

Induction Range Research Study

VERSION 1 | FEBRUARY 2023

How does an induction cooktop work?

When you turn on an induction cooktop, an electric current passes through metal coils under the cooktop's surface. This creates a magnetic field that directly heats pots and pans on the cooktop. This is different than a traditional electric or natural gas stove which heats up the pot by transferring heat from a flame or coil to the pot or pan. This is also why induction cooktops can only be used with pots and pans that are magnetic (more on that below).

What's different when I'm cooking on my induction cooktop?

The induction cooktop will cook food faster. For example, a pot of water will boil quicker on your new induction range.

Induction ranges reduce the risks of burns and fires because the burners only heat magnetic pots and pans when placed on the cooktop. A flammable dish towel or child's hand will not be directly heated or burned by the cooktop because they are not magnetic.

Knowing when the induction cooktop is turned on will be different because it does not have the "glow" of an electric resistance cooktop or the flame of a gas cooktop. Typically, induction cooktops have a light to indicate when they are cooking.

You might hear a buzz or a hum. This is normal! The buzz or hum is from the magnets at work.

Will my existing pots and pans work with the new induction range?

Your current pots and pans *may* not work with your new range. Magnetic cookware like cast iron or stainless steel will work with your induction cooktop, but aluminum pans will not. This is why we are providing you a new set. To check if your cookware will work with an induction cooktop, put a magnet on the bottom of your pots and pans. If the magnet sticks to the cookware, it will work with induction.

Will I get to pick out my new set of pots and pans?

You will get to choose a new set of pots and pans from options that we provide. These will include different types of pots, pans and materials (e.g. cast iron, stainless steel).

Will I get to pick out the induction range I receive?

We are still determining the make and model(s) that will be available to participants. You will be able to see the options prior to fully committing to this research.

Will it cost me more to operate my new induction range?

According to the <u>EPA</u>, induction cooking is 5–10% more efficient than conventional electric cooking and could reduce cooking energy costs. Although induction cooking is about three times more energy efficient than gas or propane, the cost impacts will depend on the fuel prices in your area.

Who will service my new range if I have problems after the study ends?

We are available to resolve any issues with the induction range during the research project. After we conclude the research project and remove monitoring equipment, we will no longer support any issues with the equipment.

For issues with the induction range during the study, contact Kevin Gries at kgries@slipstreaminc.org or 608.729.6878.

For issues after the study, please refer to the warranty information provided with the installed induction range.

You are monitoring my energy use and indoor air quality, will you let me know what you find?

Yes. Once the project is completed, we will share the results with all participants.







