

HAYBOX COOKERY

(AKA Fireless Cooking, Retained-Heat Cooking, Wonder Box, Ice Box Cooking, Thermal Cooking)

WHAT IS A HAYBOX? Simply an insulated box used for slow cooking. A haybox may also be used to keep pans or dishes of food or water warm or to keep food cold for short periods of time.

WHY USE HAYBOX COOKERY? Haybox cookery is easy and inexpensive to make, saves fuel and money, it cooks food well, can be left unattended, is portable and it can't overcook or burn food.

WHAT CAN I COOK IN A HAYBOX? The types of food which cook well in a haybox include soups, stews, sauces, grains, vegetables, milk puddings, stock, steamed breads, meats, etc. Keep in mind it cooks by moist heat. It won't roast, broil, braise, sauté, or bake crusty loaves.

WHAT MATERIALS DO I NEED TO MAKE A HAYBOX?

1. **INSULATION.** Traditionally, hay was used as the insulating material as it was easily available and cheap, but it has the disadvantage of being messy and needing to be renewed fairly frequently. Any loose insulation can be packed in a bag or pillowcase to minimize messes.

Common insulating materials that can be used today are crumpled newspaper, polystyrene (packing peanuts or bean bag filler), towels, blankets, cardboard, aluminum foil, rigid foam etc. It should be four inches thick unless using an icebox, then only 1-2 inches thick. A pillow for the top works great. A wonderbox is a fabric box and lid filled half full of polystyrene that can be molded around your pan. They are easy and inexpensive to make. (See Janiece Sloan for pattern & instructions.)

2. **CONTAINER.** A box or camping cooler may be used to hold the insulation in. If using a wonderbox, blankets or towels may not be necessary.
3. **COOKING POT.** A cooking pot with a well fitting lid, with two handles on the sides. It is best not to use a pan with just one long handle.

HOW DO I USE A HAYBOX? Bring the contents of the pan to a boil and put on the lid and simmer for 3 - 5 min (exception beans 10-15 min, larger cuts of meat and dense foods 15-25 min). Meat must be heated through to the center before placing in the cooker. Quickly open the box and put the pan inside. Make sure pan is completely insulated and quickly cover the lid of the box to prevent heat from escaping. If using a wonderbox, make sure there are no gaps where heat can escape. Cooking will continue at a little below simmering point.

Do not use a large pot for a small amount of food. The pot should be 2/3- 3/4 full so that the remaining air space does not cool off the contents. Or in other words, the more food or liquid that you have in a pot, the longer and better it will cook. Foods with little liquid or cooked in smaller pots may not retain heat for long periods as it has less thermal mass. If the pan is removed during cooking for any reason, such as to stir the contents, bring it to a boil again before replacing it. It is also advisable to boil meat dishes for a couple of minutes before serving them.

HOW LONG DOES IT TAKE FOR FOOD TO COOK? Most foods will be done within 2-3 hours. If you check it after 4 hours and it isn't done, you may need to bring it to a boil again. Beans generally need to be boiled longer to begin with, or boiled again at the end to completely soften. It is fine to leave the food in the haybox much longer, even up to 8-12 hours. It cannot overcook. With a little experience, you may find that you prefer certain foods cooked for certain times. It is largely a personal choice and may vary from person to person or cooker to cooker according to the differences in equipment.

DO I NEED TO WORRY ABOUT THE SAFETY OF MY FOOD? Pathogens can grow in food that has dropped below 140 degrees. When assembled properly, using the right proportion of food and water to the pot and simmered for the appropriate amount of time, the haybox cooker should retain temperatures above 140 degrees for 5 hours minimum and usually longer. Cooking overnight (10-12 hrs) is commonly done without any problems. You will most often find that it is still steaming when you take it out. If it seems to have cooled off, bring it back to the boiling point before tasting it. Add more liquid if needed before reheating. Cereals cooked overnight may be reheated in the top of a double boiler over boiling water. It is always best to check the food about 15 minutes before you intend to serve it. That gives you time to correct the seasonings or bring the food to a simmer if it has cooled. When cooking meat or poultry that has been frozen, you need to be sure that it is completely defrosted before cooking it.

ARE THERE ANY TIPS FOR ADAPTING RECIPES? Most recipes will require less liquid because the steam is trapped in the kettle and does not evaporate. This is a matter of judgment, but often the liquid can be reduced by 1/4 to 1/3 of the amount called for in a recipe. A few recipes will not have enough liquid to retain the heat and may need more liquid added, ideally to half cover the ingredients. So that your meat does not taste watered down, use broth, tomato juice or a combination of liquids to enhance the flavor. The sauce may always be thickened afterwards. Remember that the cooking time is longer in the slow cooker, often by about one and a half the amount of time the original recipe required. Oven cooking bags are useful for protecting foods from being submerged in water. This is commonly used for bread or meats. Meats will cook in their own juices and will be juicy and tender. A trivet is often helpful to keep foods off of the bottom of the pan while simmering on the stove or for setting a pot of food inside the pot for steaming, such as a 42 ounce juice can with an aluminum foil lid fastened with a rubber band for cooking breads, meatloafs and puddings, etc.

SOME HELPFUL WEBSITES FOR MORE INFO ON RETAINED-HEAT COOKING

General info/links: http://solarcooking.wikia.com/wiki/Heat-retention_cooking

Wonderbox pattern, sewing instructions, recipes, pictures, links: <http://ourldsfamily.com/wonderbox>

Fireless cookbooks from the late 1800's and early 1900's that can be viewed online/downloaded:

<http://www.archive.org/stream/firelesscooker00huntrich>

<http://www.archive.org/stream/bookofcaloricfir00calorich>

<http://www.archive.org/stream/duplexcookbookco00durhiala>

<http://www.archive.org/details/firelesscookerho00love>

<http://www.archive.org/stream/highlivingrecipe00mcla> (to view book)

<http://www.archive.org/stream/simplecookingofw00richrich>