

TROUBLESHOOTING

There are a number of problems that could affect the standard of the coffee you serve. Barista Paul Meikle-Janney tackles some of the most common ones

MY ESPRESSO TASTES WEAK, LOOKS THIN AND HAS LITTLE CREMA

Your coffee may be ground too coarsely

The most common problem with espresso in the UK has nothing to do with the coffee or the espresso machine; it's the setting of the grinder.

How we set it determines how coarse or how fine the grind is, which in turn determines how fast the water flows through it and therefore how much flavour we extract from the beans. A weak, thin espresso with little crema is usually an indication that the coffee is being ground too coarsely, allowing the water to flow through the gaps between these large particles too quickly.

If your espresso (a serving should be no more than 30ml) takes less than 18 seconds to dispense from the first drop to the last (not timed from the press of the button, which would add pre-infusion time), the water does not have enough time to pull the required flavour from the beans, and is said to be under-extracting.

The solution is to move the adjustment wheel at the neck of the grinder toward the finer setting, usually indicated by a "minus" sign or the word "fino". Go steadily, as an adjustment of even a few millimetres can have a significant effect.

The ground coffee should have an initial soft texture, with a slightly gritty feel, like soft sand – the oils in the coffee give it a damp feel and stick some of the coffee together into little beads.

The perfect espresso should take between 18 and 23 seconds to pour from first to last drop. The flow is often likened to a mouse's tail – a steady, slender hazelnut-coloured pour – and the resulting espresso should have a rich, dark base topped with a thick, persistent, hazelnut-coloured crema.

You may be using too little coffee

A single espresso is usually made with 7g of coffee. Any less puts up less resistance to the water, which could force its way through the coffee too quickly, pulling out too little flavour.



"Seven grams of coffee produces an espresso that should be a maximum of 30ml long"

To get plenty of foam, make sure that only the tip of the steam wand is underneath the milk

You may not be tamping (packing the coffee down into the filter) your coffee correctly

You should apply about 30lb of pressure to tamp. If you are not sure what this feels like, push down on your bathroom scales.

It is important that the water is forced evenly through the coffee, and this is achieved only if it is tamped firmly and evenly, with no gaps down the side of the filter that would allow the water to drain down without flowing through the coffee. Conversely, tamping too hard may slow the flow of water and cause over-extraction (see below).

MY ESPRESSO TASTES BITTER

Your coffee may be ground too finely

In the opposite phenomenon to under-extraction, if the coffee is ground too finely it causes over-extraction, giving a bitter taste and a dark crema.

In this situation, the coffee particles are ground so finely that

they nestle together very closely, and do not allow the water to flow easily through them – taking more than 23 seconds to pass. This prolonged time of contact between water and coffee allows the water to extract undesirable elements from the coffee as well as to scorch it.

The answer is to make the coffee coarser by turning the adjustment wheel at the neck of the grinder in the "plus" or "grosso" direction. Remember that the aim is to get the time it takes to make our espresso between 18 and 23 seconds from the first to the last drop.

You may be using too much coffee

If you use too much coffee, the water may struggle to push through, causing over-extraction.

There may be too much water passing through the coffee

Seven grams of coffee produces an espresso that should be a maximum of 30ml long. This amount of water should pull all the desirable elements from the coffee. ▶

◀ If more water is pushed through the coffee, then undesirable water-soluble elements such as tannin, which has a bitter taste, are pulled out and the prolonged time against the hot water will scorch the coffee.

Your machine may be dirty

All the parts of your espresso machine that come into contact with the coffee should be cleaned daily. If not, the flavour of your coffee will be affected by old grinds and coffee oils.

Also, the shower plate that distributes the water over your coffee and the holes in the filters may get blocked, causing uneven extraction and over-extraction.

Your water temperature may be too high

The water flowing through the coffee tends to be at a temperature of 90-95°C. Higher temperatures can scorch many coffees.

If the temperature is too high, it can be lowered by lowering the pressure in the boiler, which normally is about 1 bar. This is probably best left to your machine engineer to do, unless your machine is one of a few that allows the operator to change this electronically.

Your pump pressure may be too low

Your machine should push water through the coffee with a pressure of 9 bar. If the pressure drops below this, the machine will be slower pushing the water through, causing over-extraction. This pressure is adjusted by a screw on the pump and is best left to a machine engineer to sort out.

THE MILK WON'T FOAM

It is the protein content of milk that allows it to foam

The protein wraps itself around the air to cause bubbles. Anything that affects the proteins will affect the milk's ability to foam.

Two main things that affect the protein are:

The age of the milk

As milk gets older, the fats break down and eat away at the proteins. Even if the milk is still in date, it may be old enough to affect foaming. Always use milk that's as fresh as possible.

Boiling the milk

If you boil the milk, it may initially look like you have created lots of foam, as it rises up the jug, but the extreme temperatures will soon break down the bubbles and the foam will drop like a bad soufflé.

Go with the flow... it's important to take between 18 and 23 seconds to pour a perfect espresso

The maximum temperature your foam should reach is 70°C; above this, the milk starts to change flavour, eventually boiling at just over 80°C.

Lack of foam could also be a result of poor technique

A key point is that to introduce air into the milk you need to have only the tip of the steam wand underneath the milk, giving you a high-pitched "chirping" sound. If the steam wand is buried deep in the jug, you will

get only a low growling noise, and hot liquid milk with no foam.

Paul Meikle-Janney is managing director of barista training company Coffee Community. He advises and trains for many well-known high-street brands as well as keen independent coffee houses, both in the UK and internationally. He assists in co-ordinating the UK Barista Championship and coaching the UK Barista Team. www.coffee-community.co.uk

