

Solar Ovens and Cookers

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Solar ovens work much like solar collectors used in domestic water heating systems. Both collect solar radiation, convert it to heat and transfer it to another substance. Solar ovens, however, focus the sun's rays with reflective surfaces on one point. The object of the sun's energy in the solar oven is the food.

There are three basic types of solar ovens on the market today — box, parabolic reflector and multi-

reflector (truncated cone or pyramid). Box ovens produce lower temperatures and are the least expensive and most portable. Parabolic reflector ovens produce the highest temperatures but must be constyantly adjusted to focus directly on the sun. Multi-reflector ovens are generally considered the best type of solar oven overall because of their capacity and temperature range.

Here are some solar cooking tips from Jo

Townsend, and energy extension agent and =

expert solar chef:

- Steam yellow and green vegetables in dark colored utensils to prevent discoloration.
- Reduce liquids in cake recipes by one half.
- Cast-iron utensils are the best.
- Use a meat thermometer instead of a timer to determine if the food is done.
- Place foods that might splatter in cooking bags.
- Don't use salt or butter while cooking; they draw out the juices and fat-soluble vitamins.
- Cook foods in their natural state (i.e., potatoes in skins and corn in husks).

- Chewy dessert recipes such as brownies come out better than crispy ones.
- Recipes that don't require large amounts of liquid are best (with the exception of soups and stews).
- Meats cook better if cut into small pieces.
- Place the oven on a light-colored surface that will reflect sunlight.

Sources for Solar Ovens and Cookers

Approtech (manufacturer)

770 Chestnut St. San Jose, CA 95110 408/297-6527

Combined cooker-distiller (under \$70)

Clevlab (manufacturer and dealer)

P.O. Box 2647 Littleton, CO 80161 303/781-0823

Multi-reflector and box

Solar Usage Now, Inc. (dealer)

450 E. Tiffin St. P.O. Box 306 Bascom, OH 800/537-0985

Box (\$15 - \$25)

Sunshine Cooks, Ltd. (manufacturer and dealer) 17023 E. El Pueblo Blvd.

Fountain Hills, AZ 85268 602/837-1223

Multi-reflector