

Coffee--it's the lifeblood of your average day. Grind the beans, load the filter, add water, brew, and enjoy. But do you know what's inside that cup of coffee you're drinking? Mostly, it's water, over 98% of the cup. But the other 2% is the really good stuff.

The first thing you notice is the aroma. Actually, some of the compounds in coffee would be pretty repulsive if they were present in higher concentrations, like 2-ethylphenol, which has a tar-like, medicinal odor. It also happens to be a cockroach pheromone. The bugs use it to warn each other of danger. There's also dimethyl disulfide. It's just barely detectable in your cup of joe, which is lucky because it smells like rotting meat.

But of course, coffee still tastes pretty darn good. Rich acetylmethylcarbinol lends a buttery taste--no surprise, since it's a component of actual butter. Trigonelline gives coffee it's rich, earthy taste, and it also battles cavity-causing bacterium streptococcus mutans, keeping the critters from attaching to your teeth.

But the real health-food star is 3,5 dicaffeoylquinic acid, which protects your brain from free-radical damage. That's right--coffee is an antioxidant. Once you've had a few slugs, your favorite ingredient kicks in--caffeine. It's actually an alkaloid plant toxin like nicotine and cocaine. But don't let that scare you. In your brain, it blocks receptors for the neurotransmitter adenosine. Result: you, awake.

Want milk and sugar with that? Well, that's a whole other episode. Feeling Wired yet? [Subscribe](#).