

Existing Food Facilities Planning to Freeze, Dry or Otherwise Preserve Fresh Foods for Sale or Service

Minnesota Department of Agriculture; Minnesota Department of Health; University of Minnesota Extension

Introduction

Does your menu include fresh food items that are dried, frozen, or vacuum packed in your facility or do you sell these items in your business? Are you planning to expand your menu or business to include fresh food items preserved by you?

If so, there are a number of food safety and regulatory requirements to consider.

Many of these requirements are the same whether the fresh foods come from your regular sources, or from new sources of locally produced food. If you would like to sell your dried or frozen produce or vacuum-packed meals as retail items as well as serving them, other regulations may apply.

This fact sheet provides a brief discussion of these food safety and regulatory issues, and links to websites for more information.

Regulation and Licensure

Before changing your menu or expanding your business by using new foods or methods, you should always check with the state or local regulatory authority that licenses and inspects your facility. They can help you to determine whether there are training, licensing, or permit requirements that you must follow before expanding your business or menu.

Find state and local licensing contacts at: <http://www.health.state.mn.us/divs/eh/food/license/locals.pdf>

Product, Facility, and Equipment

Based on the product(s) and the recipes you provide for those products, your licensing authority can also help you to determine whether you have the space for storage and production of those food items, and if you need additional commercial equipment for processing or storage.

Approved Source

MN Food Code: Minnesota Rules, Chapter 4626:
<https://www.revisor.mn.gov/rules/?id=4626>

The Minnesota Food Code requires that all food sold or served to the public must be obtained from an approved source. The Food Code also contains specific regulations for approved source purchasing of various foods by a licensed food business:

Produce: Can be purchased from an approved source or directly from an unlicensed grower, if the food is grown on the seller's own or rented land.

Milk and milk products: Must be processed at an approved milk processing plant (dairy), and must be pasteurized.

Fish: Must be commercially caught.

Wild Mushrooms: Must be from an approved source. See Wild Mushroom Fact Sheet at: <http://www.health.state.mn.us/foodsafety/index.html>

Meat: Must be processed at a USDA or Minnesota "Equal To" plant.

Eggs: Must be candled and graded as grade B or better, with shells intact.

Freezing

University of Minnesota Extension (<http://www.extension.umn.edu/distribution/nutrition/dj0555.html>) offers directions for safe freezing of fresh fruits and vegetables, including this basic information:

- Fresh fruit and blanched vegetables can go into freezer-type, food-grade plastic bags or containers. Additional rules and regulations apply, if produce will be vacuum packed.
- Blanched or cooked vegetables should be cooled and frozen quickly.
- The freezer must operate at 0°F or lower at all times.
- Thaw frozen foods under refrigeration (best) or in the microwave, or use them frozen (e.g., as with cooked vegetables and fruit pies).

Drying

Many kinds of fresh fruit, vegetables, and herbs can be dried. See:

<http://www.uga.edu/nchfp/how/dry.html>.

- Pre-treat fruit with ascorbic acid, honey, or fruit-juice dip for best color and flavor.
- Blanch or steam vegetables to preserve color, texture, and taste. Correct blanching times will be listed in your recipe.
- Follow drying times exactly, removing about 20% of moisture.
- Test for dryness: Cut pieces in half. It shouldn't look moist and shouldn't be sticky. You should not be able to squeeze any moisture from the fruit.
- After drying, conditioning fruit is the process used to equalize moisture and reduce the risk of mold growth. To condition fruit:
 - Pack loosely in covered jars.
 - Let stand for seven to 10 days. Excess moisture is absorbed by the drier pieces.
 - Shake jars daily to separate the pieces and check for moisture condensation.
 - If condensation develops, dry again.
- Store in airtight containers so moisture doesn't rehydrate the product allowing microbes to grow.
- Dried foods last longer in cooler temperatures. Store up to one year at 60°F or for six months at 80°F.

Note: Check recipe with your licensing authority to determine whether any dried food (e.g., meat or fish) requires refrigeration during processing, storage, or display.

Reduced-Oxygen Packing

There are several methods of reduced-oxygen packaging (ROP), including vacuum packaging, modified atmosphere packaging, controlled atmosphere packaging, cook-chill, and sous-vide packaging.

The Minnesota Food Code states that a food establishment that packages potentially hazardous food using ROP must have a Hazard Analysis and Critical Control Points (HACCP) plan.

Minnesota Department of Agriculture offers online training modules for cook-chill and vacuum packaging at: <http://www.mda.state.mn.us/food/business/meat-poultry-training-modules/vacuum-packaging.aspx> and <http://www.mda.state.mn.us/en/food/business/meat-poultry-training-modules/cookchill-food-safety.aspx>.

University of Colorado offers: A Practical Guide to Sous Vide Cooking at: <http://amath.colorado.edu/~baldwind/sous-vide.html>.

Basic Food Safety Requirements

- Thoroughly wash fresh foods before preservation.
- Wash hands well and often.
- Make sure that work surfaces and equipment are thoroughly cleaned and sanitized.
- Label and date all packages and jars.
- Discard moldy canned goods and those with a broken seal; bruised or damaged foods and those that are not fresh; dried-out or freezer-burned foods.

“WHEN IN DOUBT, THROW IT OUT!”

<http://www.mda.state.mn.us/food>

(651) 201-6027 • 1-800-967-AGRI

www.health.state.mn/divs/eh/food/fs/index.html

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