

## FAQs

### **What can I cook in a GLOBAL SUN OVEN®?**

Anything you can cook in a conventional electric or gas oven can be cooked in a **GLOBAL SUN OVEN®**. You can bake, boil and steam using any of your favorite recipes.

### **What is the cooking temperature range?**

The **GLOBAL SUN OVEN®** will reach temperatures of 360 to 400 degrees Fahrenheit. The oven will generally reach its maximum temperature as it is being preheated. The temperature will drop when food is placed in the chamber.

### **Will food prepared in a GLOBAL SUN OVEN® taste the same as food prepared in my conventional oven?**

The food tastes much better! Solar cooking allows many of the natural flavors of food, which get baked out in conventional ovens, to remain. The slow, even rise in temperatures in a **GLOBAL SUN OVEN®** gives the complex carbohydrates time to break down into simple sugars allowing subtle natural flavors to emerge. Sun baked foods stay moist, the natural internal juices do not bake out, resulting in a superior, moist taste and much less shrinkage.

### **How long does it take?**

Cooking times are close to the same as those in a conventional oven. Because the sun is often trying to run away and hide behind clouds, cooking times can vary. At times it may take a little longer. The factors that affect the cooking time are: the quality of the sunlight at the time you are cooking, the types and quantities of the food being cooked, and how often the oven is being refocused.

### **Does a GLOBAL SUN OVEN® require special pots and pans?**

No, but dark, thin-walled pots with lids work best. Dark pots change the light from the sun into heat energy. Lids are important because they hold steam in the pot. If a lid is not used the steam will dissipate much of the heat. Shiny aluminum pots and pans cause light to be reflected out thereby reducing the oven's temperature. Glass casserole dishes with lids also work well. For baking cakes, breads, cookies, and pies, dark cookie sheets and baking tins work best.

### **Does food need to be stirred?**

No. Stirring to prevent scorching is not required when cooking in a **GLOBAL SUN OVEN®** due to the fact that there are no hot spots. The temperature of the food rises evenly. It is almost impossible to burn food in a **GLOBAL SUN OVEN®**.

### **How difficult is it to focus a GLOBAL SUN OVEN®?**

Focusing a **GLOBAL SUN OVEN®** is very easy. All that is required is to watch the shadows created by the oven. When the shadows are even on all sides, the cooker is directly focused. The built-in leveling leg on the back of the oven allows for easy tracking.

### **How often must a GLOBAL SUN OVEN® be refocused?**

The need to refocus depends a great deal on what you are cooking, the time of day, and the temperature you wish to maintain. A good rule of thumb is to plan to readjust every 30 minutes to maintain maximum heat. At noon the sun is high in the sky and moves quickly past the maximum focus point, creating the need to refocus

more often. Later in the day you will not need to refocus as often. The **GLOBAL SUN OVEN®** is equipped with a built in Levelator, which keeps food level and avoids spills while being refocused.

Many meals can be cooked without refocusing. **GLOBAL SUN OVEN®** users often will put their ovens outside, focused for the mid-day sun, with their dinner in it when they leave for work in the morning. As the sun moves overhead, the temperature in the Global Sun Oven chamber slowly rises to a cooking level. As the sun passes, the food is kept warm and when they return from work they have a warm, sun-cooked dinner.

(Keep in mind food will not burn in a **GLOBAL SUN OVEN®** and that the chamber is extremely well insulated, allowing food to stay warm for hours.)

**With the GLOBAL SUN OVEN® getting so hot, what is the risk of getting burned when using it?**

The only parts that get hot are the oven chamber, the cooking pan, and the glass door. Proper care must be taken to use hot pads when opening the door and removing food. The entire exterior of the oven, including the reflectors, remains safe to touch.

**How long will a GLOBAL SUN OVEN® last?**

The estimated life of a **GLOBAL SUN OVEN®** is 20 + years. With proper care it should last a lifetime.

**Do I need special recipes to cook in a GLOBAL SUN OVEN®?**

The **GLOBAL SUN OVEN®** reaches temperatures comparable to that of conventional ovens, therefore no special recipes are required. A good rule of thumb is to add 10 to 15 minutes of cooking time for each time the oven door is opened.

**What are the dimensions of the GLOBAL SUN OVEN®?**

The size of the **GLOBAL SUN OVEN®** is 19" x 19" with an average depth of 11". The total weight is only 21 pounds.

**Can I use a GLOBAL SUN OVEN® in the winter?**

Yes. The most important factor in using a **GLOBAL SUN OVEN®** is the brightness of the day, NOT the outside air temperature. Often, a 40-degree, clear, low-humidity day will allow food to cook faster than a 100-degree day with high humidity. The **GLOBAL SUN OVEN®** has been used very successfully at the base camp of a Mt. Everest expedition where the temperatures are often well below zero. There are, however, more cooking hours available in the summer than in the winter. In the early summer, it is not unusual to cook from 8:00 AM to 6:00 PM, whereas during the early winter, effective cooking is limited to 10:00 AM to 2:00 PM.

**How does it work?**

The black surfaces on the inside of the oven captures and transforms the sun's energy into a form that cannot escape the oven chamber. When a **GLOBAL SUN OVEN®** is focused in the sun, the interior of the oven is heated by the sun's energy. Direct and reflected sunlight enters the oven chamber through the glass door. It then turns to heat energy when it is absorbed by the black inner-shell and Levelator. This heat input causes the temperature inside the oven to rise until the heat loss of the oven is equal to the solar heat gain. The light energy absorbed by dark pots and the oven's dark interior is converted into longer wavelength heat energy. Most of this

longer-wavelength radiant energy can not pass back out through the glass, ensuring more efficient cooking.

**Are *GLOBAL SUN OVEN*® used in countries outside of the United States?**

Yes. Currently they are being used in 126 countries around the world. In many of these countries, they purchase unassembled ***GLOBAL SUN OVENS***® and complete the final assembly on location. This reduces the overall cost of the ovens and shipping while creating jobs locally. The demands of massive population growth, and inefficient conversion of wood to charcoal, have outstripped the third world's forests ability to regenerate. The ecological effect of wood fuel is burdensome and has a far-reaching negative global impact. These global trends will lead to environmental destabilization leading to deforestation and global warming. Science strongly supports the fact that deforestation for agricultural and fuel use is changing weather patterns, causing soil erosion, and depleting plant and animal life. ***SUN OVENS***® offer a powerful solution to the effects of deforestation, and can have an enormous positive impact on the everyday life of millions of people in underdeveloped countries by improving their nutrition, health, and quality of life.