

Canning

Canning uses a water bath to cook (denature proteins, render fat, pasteurize) food in glass jars with special lids that 'snap' down to show they are properly sealed.

Pasteurisation is 70°C for 2 min. This kills all normal bacteria, including botulism but not botulism spores. The botulism toxin is destroyed quickly after 80°C. Killing the spores takes superheated water; 15 PSI (121 °C) for 3 min or 10 PSI (115 °C) for longer. Thus most canning processes are much longer to ensure it is done.

This can't be done in a normal pot at normal pressures. The exception to this is highly acidic foods - like pickles - the acidity kills the spores.

The pressure process can be done in a specialty pot often called a pressure canner.

Typical Meat Canning Parameters

jar	contents	normal canner	pressure canner
quart	32 oz 2 lbs (<1 kg)	4 hrs	1 hr 30 min
pint	16 oz 1 lb (<0.5 kg)	3 hrs	1 hr 15 min

Soups

I've been able to can leftovers - but I've never been able to make soup with the canning process. It always tastes flat.

Meat - lean

Some people brown their meat first in a frying pan to allow them to pour off as much fat as they wish.

Remove as much fat as possible.

Pack jars with stew meat or ground meat (hamburger).

Leave additional headspace.

Meat will sink after canning, fat will float.

Seal and Can normally in a pressure canner.

Meat - reg

Pack jars with stew meat or ground meat (hamburger).

Leave additional headspace for the extra fat.

Meat will sink after canning, fat will float.

Seal and Can normally in a pressure canner.

Meatloaf

Like soups - I've never been able to get the canning process to cook a meatloaf properly.

Baked Beans

Like soups - I've never been able to get the canning process to cook beans properly.