

Tech Talk

Navigating the world of technology one gadget at a time
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Coffee Gadgets

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Why should I care about coffee gadgets?

If you always get your cup at a coffee shop, you may have no need for coffee gadgets, but if you ever make coffee at home, rest assured that a gadget or two could probably improve your results. This Tech Talk issue will provide tips on getting the most from your homemade coffee.

From beans to brew: creating the perfect cup of coffee.

There are four basic steps in the coffee making process: selecting, roasting, grinding and brewing.



Figure 1: Roasted Arabica coffee beans.

Step One: Selecting Coffee Beans

It all starts with high-quality coffee beans. Coffee bean selection has as much of an impact on a cup of coffee as choice of grape has on a glass of wine. You'll need to consider two dimensions when selecting coffee beans: type and roast.

Coffee Bean Type

Try to pick beans from the Arabica species of coffee (see Figure 1), which are more aromatic and flavorful than the cheaper Robusta beans. Coffee tastes freshest immediately after grinding, so it's best to buy whole beans and grind them at home.

Coffee Bean Roast

The length of time coffee is roasted plays an important role in its taste. Longer roasting times yielding darker beans and a smokier flavor.

Roasts range from a light “cinnamon” roast, to a medium “city” roast, to the dark roasts: Italian, French and Vienna. Your personal taste will play a great role in which roast style you should select. For help in picking a roast, see www.wholelattelove.com/articles/coffee_roasting.cfm (an informational article from a commercial site).

If you’re after the freshest possible cup of coffee, you might consider roasting beans at home. Home coffee roasters range in price from less than \$100 to over \$600, and unroasted “green” beans cost significantly less than roasted beans (typically 40% to 50% less). For a comparative table of home roasting machines prepared by Internet retailer Sweet Maria’s, see www.sweetmarias.com/roastercomparisonchart.html.



Figure 2: A burr grinder produces more uniform coffee grounds than a blade grinder.

Step Three: Grinding Coffee Beans

There are two basic types of coffee grinders: blade and burr. A *blade* grinder uses a multi-pronged blade similar to the one found in a blender to pulverize coffee. The coarseness of the grind is determined by the amount of time the beans stay in the grinder, making it tricky to get the coffee to the optimal coarseness (e.g. a medium grind for automatic drip and fine for espresso). A *burr* grinder (see Figure 2), in contrast, uses a mechanism similar to that found in a pepper mill to grind coffee to a uniform size. A decent burr grinder should be near the top of a home coffee brewer’s gadget priority list.

Step Four: Brewing Coffee

Without being properly brewed, coffee roasted and ground to perfection will still produce a mediocre cup. Fortunately, many home brewing methods give good results. Here are a few:

French Press

A French press (See Figure 3), also known as a press pot, is a non-electric brewing method. You steep coarsely ground coffee in hot water for about four minutes, then use a perforated plunger to separate the coffee grounds from the



Figure 3: French press coffee maker can produce an excellent cup of coffee with little fuss.

brewed coffee. A small amount of ground coffee may end up your final cup. For additional information on the French press process, see www.wholelattelove.com/articles/french_presses.cfm (an informational article from a commercial site).

The Aeropress

The Aeropress (see Figure 4), unique among coffee makers, uses a syringe-like system to brew coffee under pressure. Unlike the French press method, a paper filter keeps grounds out of the finished cup. After hot water is added, the Aeropress takes just 30 seconds to brew. For a normal American cup of coffee, simply dilute Aeropress coffee with an equal amount of hot water. The Aeropress has generated lively discussion over at the Coffee Geek Web site, compiling 100 pages of comments and user reviews (www.coffeegeek.com/forums/coffee/machines/195166).

Single Serve Coffee Makers

These machines brew a cup of coffee from self-contained pods, discs, or cups, eliminating the need for careful measuring or fiddling with filters. For convenience and time-to-first-cup, they are hard to beat. The finished product can taste good, though mass-market pods are likely to produce mediocre results. Check out the Single Serve Coffee site (www.singleservecoffee.com) for reviews of single serve machines and coffee pods.

Espresso Machines:

These electric machines force pressurized water through finely ground coffee, creating a small, potent cup. Specialty coffee drinks like *cappuccino*, *café mocha*, *latte*, *café au lait*, and *machiatto* all begin with espresso. Prices range from under \$50 for basic models to over \$1000 for a *super automatic*, which magically turns your whole coffee beans into a steaming shot of espresso. Espresso coffee maker owners enjoy the flexibility their machines offer: after all an espresso shot diluted with water makes a fine cup of American style coffee (an *Americano*), but no amount of tinkering can force an automatic drip coffee maker to produce an espresso shot.



Figure 4: The Aeropress coffee maker uses pressure generated from a large syringe to brew coffee.

Automatic Drip:

The automatic drip coffee maker is nearly ubiquitous in U.S. kitchens, but not all drip coffeemakers will give optimal results. Here are a few things to look for when shopping for a drip brewer:

- **Showerhead-style water dispersion:** If the hot brewing water pours over the grounds from many points like a showerhead, your coffee may taste better than if it comes from a single central point.
- **Correct brewing temperature:** According to the National Coffee Association, coffee should be brewed at a temperature between 195 and 205 degrees Fahrenheit (www.ncausa.org/i4a/pages/index.cfm?pageid=71). If your coffee maker does not get the water to the correct temperature, your results will suffer.
- **Insulated carafe:** Insulated carafes keep your coffee warm without negatively affecting the taste like an electric burner. If your coffee maker has a hot plate, transfer the coffee from the included glass carafe to an insulated container immediately following brewing.

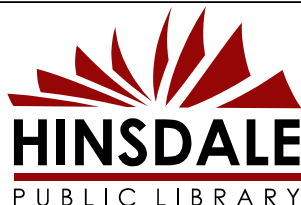
Some of these coffee maker characteristics can't be determined without taking a machine home and using it. Fortunately, Internet coffee sites like Coffee Geek (www.coffeegeek.com/reviews/drip) can help you research the features of different models.

Resources

- Coffee Geek: www.coffeegeek.com reviews and discussion of coffee and coffee makers
- Single Serve Coffee: www.singleservecoffee.com reviews and discussion of coffee pods, discs, cups, and their corresponding machines.

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