

Induction Cooking – No More Slaving Over a Hot Stove!

By Andy Ferguson

“Since using induction, I’ll never go back to using natural gas again,” is a typical reaction of new users after cooking with their new induction cooktops.

Indeed, induction cooking is rapidly gaining followers among professional chefs and culinary experts. Yet most consumers are still unfamiliar with this exciting technology – a cooking method that uses magnetic fields, not electric burners or gas flames, to prepare the family meal.



Image courtesy of Bosch

How Do You Cook with Magnetic Fields?

Induction ranges “induce” heat in stainless steel or iron cooking vessels by means of a fluctuating magnetic field. The pot gets hot and the food cooks, but the induction stove itself does not directly give off heat in this process. If this seems odd, consider how a microwave oven does not get hot when it cooks food placed inside it. In a similar fashion, an induction stove does not radiate heat, but instead induces heat in any ferromagnetic cooking vessel (one made of stainless steel or iron) that is placed on the stove.

What are the Advantages of Induction Cooking?

Induction stoves offer at least three big advantages over conventional electric or gas ranges:

Safety: Because induction stoves do not have an open flame or burner, they offer a safer cooking environment – particularly important where young children or persons with disabilities are present. Induction stoves also do not create potentially harmful gases that arise from combustion style cookers, a significant hazard in kitchens lacking good ventilation. Persons with medical devices like pacemakers, however, should seek advice on whether their device can be safely in the vicinity of an induction stove.

Ease of Use: By design, induction stoves offer very precise heat control. They do not require a warm-up time and instantly move from one heat level to another. This precise control makes them popular with expert chefs, who need reliable and repeatable cooking performance. Most induction cookers offer large, easily readable controls with a function to control the cooking time. And their smooth glass tops make cleanup a breeze!

Efficiency: Induction stoves use less energy and are more efficient. The heat they create is mostly confined to the cooking vessel and the food it contains. Little energy is wasted due to heating the stove itself or through heat lost from burners or combustion. Creating less heat in the kitchen environment is great during hot summer days, and is especially attractive for commercial cooking operations.

Other Advantages: Reducing the use of natural gas has positive results on air quality outside the home as well as inside. Leakage from natural gas pipelines and gas recovery operations is a significant cause of air pollution. PG&E advises that each therm of natural gas used by consumers leads to the release of about 14 pounds of carbon dioxide into the atmosphere.

These and other considerations make induction stoves and cooktops an attractive choice for well-informed home cooks and chefs!