

#### **PennState Extension**

HOME | FOOD SAFETY AND QUALITY | HOME FOOD SAFETY | FOOD PRESERVATION | PRESERVING SOUP SAFELY

# **Preserving Soup Safely**

#### Learn about safe methods for canning or freezing soup at home.

ARTICLES | UPDATED: NOVEMBER 9, 2017



The convenience of canned soup makes cooking and meal preparation easier on busy days. Because of the convenience of canned soup, many food preservers would like to reproduce soups found in the deli or supermarket. However, there are some commercially prepared foods that just cannot be

reproduced safely by the home canner. Creamed soups are not suitable for home canning because their ingredients interfere with the proper transfer of heat during the processing step and can result in food borne illness. Freezing some soups is a safer option.

### **Problem Ingredients in Canned Soup**

Adding flour or other thickening agents to a product for home canning, prevents the heat from penetrating to the center of the jar interfering with safe processing to destroy the bacterial spores that cause botulism. Never add thickening agents to a home canned product. Wait until you are ready to prepare the food for serving and then add the flour, cornstarch, or other thickening agent you are using. The only exception to this rule is when a scientifically research tested recipe calls for Clear Jel<sup>®</sup> as in pie fillings or small amounts of thickener in a few relish recipes. It is not safe to just add starch to any recipe or to create your own recipe.

Butter, milk, cream, cheese and other dairy products are low acid foods that should never be home canned. Again, add butter and milk to soup just before serving. Products high in starch also interfere with heat processing. Thus, add noodles or any type of pasta, rice, or dumplings to canned soups or stews at serving time. Avoid using noodles, alphabet noodles, spaghetti, or other pasta, rice, barley, etc to canned soups.

# Safe Soups to Can

So what soups can be canned? Vegetable soups in a broth base may be safely canned using the process time for the ingredients that takes the longest process time for the individual ingredients in the soup. Most soups will take 60 to 90 minutes to process in a pressure canner depending upon size (pints or quarts) and ingredients. Never can soup in half-gallon containers. Use caution to avoid packing ingredients too solidly in the jars. For vegetable soup, fill the jars half full of solids, add broth allowing 1 inch headspace and process in a pressure canner. There needs to be space for the hot liquid to circulate between the food particles. Pieces of cooked beef or chicken can be added to the vegetables to make a vegetable meat soup. Thickened or creamed tomato soup should not be canned. Instead, can tomato juice, tomato vegetable juice blend, or crushed tomatoes (without added vegetables). When you want to make the soup, open the jar of tomato product, add whatever seasoning vegetables and thickeners, desired. A good cream of tomato soup is made by pouring the heated tomato mixture into a heated white sauce.

Avoid canning pumpkin, winter squash, broccoli, or cauliflower soup. These pack together and contain ingredients that interfere with safe processing. There are no scientifically research tested recipes for these soups.

## **Freezing Soup**

How can you preserve soup safely? Freeze it. Although freezing temperatures do not kill bacteria, microbial growth stops in the freezer. Using a modified starch suitable for low temperatures such as ThermFlo<sup>®</sup> will help prevent separation of a thickened soup. Soups made from fall vegetables such as pumpkin, butternut squash, cauliflower, or broccoli are flavorful when frozen. It is also safe to freeze vegetable and meat soups that contain pasta, rice, or noodles. Just remember to allow time for frozen soup to thaw in the refrigerator; or if it is defrosted in the microwave oven, it should be heated and eaten immediately. © 2020Penn State Extension