

# The Battle of the Breakfast Brews

By Jill Weisenberger, M.S., R.D., C.D.E.

Reach for java--hot or cold--before a race, and you might outlast your competitors. Opt for tea and you'll get less of a jolt, but your body will appreciate the antioxidant boost. The list of supposed benefits from coffee and black tea gets longer every day thanks to savvy marketing campaigns. So, we asked experts to sort through the fluff and determine the real winner for improving your health.

## To Finish Strong

Coffee: Athletes who swear by the jump-start that coffee provides have reason to gloat. Endurance athletes ran on a treadmill to exhaustion in 32 minutes, but were able to last an additional 10 minutes after drinking coffee with a good dose (250 milligrams) of caffeine, according to the *Journal of Applied Physiology*.

The caffeine in coffee likely stimulates the nervous system, helping you ignore fatigue and recruit more muscles for intense exercise, says registered dietitian Mary Lee Chin of Nutrition Edge Communications. Greater concentration may help your performance as well, she adds. However, coffee has the potential to reduce iron absorption, and low iron stores can leave you slow and tired. If your iron levels run low, drink coffee an hour or so before meals.

Don't worry about the supposed dehydrating effects of caffeine. The Institute of Medicine of the National Academies concluded that the liquid in the beverage cancels out the mild diuretic effect of the caffeine.

Tea: Ounce for ounce, there's less caffeine in tea, so expect the performance edge to be less, too. Count on 16 ounces of black tea to contain 60 to 100 milligrams of caffeine. (An equal amount of coffee has 150 to 330 milligrams of caffeine.) In other words, you'd have to down about three cups of tea to equal one cup of joe.

However, this decreased amount of caffeine may be easier on a nervous stomach, especially on race-day morning.

Advantage: Coffee

## To Gain the Mental Edge

Coffee: You know that the caffeine in a cup of high-grade brew will wake you up, but did you know that coffee can help boost brainpower? Chemicals in coffee may improve memory, says Dr. Peter R. Martin, director of the Institute for Coffee Studies at Vanderbilt University. A European study found that over 10 years, participants who drank three cups of coffee daily had less than half the cognitive decline of non coffee-drinkers.

Many of the estimated 1,000 compounds in coffee have significant antioxidant effects and decrease total body inflammation, thought to be a precursor to many diseases, adds Martin. Drink brewed coffee--not instant--to get the most antioxidants.

Tea: Tea also sends your brain the message to perk up and pay attention. But tea has something coffee doesn't: the amino acid theanine. Theanine increases alpha brainwave activity, which

helps you concentrate despite auditory and visual distractions, explains John Foxe, Ph.D., director of the Cognitive Neuroscience Program at City University of New York. Further, the antioxidants in tea may help prevent the oxidative stress thought to play a role in the development of Alzheimer's disease, says registered dietitian Marie Spano.

Advantage: Tie

#### To Keep Your Bones Strong

Coffee: No matter what you may have heard, coffee doesn't stunt growth. Because of the high caffeine content in coffee, you'll lose a bit of calcium with each cup, but take in adequate calcium, and you'll still be standing tall. In a study of Swedish women, caffeine and coffee were associated with increased fracture only in women with the lowest calcium intakes. The real problem is having caffeinated drinks in lieu of bone-building, calcium-containing beverages.

Tea: Several studies suggest that tea drinkers have stronger bones. Adults older than 30 who were habitual tea drinkers for at least six years showed greater bone mineral density than non-tea drinkers. Researchers suspect tea's flavonoids, compounds with antioxidant and anti-inflammatory properties, improve bone mass. To gain the most advantage, choose brewed teas and steer clear of the bottled and instant teas.

Advantage: Tea

#### To Love Your Heart

Coffee: Drink to your health! The more coffee you drink, the less likely you are to die from cardiovascular disease, says Martin. Among participants in the Nurse's Health Study and Health Professional Follow-up Study, coffee consumption reduced the risk for death from cardiovascular disease, independent of caffeine intake. So how much coffee should you drink? "If you can sleep, drink more," says Martin.

But beware: Unfiltered coffee like that prepared by boiling or French press contains compounds called diterpenes that raise LDL (bad) cholesterol. One more caveat: Some research has suggested that among high-risk individuals who rarely drink coffee and are slow metabolizers of caffeine, coffee may trigger a heart attack.

Tea: The more tea you drink, the lower your risk for heart disease, says Jeffrey Blumberg, Ph.D., director of the Jean Mayer USDA Human Nutrition Research Center on Aging. There is "some protection noted in those drinking one cup daily, more protection in those consuming two to three cups each day, and the lowest risk in those with intakes of four to five or more cups per day," he adds. Tea flavonoids inhibit the oxidation of LDL-cholesterol, seem to reduce inflammation and improve the response of blood vessels to stress, he explains.

Advantage: Tie

Jill Weisenberger is a registered dietitian and certified diabetes educator for the Hampton Roads Center for Clinical Research in Norfolk, Virginia.