

Food & drink

Low on caffeine, still big on taste

And healthier too. Delicious decaf, made without solvents, is out there – but it pays to enquire about the beans and brewing method, says *Sue Quinn*

Decaf has long been the ugly duckling of the coffee world, denounced for being full of chemicals and derided for tasting awful. But decaffeinated coffee is having a new dawn.

According to consumer analysts Allegra Strategies, around six per cent of us now regularly order a decaf when we visit a coffee shop. Although the health benefits of moderate coffee consumption are widely recognised, many people don't get on with caffeine. Pregnant and breast-feeding women are advised to limit their intake, while many find that caffeine disrupts sleep, raises blood pressure or makes them anxious.



So the reputation of decaf is on the up. Chemical-free decaffeination methods and high quality single-origin beans are being employed more widely to improve the lot of decaf drinkers and win over the naysayers. But how is decaffeinated coffee made and what's actually in the cup? Decaffeination has come a long

way since a German, Ludwig Roselius, first discovered how to extract caffeine from beans in 1903. He used benzene, a solvent now known to be a carcinogen, which might explain decaf's reputation for being riddled with chemicals. But benzene hasn't been used for decades to decaffeinate coffee, and the process is now generally regarded to be safe.

There are four different methods used to extract caffeine from beans. Two "direct" methods employ chemical solvents – either ethyl acetate or methylene chloride. Green coffee beans are soaked in water to soften them, and then a solvent is added to draw the caffeine out. The water is then drained off, and the process repeated until the caffeine content of the beans is at or below 0.1 per cent – the legal maximum for decaffeinated coffee. The process also ensures that traces of solvent left on the beans are below the safe limits set by European legislation.

According to Roger Cook, science manager for the Institute for Scientific Information on Coffee (ISIC), studies have proven that these solvents are safe to use in decaffeination. But some people still have concerns, and many aficionados believe the process damages the bean and therefore the flavour of the coffee. That's why modern methods that don't involve chemical solvents are increasingly finding favour.

Hit: a cup of decaf is the obvious answer for pregnant women, below left, craving a good coffee

ALAMY; GETTY IMAGES



BEST-TASTING DECAF WAKE UP AND SMELL THE COFFEE

The Swiss Water® process is the best known. Green coffee beans are soaked in water, which dissolves the caffeine. Natural coffee components are then added to the water to make up for the flavour compounds that leach out of the beans along with the caffeine. The caffeine is then filtered out of the water and the process repeated until the beans are 99.9 per cent caffeine free. Another non-chemical process, known as the "sparkling CO₂", "supercritical CO₂" or "liquid CO₂" method, is also used. Green coffee beans are soaked in liquid CO₂ -

The public still think of decaf as bad quality muck

the same gas as used in sparkling water - and under certain conditions the caffeine can be extracted and filtered out, leaving the flavour compounds unaltered.

"If we compare decaf back in the Seventies and Eighties to recent years, it's night and day in quality and taste," says Guy Wilnot, founder of the Decadent Decaf Coffee Co, an online retailer specialising in single-origin decaf made with the Swiss Water® method. "This hasn't filtered through to the public yet, who still think of decaf as bad-quality muck that's not good for you."

Lavazza Caffè Decaffeinato
£3.75 for 250g;
ocado.com



Decadent Decaf Coffee Co signature espresso decaf blend
£4.50 for 227g;
decadentdecaf.com



Square Mile Coffee Decaf espresso.
£12.50 300g;
squaremilecoffee.com



Waitrose 1 Peru decaffeinated
£3.29 for 227g;
waitros-e.com



But the quality of decaf has as much to do with the beans as the way the caffeine has been extracted. The process has always been expensive and time-consuming, so some coffee manufacturers have used the cheaper, inferior Robusta beans to keep prices low. Ironically, Robusta beans, commonly used in freeze-dried coffee and cheap blends, contain twice the caffeine of pricier Arabica beans.

James Hoffmann, CEO of Square Mile Coffee Roasters, says he only uses top-quality Arabica beans and the supercritical CO₂ method to make the company's decaffeinated

range. "We are passionate about decaf," he says. "We buy coffees we love specifically to have them decaffeinated."

But how can consumers find out what they're buying? If you grab a decaf from a specialist coffee shop, the barista might know the method used. But this information is harder to come by at the big chains. Starbucks told the *Telegraph* it uses a blend of 100 per cent Arabica beans and the direct method (methylene chloride) decaffeination process - but this is not publicised in coffee shops or on the company's website.

Costa coffee uses the Mexican Mountain Water process, similar to the Swiss Water® method, while Caffè Nero uses CO₂.

It's also difficult to make an informed choice when buying decaf coffee to make at home. Some supermarkets, including Waitrose, sell decaffeinated coffee made without solvents. Waitrose 1 Peru decaffeinated and Waitrose 1 Raw Bean decaffeinated, for example, are made with Arabica beans using the Swiss Water® method.

"Manufacturers sometimes switch between processes, which is one reason why they don't specify on packaging," says Cook. "Another is that all processes are perfectly safe, so there's no reason to specify."

Many people are also unaware that decaf is not caffeine-free. Under EU regulations, the caffeine content of decaf cannot exceed 0.3 per cent for soluble or 0.1 per cent for roast and ground coffee. Depending on the beans and how the coffee is made, this could equate to as much as 5g of caffeine per cup (compared to 120g for caffeinated coffee) - and again this isn't always stated on the packet. It pays to ask questions about decaf so you can make an informed choice. Delicious decaf that tastes of coffee - made without the use of solvents if this is important to you - is available. You just have to hunt it down.