Commercial Kitchen Food Processing Operation)
- 5) After you submit your application, VDACS will contact you with further questions and/or to schedule an inspection when your application is considered complete.
- 6) Comply with all regulatory requirements including product label requirements by VDACS.

Note:

Vacuum Packaging and Botulism

Vacuum packaging has gained popularity now that it is easy to purchase the equipment. However, vacuum packaging creates a package atmosphere that allows the organism that causes botulism to grow. If you wish to vacuum package your product, you will be required to apply for a variance, which includes writing a food safety plan to address the hazards of vacuum packaging. To decrease food safety risk, the product should be sold frozen.

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What are the most important food safety steps I need to consider when preparing my product?

- 1) Practicing proper personal hygiene including handwashing.
- 2) Using proper cleaning and sanitation practices.
- 3) Using proper temperature control.
- 4) Purchasing from approved, reputable suppliers.

What are some guidelines for preparation of packaged meals (refrigerated/frozen)?

- 1) Cook your product to the correct internal temperature. Different products require different temperatures. Be aware of the proper internal temperature needed for your product. For instance, mixed casserole dishes need to be heated to an internal temperature of 165° F.
- 2) Cool your cooked foods as quickly as possible. Proper cooling is important to prevent growth of microorganisms. The initial cooking of the food kills potentially harmful bacteria, but cooling the food is also an important step. You want to cool your product evenly to make sure your food is not in a temperature range that allows for bacterial growth (41°-135° F). In addition, the quicker food is cooled, the higher the quality.

It is best if cooked food can be transferred hot (above 160° F) to its final package before cooling, or cooked then cooled in its final package (as in the case of a casserole in a covered foil pan). If the food is cooled before transferring it to its final package, care should be taken to ensure that the food is not contaminated during the packaging.

Recommendations for proper cooling of food are:

- Using a blast chiller – a blast chiller is a specific type of cooler that quickly cools/freezes food. Blast chillers work far more efficiently than a consumer's refrigerator freezer. You may be able to find blast chillers in commercial kitchens.



- Dividing finished product into separate smaller containers for food to cool quickly. Food can also be transferred to a shallow pan to spread food to a shallower depth before refrigeration. Food placed into containers at a depth of 2 inches or less allows for quicker cooling.
- Placing containers with hot food into an ice water bath, and stirring product will speed up cooling. Using an ice/cooling wand for stirring can increase the speed of cooling. Ice wands can be purchased through most restaurant supply companies.

Food must be cooled from 135° F to 70° F (57° C to 21° C) within two hours.

Food must then be cooled from 70° F to 41° F (21° C to 5° C) or lower in an additional four hours.

Note: If food has not reached 70° F (21° C) within the first two hours, the food must be reheated to 165° F and cooled again. Total cooling of food should not exceed 6 hours.

For more information, refer to the VCE publication entitled Required Food Labeling Information.

Be sure to emphasize instructions for reheating before consumption. Packaged meals (refrigerated/frozen) must be reheated to an internal temperature of 165° F (74° C). Instructions on reheating must ensure that 165° F (74° C) internal temperature is reached.

Your label should also include a "Keep Refrigerated" or "Keep Frozen" statement. This statement should be prominent on the main display panel so that consumers can easily see it.

How should I store/sell my packaged meals (refrigerated/frozen) at the market?

Mechanical refrigeration is the best way to control the temperature for storage. However, if ice is used to keep your packaged meals cold, the following requirements should be met:

- ▶ Packaged foods that are subject to the entry of water because of the nature of packaging, wrapping, or container, cannot be stored in contact with ice or water.
- ▶ If ice is used, it must be done in such a way that the water from melting is constantly draining away from the product and into a properly designated area or in a container.
- ▶ Vendors who sell refrigerated foods are required to have a thermometer to verify food is being maintained at or below 41° F.
- ▶ Frozen foods that are labeled as "Keep Frozen" must remain frozen at the market and should not be allowed to thaw. Use mechanical freezers if possible; however, dry ice may be used to maintain freezing temperatures. Be aware that dry ice can make certain package material brittle (especially plastic).

- 3) Store cooled packaged meals (refrigerated/frozen) in appropriate covered and sealed containers. Examples of containers can include foil or plastic that have been approved for food use.
 - Refrigerated meals must be stored at a temperature of 41° F (5° C) or below.
 - Frozen meals should be stored in the freezer so that they remain frozen. Temperatures will vary depending on the type of food.
 - Use a thermometer to check temperature.
- 4) Label all packaged food items clearly. Labelling should include:
 - Statement of identity (product identity)
 - Net weight





- Ingredients
- Name & Address of manufacturer
- List of allergens
- Storage instructions
- Best by dates
- Storage and safe handling instructions

How do I know my product's shelf life?

Due to the risk of *Listeria monocytogenes*, regulation dictates that your refrigerated food product has a seven-day shelf life (FDA, 2017).

If you want to label your product with a shelf life greater than 7 days, you must provide documentation to your state's regulatory agency (VDACS or VDH). To do this, you must prove that you have control over the *Listeria monocytogenes* microorganism within your commercial kitchen (food processing facility). This can be done by working with a food scientist or process authority using any of the methods below.

- ▶ Determine if there is anything inherent in your food product that may prevent the growth of *Listeria* spp.
- ▶ Determine methods to limit the growth of *Listeria* spp. in your food product.
- ▶ Develop an environmental monitoring program to show that your sanitation procedures are effective against *Listeria monocytogenes* growth in your facility.

For more information, please refer to the Grocery Manufacturers Association's "Listeria monocytogenes: Guidance on Environmental Monitoring and Corrective Actions in At-Risk Foods" (GMA 2018).

References:

- GMA (Grocery Manufacturers Association). 2018. *Listeria Monocytogenes: Guidance on Environmental Monitoring and Corrective Actions in At-Risk Foods*. Washington, DC: GMA.
- FDA (Food and Drug Administration). 2017. *Food Code*, 9th edition, chapter 3, section 3-50117. Available at: <https://www.fda.gov/food/fda-food-code/food-code-2017>