



ORGANIC FAIRTRADE **COFFEE**

Espresso Tips



Kush Coffee 6 Bridge St Nelson ph 03 5394793 kushcoffee @callplus.net..nz

Coffee Beans

To prepare an exceptional cup of coffee, two essential prerequisites are necessary:

- The finest quality green coffee beans and
- That these are fresh roasted.

Freshness is probably the most misunderstood thing about coffee. Roasted coffee is an extremely perishable product. Within two weeks of roasting, half of the flavour is lost. Freshness cannot be preserved very long, regardless of how the coffee is packaged or stored. It is the roasting that sets the clock ticking on the shelf life of coffee and not the purchase date nor how it was packaged, stored or ground. It deteriorates even in a complete vacuum. Of course exposure to air and moisture will accelerate the decomposition of the flavours, until after six weeks the oils become rancid. For best results use your coffee within a week of roasting.

Store your coffee in an airtight container in a cool dry place. **Do not store in the fridge or freezer.**



Milk

Despite the myths, all milk froths equally well. However, milk with a higher fat content produces a thicker and creamier texture than low fat varieties. Also the fat in milk has a mellowing effect on the coffee, smoothing out the acidity inherent in most espresso blends. The result is a richer and rounder brew. Milk should be stored in the fridge and removed immediately before use.

The Perfect Espresso / Cappuccino

The essentials are

1. The grind
2. Extracting the coffee
3. Frothing the milk,
4. The maintenance/cleaning of the espresso machine.

The Grind.

The correct grind is crucial. What you are looking for here is to avoid under or over extracting the coffee. The grind is so important because the size of the particles controls the length of time the hot water is in contact with the coffee. The grind is the only thing you should adjust. Always tamp with the same pressure and always fill the basket with the same amount of coffee.

Attach the filled handle to the group head on the espresso machine and switch on the pump. Time the extraction. It should take 20-25 seconds. If it takes a shorter time then grind finer, if longer then coarser. It should first appear as a few drops then turn into a steady stream as thick as a rats tail. The crema on the surface of the shot should be a golden brown colour and should heal readily.

Adjusting the grinder

It is necessary to rotate the mill collar in order to increase or decrease the size of the coffee grounds. Some grinders rotate left while others rotate right so you need to look for some indication as to which way to turn the collar. Look for a + or – sign. Turning towards + will coarsen the grind (allowing the liquid to flow more quickly) while towards the – will fine it up. If these symbols are absent, look for an arrow with a point at one end and a fat tail at the other. Turning toward the point fines up the grind. Beware, you might find two arrows pointing in opposite directions. One is likely to have a - or the word Fin (fine) at the sharp end and the other a + or the word Grob (course) at the sharp end. You rotate the mill collar in the direction of the appropriate arrow to achieve what you want. Many grinders have a mill-collar locking device in the form of a push down button. This button needs to be depressed before the collar will move. Ensure the button returns fully to its locked position before starting the grinder.

Make only small adjustments - rotate the collar one “notch” at a time.

Adjusting the grinder from scratch

Periodically it will be necessary to completely remove the whole bean hopper and mill tray for cleaning or removal of a foreign object thereby upsetting your setting. Simply make sure the threads are perfectly clean and wind the mill collar down till it touches the lower grinding surface. Now wind it back a quarter turn and grind a little coffee until it is the size of table salt grinds (or sand). Adjust as previously described.

Tamping

Choose a tamper with a flat bottom and one that fits the basket closely. Overfill the basket scrape the top off level and tamp with 14kg of pressure. Want to check if you have the pressure right?



Tamp on some bathroom scales. Press down on the coffee, rotate and then tap the side of the group with the tamper to dislodge any loose grounds and re-tamp this time with a twist to polish the top of the grounds. Check to see if the top of the grounds is level and smooth. If not start again. Wipe the rim before inserting in the machine to ensure a tight seal.

Extracting the coffee

There are only 4 rules to pulling the perfect shot of espresso:

1. Temperature. If the machine has been sitting for a while, draw off some water through the group head. This will remove the boiling water in the head and replace it with cooler water. Drawing off water will also wash the head of loose grounds.

2. Fill the handle This must be dry, clean and hot Clean it under the group head by running some water through it. Then dry on a tea towel. This also cleans the head from old grounds from the previous cup and means the coffee will taste better. . The coffee must pack the handle from the bottom of the filter basket to the shower screen in the group head. If not the water will move the coffee around and an inferior extraction will occur. Overfill and wipe off the excess back into the grinder. Then tamp. There is a line in the basket which shows the level the coffee should come to after tamping.



3. Rats tail. The flow from the handle must be no thicker than a rats tail. See adjusting the grinder to correct any errors.

4. Only 30 ml per cup. The first 15 ml of liquid is the strongest (as used in a ristretto), the next is less strong but very acceptable (total now 30 ml) but the next 15 ml is not acceptable. After 30 ml there is no further coffee oil to be dissolved and what remains is acidic, bitter and thoroughly unpleasant. This is definitely not coffee. Note that 30 ml from a double shot into a single cup is effectively two 15 ml ristretto's in a single cup – simply the very best that can be provided.

Frothing the Milk

Milk that is frothed correctly looks great, adds to the flavour by toning down some of the natural acidity of the bean and creates a wonderful texture in the mouth. With the milk you aim to avoid two things. The first is not to scald the milk and the second is to avoid large air bubbles in the jug. Both are easily avoided with a little practice.

Take a half-filled stainless steel jug of cold milk, introduce the steam wand to the centre of the milk jug and turn on the steam. Withdraw the jug until the tip of the wand is just below the surface of the milk at which point you will hear a sucking sound. This is the best position since with the wand further in, the milk heats before it froths and further out you blow bubbles. You will need to keep pulling the jug down in tiny steps to keep the wand in the right place as the milk expands. This is called stretching the milk and will only occur at lower temperatures – roughly below 35 degrees. You must stretch the milk before you heat it. Once heated, milk will scald before it stretches. Shut the steam off, remove the jug,



wipe the wand and bang the jug a couple of times on the bench top to remove the larger bubbles.

Now make your coffee and pour in the milk. You do not need a thermometer in the jug to measure the temperature - use the touch method. Hold the jug by the handle using the hand you write with and place the fingers of your spare hand on the jug bottom away from the steam nozzle. When it gets too hot to hold, count three and remove it from the steam. Is the temperature right? Make yourself a coffee using the milk just frothed. If it is too cold simply increase your count until you get

the temperature correct. There is no need to burn your fingers

Maintenance

Machine

Espresso machines are remarkably robust pieces of equipment and will continue to give excellent service with the simplest of maintenance. The things to be avoided here are the blocking up of the group head and boiler contamination.

Every so often, say after 10 cups, the machine should be back-flushed. Back flushing involves the use of the blind filter in a handle. First though you need to brush under the group head to remove loose grounds of coffee, particularly those that have stuck to the neoprene seal. A build-up of grounds here will cause the handle to seal incorrectly and water will be forced over the top rather than through the pipes behind. Introduce the handle to the head and push the continuous pour button for a 10-second pour. Empty the contents and repeat until clear

. At the end of each day use a special detergent to backwash the group – we recommend Cafetto Evo which is an organic espresso cleaner. Simply follow the same procedure as back flushing but add the detergent to the blind filter. Thoroughly rinse the group with water before pouring the first coffee. The back-washing procedure is very important because it assists in dissolving coffee oils that accumulate in the group head and clog the fine filters.

At the end of each week (or sooner if necessary), soak the filter handles and their cups in back wash detergent to remove the black coffee stains

You should periodically refresh the water in the boiler by pouring off a litre or two via the tea-making tap. This not only refreshes the water but is also a check on whether you have spore contamination in the boiler. Spore contamination will show either as black “crud” in the poured off water and or the water will have a white appearance and smell like sour milk. If the boiler is contaminated so is your coffee. These spores are a fungus growth caused by milk being siphoned into the boiler via the steam wand because the wand has been left in water. Boilers contaminated with spores can be cured but at considerable cost.



If steam wands must be soaked in water to remove caked on milk, blow out the holes by releasing some steam. And soak for the shortest time possible. Under no circumstances turn the machine off with the wand in water. Espresso machines are best left on at all times if possible! Also have the machine serviced every 6 months.

Grinder

On a weekly basis remove all the beans from the hopper and wipe the hopper clean of oil residue. Clear any obstruction in the opening to the grinding discs. If grinder is fitted with a magnet then remove any object clinging to magnet. Do not use detergent on interior of grinder. Do not use water on interior of grinder. On a monthly basis remove the bean hopper completely and remove the top grinding-burr by unscrewing the mill collar. Inspect the burrs and clean the chamber. Pay particular attention to cleaning the threads and reassemble. Replace the burrs every 400 kg of beans.