

An Introduction To Induction Stoves

Cool, Clean, Energy-Efficient Way to Cook

By Charlyne Varkonyi Schaub
South Florida Sun-Sentinel
Saturday, May 13, 2006; F44

Deana Litowitz grew up with a gas stove and never thought she could use anything else. An avid cook, she loved the way gas can reduce a sauce from a boil to a simmer almost instantly.

"You can't get that kind of control with electric," she said.

Until now.

Litowitz bought a Viking induction cooktop for her South Florida kitchen about eight months ago, and is a convert to this reincarnated cooking method that experts say is a cool, clean and more energy-efficient alternative to gas. Induction is perfect for hot, humid South Florida because 90 percent of the heat goes into the pot. Compare that to 55 percent for gas and 65 percent for other electric cooking.

"I love it. I love it," Litowitz said. "I cannot believe how responsive the temperature control is. It's very similar to gas. I can have a huge pot of something boiling, turn the temperature down and it responds in a few seconds. I think it's fantastic."

Here's how it works: Power generators produce a magnetic field that reacts with the metal in cast-iron and some stainless steel cookware. The heat is transferred immediately to the cookware and to the food or liquid inside. The burner, which isn't as hot, cools quickly when the pot is removed.

Induction cooking was named one of the "Top New Trends in Kitchens" for 2006 by the National Kitchen and Bath Association, but it is far from becoming mainstream.

Consumers such as Litowitz, which marketers call "early adopters," are sold on it. But this group, which buys into new products early, typically represents about 13 percent of the market.

The major drawback is the price, said Mark Connelly, senior director of appliances and home improvement for Consumers Union, publisher of Consumer Reports. "The other con is you need to use magnetic cookware. If you have a Pyrex dish, copper or aluminum and you buy [a four-element induction cooktop] you have to buy new cookware."

Induction cooktops typically come in 30- and 36-inch models. They are available with four induction elements or a combination of induction and radiant elements. A four-element induction cooktop for the home kitchen ranges from \$1,799 to about \$3,600.

In Europe and Asia, prices are lower and acceptance is greater.

"You can go into an appliance store in London and buy a conduction cooktop for half the price or maybe less," said Eric Walker of <http://theinductionsite.com/>. "The cost is a psychological barrier."

Consumer Reports also mentioned the high price but gave good reviews to Gaggenau and Viking induction cooktops in the magazine's November 2005 issue. The article described them as "the fastest-heating models we've ever tested," noting six quarts of water came to a boil in eight to 11 minutes.

"We did research if there was any problem for people with pacemakers, and no one wants to commit themselves," Connelly said. "The safest thing is to not get too close, but we found no real instances where anyone was adversely affected."

Gaggenau's owner's manual suggests avoiding induction if you wear a pacemaker, but a spokesman for the American Heart Association told Consumer Reports that pacemakers made after 1995 should not be affected.

The technology was brought into American home kitchens in 1979, when Rangaire introduced the first induction range at the National Association of Homebuilders show in Las Vegas. Others also entered the market, but they abandoned induction in the late 1980s because of lackluster sales.

Experts say induction flopped here the first time because of poor marketing, poor performance and expense.

"The marketing wasn't very intelligent," said Walker, who began theinductionsite.com four years ago from his home in Ritzville, Wash. "There was an insufficient differentiation between induction and anything else. People would see a flat, smooth top and fail to understand that there was dramatically different forms of equipment underneath."

Sears and General Electric were among the manufacturers that introduced induction cooktops in the 1980s and pulled them off the market a few years later after disappointing sales. GE doesn't currently offer an induction cooktop. But Sears has entered the market again, competing against brands such as Wolf, Viking, Diva de Provence, Kuppersbusch and Gaggenau.

"I don't think we were ready for induction from a manufacturing standpoint," said Sue Bailey, Viking's lead product manager. "People who had it loved it. When it came time to get it serviced, it was hard to get repaired and people shied away fairly quickly."

The other problem, Bailey said, was attitude. Folks thought induction was expensive (\$2,000 or about \$2,650 in today's dollars), and they were looking for the least-expensive appliances in the 1970s and early 1980s. But since the birth of the trophy kitchen, attitudes have changed.

Armand Rocco, co-owner of The Kitchenworks in Fort Lauderdale, Fla., said about 50 percent of the electric cooktops he sells are induction. The main market? High-end homes and condos where gas isn't available.

"They are really hot now," Rocco said. "The resurgence is due to the fact that the cost has come down substantially and reliability has gone up."

The Sears Kenmore Elite four-burner induction, which was launched in September 2005, is the lowest price at \$1,799 for a 30-inch cooktop.

"Most of the information was passed down, but it's my understanding that the first ones were extremely expensive and a little more prone to quality issues," said Lori Wood, Sears' buyer of cooking appliances. "If one element went bad, you would need a new cooktop, and it was costly to repair."

But Wood said the technology has been greatly improved and consumers are buying. They met the annual sales projection in only six weeks, Wood said.

"It makes your life easier," she said. "It's speedier, easier to clean and you don't have to go to school to learn to cook on it. The product today is a lot better than it was before."

Connelly said it will take some time before data is available on the reliability of the new induction cooktops. Another question mark is how much it will cost to get them repaired.

"Certainly the plus side has to do with safety," he said. "One of the advantages is when you walk away there is no open fire. It has some inherent safety advantages that you can't put a dollar value on, and that's what we find so attractive. The hope is, like with so many other technologies, the price will eventually come down."

The Pros

- Heat can be adjusted instantly with precision, just like gas.
- More energy efficient than gas or other forms of electric.
- Keeps kitchen cooler than gas or electric. Heat does not radiate into the room.
- Cook top cools immediately, providing less burn hazard for curious cats and children.
- Easier to clean because spills don't burn onto cook top.

The Cons

- Expensive, typically \$1,799 to \$3,650.
- May have to buy new cast-iron or stainless steel pots.
- Inconclusive evidence about whether those wearing pacemakers can be adversely affected.
- Too early to tell if there will be repair problems.
- Problem for small kitchens unless Viking's portable unit is used. Most experts say ovens cannot be installed under cook tops.
- May have to hire electrician to increase the amps in your breaker box for some models that use up to 50 amps of power.