

HOW CAFFEINE KEEPS US AWAKE

The main health issue with caffeine stems from caffeine's ability to interfere with a good night's sleep. How it happens is very simple. Caffeine is similar to adenosine, a naturally occurring brain transmitter that makes us drowsy and drift into sleep. Caffeine can bind to the same receptors in the brain as adenosine, thereby blocking the effect of adenosine and keeping us alert and awake.

y earliest memories of 'decaf', dating from somewhere in the 1980s, were of pre-ground coffee scooped from a jar into the filter basket. It was usually kept under the bench, possibly there for months. You can just imagine the aroma when you lifted the lid and what an espresso made from such coffee tasted like! Those were the days, when having a second grinder in a cafe was highly unlikely. They were also the days when decaffeination processes that used chemicals such as Methylene Chloride and Ethyl Acetate received bad press over concerns of chemical residue left in our bodies. One of these chemicals, Methylene Chloride, hailed as an ozone disruptor, also fed concerns over the growing hole in the ozone layer and the effect on global warming. The reputation of decaf was not good back then.

It's also worth mentioning here that among some of today's baristas and roasters, there's a certain snobbery attached to decaf – with slogans such as 'death before decaf' and 'coffee without caffeine isn't coffee'. This is supporting the stigma of decaf and making customers wary.

Fortunately, there's more awareness now of other, chemical-free, decaffeination processes, the Swiss Water Process and the Mexican Mountain Water Process for example, that use just water to remove 99.9% of the caffeine. There's another method that uses supercritical carbon dioxide to decaffeinate coffee, and yet another known as the Natural Decaffeination Method, using ethyl acetate, that's claimed to be natural as it's made from a combination of sugar cane molasses and acetic acid, found in vinegar.

Industry practices have come a long way, and now it's not unusual to find several grinders in a cafe with one dedicated to decaf. However, many cafe owners have told me that water-processed decaf is expensive and they don't get enough requests for decaf beverages to warrant buying decaffeinated beans and dedicating a grinder to them. I'm told however, by reliable sources that the difference between the cost of regular specialty beans and water-processed beans is just a few dollars per kg. Add to that, statistics indicate that the number of customers drinking decaf is increasing by a few percent each year. John Russell Storey from Cofi-Com referred me to the 'Food Industry Foresight Away from Home Report 2015', stating that 5% of coffee drinkers drank decaf in 2012, 6% in 2014, with the number jumping to 9% in 2015.

After talking with several roasters and green bean suppliers, I'm told that decaffeinated coffee should taste just as good as the caffeinated version of the same bean – depending on the decaffeination process used and how well it's roasted. Anne Cooper of Equilibrium Coffee Roasters explains 'with the technology of the Swiss Water Process, all you're taking out is the caffeine; you're not taking out any of the origin gualities.' Another practice that Anne is keen to expose, is of roasters choosing their decaf beans for the first roast of the day to warm up their roasters. Anne said 'There needs to be a call out to roasters to stop using decaf beans to warm up their roasters and offer them the same respect as they do their other beans."

There's also a group of customers who would love to drink caffeine-free coffee that tastes as good as regular coffee – for health related reasons. While research indicates that caffeine has considerable health benefits, this isn't always the case for particular individuals. While I could not find a report to back this up, it's often stated that approximately 10% of the population reports a jittery feeling after consuming caffeine. For some, it keeps them awake at night, especially if consumed in the afternoon and evening. For those with adrenal issues, it may raise their blood pressure; give them anxiety or heart palpitations. Some say it shouldn't be consumed during pregnancy or when breast-feeding. Add to that, many medications and some diseases have interactions with caffeine. For these customers, caffeine-free coffee is the only sensible option.

There is also a growing number of consumers who are concerned about their health and the environment. They're choosing cafes that serve seasonal, locally produced wholefoods that are nutritious and often organic. While they happily drink coffee, they're also concerned about the amount of caffeine they're consuming. The National Coffee Association's 2017 Coffee Drinking Trends report, reveals that a surprising 68% of consumers in the USA are concerned about how much caffeine they consume. The report went on to say that such concerns result in trends. And trends in the cafe industry are known to spread guickly and be far reaching.

> A 100% chemical-free water decaffeination process was pioneered in the 1930s in Switzerland, ultimately resulting in the trademarked Swiss Water Process. It uses water only to remove the caffeine. Other similar processes have followed. To be labelled decaffeinated, 97% of the original caffeine has to be removed.

DISCOVERY OF CAFFEINE AND DECAFFEINATION

Be it fact or fiction, it's often cited in the history books that William Harvey, the physician who discovered the human circulatory system in the 17th century, was aided in his research by the feeling of something pumping through his veins and keeping him awake after drinking coffee. Caffeine as such had not yet been discovered. It took another 200 years for that.

In 1819, the German poet Goethe, who is said to have consumed copious amounts of coffee to feed his creativity, engaged the services of a young scientist to find out what was in coffee that made him so alert and focussed. Before long he'd extracted a substance known as trimethylxanthine, popularly known as caffeine.

It was nearly 100 years later before commercial decaffeination processes were in place. In 1903 Ludwig Roselius, a German coffee importer, also commissioned a scientist who removed the caffeine by superheating coffee beans with steam, then flooding them with the solvent benzene. He patented the process under the name Kaffee Hag. Other similar chemical processes followed in various countries. Benzene was later found to be a hydrocarbon that can be toxic.

Later a process using supercritical carbon dioxide to extract caffeine was invented. Because it's expensive, it's mainly used for decaffeinating commercial coffees today.

One trend that's been emerging slowly for a few years, is cafes specialising in decaf. The initiative of Swiss Water Process, they're popping up in a few cities around the world. There's one in Japan, opened by Hayama Coffee and at least two in the USA I know of – one in New York and one in Los Angeles.

Seemingly then, the market is ready to embrace decaffeinated coffee and is starting to experiment with quality decaf. Enter the innovative Dan Salter who's been ahead of his game more than once before in his coffee career. As the protege of lan Bersten, who started Belaroma Coffee in Sydney, Dan was working on one of the country's first coffee carts decades ago. During the 2000 Olympics in Sydney, he was perfecting the Sydney Opera House in latte art at a time when free pouring was just taking off. He installed one of



says a good proportion of his customers are choosing Freecaf over caffeinated coffee.

Whether Dan predicted a trend or is just in a lucky spot in spite of it, he hopes to redeem the reputation of decaffeinated coffee from decades ago and at the same time, hit out at the stigma-sprouting members of the coffee community who are keeping this reputation alive. I believe the Australian coffee drinker is ready to embrace good specialty decaffeinated blends and single origins. As one who has a sleepless night if I drink coffee after midday, I certainly am!

ABOUT The Author

CHRISTINE COTTRELL CONTACT: 0407 021 220 or christine@perfectespresso.com.au A swell as in coffee, there's naturallyoccurring caffeine in a wide variety of plants including tea (including green tea), chocolate, cola and mate, a traditional, tealike beverage from South America. Caffeine is possibly the most widely consumed drug and it can kill you if you consume too much. It varies with individuals but the lethal amount is generally equivalent to drinking 50 to 100 cups of coffee in a day. However, coroners have reported caffeine toxicity as the cause of death with far less.

Freecat

Chemical Free

Caffeine Free

Full Flavour

Darker roasts generally have slightly less caffeine than lighter roasts. This goes against the popular but incorrect belief that darker roasts have more caffeine because they taste stronger.

In the psychology handbook 'Diagnostic and Statistical Manual of Mental Disorders', caffeine withdrawal is listed as a mental health condition. Withdrawal side effects may start 12 to 24 hours after suddenly stopping or dramatically cutting back on their daily use of caffeine.

According to consumer analysts Allegra Strategies (2016 data), around 6% of coffee drinkers regularly order decaf.

Christine's latest book is now available:

TRENDING CAFES Brisbane & Beyond features 100 great cafes in Brisbane and along the coastal strip from Noosa to Ballina. There's a free coffee at each, if you own a copy of the book. Contact Christine for more info.