



Need Fiber? Have Some Coffee

March 13, 2007

New study shows that coffee may be a source of dietary fiber, but that does not mean you should give up vegetables and fruit

Some good news for coffee lovers: a cup of joe may get you going in more ways than one. A new study shows that brewed coffee contains soluble fiber, the roughage found in oatmeal and apples that aids digestion, helps the body absorb vital nutrients and keeps a lid on cholesterol.

Scientists already knew that coffee beans were rich in dietary fiber—and now Fulgencio Saura-Calixto and Elena Díaz-Rubio, food scientists at the National Research Council in Madrid, have confirmed for the first time that brewed coffee also contains it.

"It is logical to think that a significant part of the fiber passes from the powder into the beverage," Saura-Calixto says. "It is hard to believe that the scientific community, especially scientists working in dietary fiber, [assumed] that coffee and other beverages do not contain fiber." Saura-Calixto and Díaz-Rubio tested the dietary fiber content in three common coffee types: espresso, drip and freeze-dried.

Using a method similar to that used to measure fiber in beer and wine, they treated each type of coffee with enzymes to break apart constituent molecules, then filtered out the water and analyzed the remaining solid compounds. Their findings, published in the *Journal of Agricultural and Food Chemistry*: all three types of coffee contained between 0.47 and 0.75 grams of fiber per 100 milliliters. Freeze-dried coffee came out on top, most likely, Saura-Calixto says, because its high-temperature preparation process ensures that large amounts of soluble fiber are extracted from the beans.

According to the American Dietetic Association (ADA), men on average need about 38 grams of fiber a day and women require around 25 grams. Yet 50 percent of Americans consume 15 grams or less per day, according to a recent survey by the National Fiber Council.

Americans are, however, downing a lot of café au laits. According to the National Coffee Association, 82 percent of adults in the U.S. drink an average of 3.2 cups of java every day. A traditional eight-ounce (237-milliliter) cup of coffee could contain as much as 1.5 grams of fiber and 3.2 cups nearly five grams of fiber. But, of course, a "cup" is relative these days. A "grande" (medium size) cup at Starbucks, for instance, is 473 milliliters (or 16 ounces) and could pack as much as three grams of fiber, about the same as a raw apple and 20 percent or more of the average American's daily intake.

But that does not mean you should drink coffee in lieu of veggies and whole grains to up your fiber intake, says ADA spokesperson Katherine Tallmadge. "There are so many other sources of fiber [that are healthier]. Should you drink tons of coffee to get those benefits? No," she says, noting that coffee also contains caffeine—around 100 milligrams per cup. It is far better, she says, to get fiber from a variety of foods that do not contain caffeine and are also packed with other healthy compounds, such as protein and vitamins. "It's the whole diet that's important," Tallmadge says, adding that she would not recommend more than two cups of coffee a day.

"The results are surprising," says Victoria Drake, a research associate at the Linus Pauling Institute at Oregon State University in Corvallis, who recently completed a comprehensive review of studies on coffee's health effects. "When I think of fiber, coffee definitely doesn't come to mind." But she urged caution, noting that caffeinated coffee has received mixed reviews from the

scientific community. The good news is, "there is consistent evidence that habitual [caffeinated] coffee consumption decreases the risk of type 2 diabetes mellitus," the type that can develop in obese and elderly patients, she says. In addition, some epidemiologic and animal studies have shown that caffeine may help reduce the risk of developing Parkinson's disease and lower suicide rates among Americans.

The bad news is that some studies have linked high coffee consumption, described as more than three cups per day for years at a time, to accelerated loss of bone mineral density. Studies have been mixed about coffee's effect on cardiovascular health; some indicate that it is good for the heart and others show that it may be a risk factor.