

# INDUCTION COOKING

Use induction stoves to cook faster and safer with better control and easier cleanup, while fighting climate change and improving indoor air quality.

## Gas stoves are unhealthy for your family and the planet

### Bad for your lungs

Gas stoves emit toxic gases into your house that can cause asthma and other respiratory problems.

### Bad for our climate

Gas stoves emit carbon dioxide and methane into the atmosphere which contribute to global warming.



## Induction stoves are a great answer

### Healthier

Induction stoves do not emit any toxic gases into your house.

### Climate friendly

Induction stoves use clean electricity. Choose 100% renewable electricity from your local community choice energy provider.



### FASTER

Induction stoves send more energy rapidly into a pan than a gas burner, electric coil, or radiant electric smoothtop, boiling water twice as fast as gas.



### IMMEDIATE RESPONSE

With all energy going directly into the pan, and no grate, coil or radiant burner to heat up, the temperature can be raised or lowered virtually instantly.



### ENERGY EFFICIENT

Just the pan is heated. No energy is wasted heating the air around the pan. Induction stoves are 85% efficient. Gas stoves only deliver 32% of the flame heat to the pan.



### ACCURATE CONTROL

Digital controls allow setting temperature precisely without having to judge a variable flickering flame.



### COOLER KITCHEN

Since virtually all the energy is going in to the pan rather than the air, the kitchen stays cool.



### SAFER

With no flame and little residual heat after you remove the pan, induction cooking reduces accidental burns. There will never be a gas leak, and there is no igniter to fail or gas line to break in an earthquake.



### EASY TO CLEAN

Induction stoves have a smooth, easy to wipe clean ceramic glass surface with no hot burner grate on which food can bake, and no spots where grease and food bits accumulate.



### WIDER TEMPERATURE RANGE

Induction cooktops offer higher boil and lower simmer temperatures than gas, and hold them steady.



### EVEN COOKING

An induction stove heats up the entire pan simultaneously and more evenly than a gas flame or electric radiant coil, which only heat the part of the pan they touch.

# How does induction cooking work?

An induction stove heats up the pan by magnetism. Instead of burning gas, the stove reverses a magnetic field back and forth very rapidly. This sends alternating magnetic energy into the metal pan, heating it up.

Many chefs have made the switch, including Rick Bayless, Wolfgang Puck of Spago, and Thomas Keller of The French Laundry.

## Tips for Converting

### The Right Cookware

All iron pans work including cast iron skillets and enamel or ceramic coated iron. Most stainless steel works, as does blue steel. Aluminum, copper, and glass work only if the manufacturer has added an iron or steel plate to the bottom. Check your pans by holding a magnet to the bottom. If a magnet sticks, the pan will work. Look for a cooktop that allows bridging two burners together to cook on a cast iron griddle.

### The Right Power

One or two element portable induction cooktops can be plugged into a regular 120 volt wall outlet. A full size four or five element cooktop with power boost for fastest boil requires a dedicated grounded 240 volt outlet with a 40- or 50-amp breaker. Check with a licensed electrician to ensure your wiring is ready to handle the load.

### Safety

Most cooktops include a sensor that automatically shuts off if it does not sense a pan. If you have a pacemaker or similar device, consult with your doctor.

## How do I get an induction cooker?

Induction cooktops can be found at any appliance or home improvement store and prices are coming down. They are sold in three different configurations:

### Range

These are four to six element cooktops paired with an electric convection oven. They require a 240 volt outlet. Prices range from under \$900 to over \$3,000.

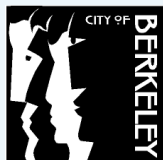
### Cooktops

A four or five element cooktop can drop into a countertop independently from a standalone oven. They require a 240 volt outlet or may be hardwired into the electrical system. Prices range from \$400 to over \$2,000.

### Portables

These one and two element units can be set on a countertop anywhere and plugged in to a standard 120 volt outlet. These generally don't have the power boost option to heat up as fast as the 240 volt models but are still rapid. Prices range from \$50 to over \$500 for some commercial grade portables.

For additional information, visit:  
[ElectrifyPDX.org](http://ElectrifyPDX.org)  
[ElectrifyNow.net](http://ElectrifyNow.net)  
[ElectrifyOregon.org](http://ElectrifyOregon.org)



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