



## Solar Water Pasteurization or Cooking

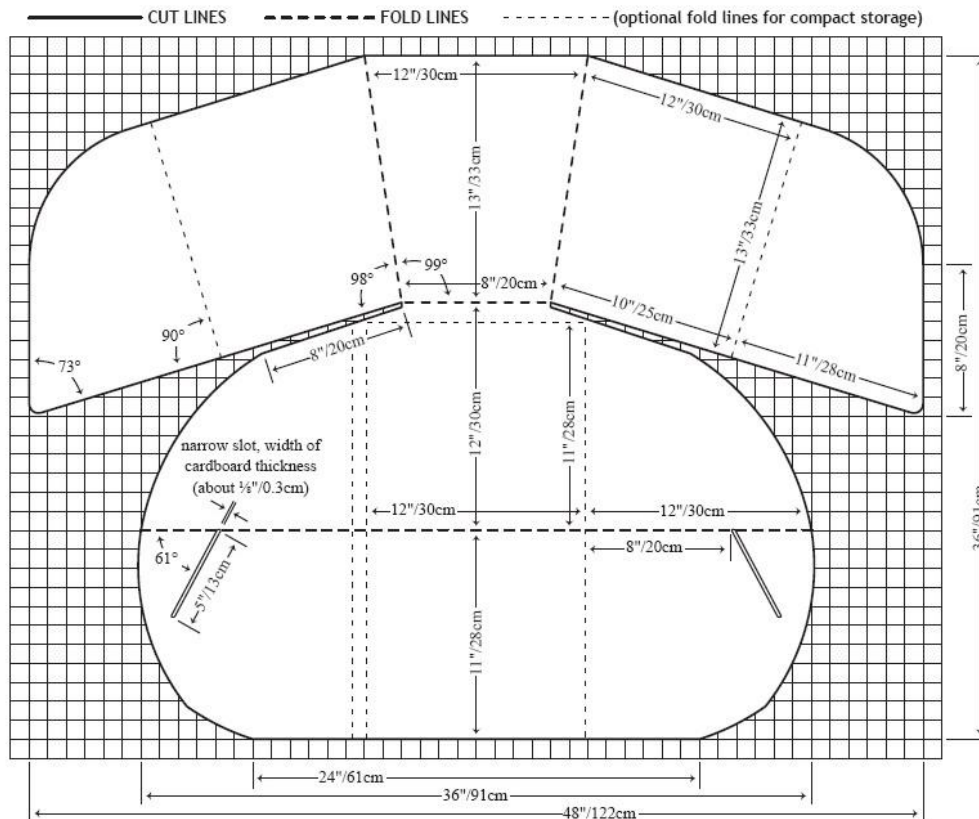
Solar cookers are an easy and affordable method to cook your food and purify your water. They allow you to do so without requiring the use of wood, coal, or dung. This reduces deforestation, CO2 emissions, and does not cause respiratory health problems.

### Materials:

- ✓ Corrugated cardboard: 3x4 Feet
- ✓ Aluminum foil: 1x10 Feet
- ✓ Water based glue
- ✓ Paintbrush (to apply glue)
- ✓ Knife
- ✓ Pencil and ruler
- ✓ Clamp

### Building Instructions:

1. Use pencil and ruler to map out cutting and folding lines
2. Cut two slots - one cut on each side of the rounded section
  - ✓ Be sure to make slots narrow so that corners of the winged sections fit snugly
3. Score the fold lines by using a blunt edge
  - ✓ This will make it easier to fold the cardboard for compact storage)



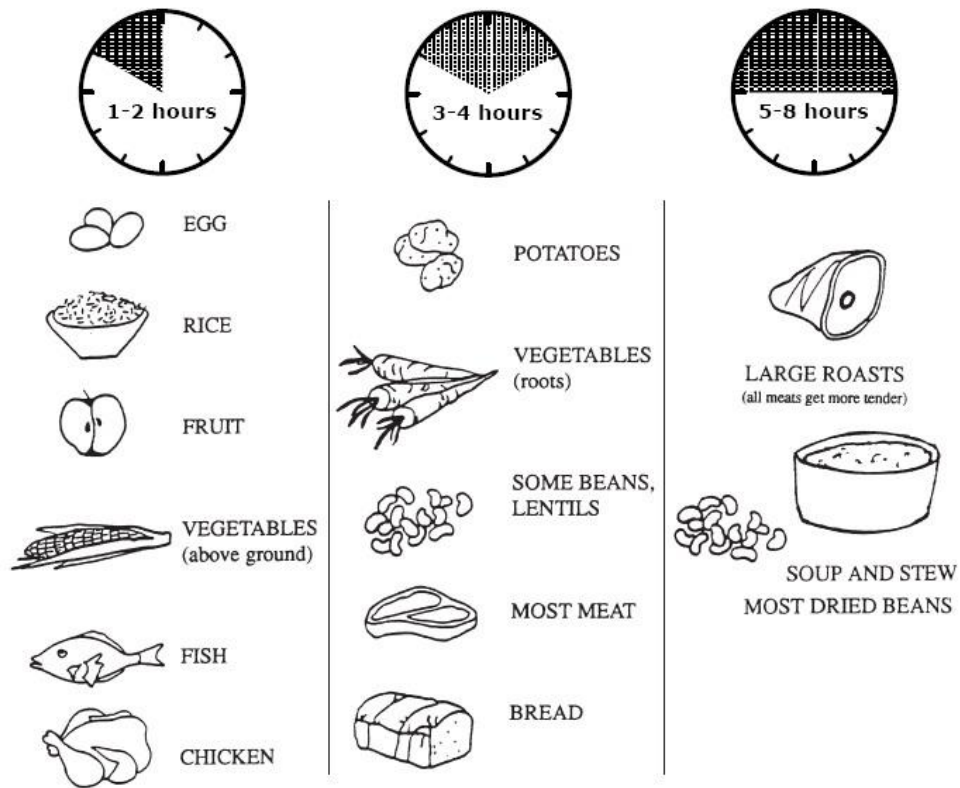
## Instructions:

1. Do not use petroleum or rubber based glues
2. Make the 1:1 ration of glue and water
3. Homemade glue can be made by combining Cassava flour & water which is cheaper than regular glue
4. Use paintbrush to spread glue onto the dull side of the aluminum foil
5. Apply sheets of aluminum foil to the cardboard surface
6. Smooth out foil to avoid wrinkles
7. Allow glue to fully dry before using

## Cooking Instructions

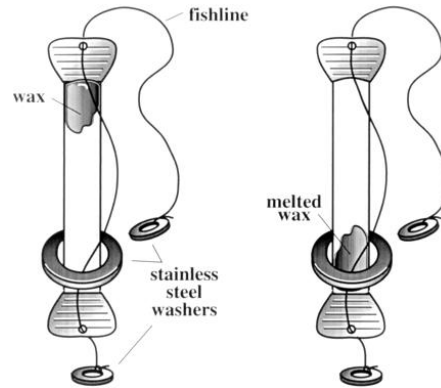
1. You will need a dark cooking pot with a lid and a plastic bag large enough for the pot
  - ✓ Preferably a thick, sealable bag
2. Assemble solar cooker by folding the two corners into the two slots
  - ✓ Clamp each tip so that it will not slide out of place
3. Face cooker so that the maximum amount of sunlight is reflecting onto the pot
  - ✓ The position may need to be adjusted throughout the day
  - ✓ Do not let the front flap block the sun - it is meant to reflect it
4. Place cook pot with lid in the bag and set in the center of the solar cooker
5. Refer to cook time chart below for length of cooking
6. Use pot holders or towel to safely remove hot pot from solar cooker
7. Open the bag away from you so that hot steam does not burn or scold your face

### Cooking times for 4 pounds of food on a sunny day:



## Water Purification Instructions

1. Fill the pot with water and heat in the same method as cooking food
2. To ensure that the water has been purified:
  - ✓ Use a thermometer and heat to 66 degrees Celsius
  - ✓ Heat it to a rolling boiling
  - ✓ Use a Water Purification Indicator (WAPI)



Courtesy of Solar Cookers International  
[solarcookers.org](http://solarcookers.org) | [solarcooking.org](http://solarcooking.org)