

Barista Training

- [Barista Training](#)

Barista Training

Roasting

The degree of roast relates to how long coffee beans have been roasting for. This process can often be determined by the colour of the bean. For example, a light roast will be a light shade of brown, a medium roast will be a rich, chocolate brown colour and a dark or full roast will be a very dark brown. There are other roast types, including an Italian roast, which will be black in colour, and a French roast, that is black and oily.

A. Light Roast

This refers to the colour of the coffee beans when removed from the roaster. Light roasted beans are light shades of brown in colour, produce low levels of bitterness and sweet to taste. They are likely to be reminiscent of fruits, teas and chocolate to taste and are highly aromatic when ground and used. They offer delicately nuanced flavours and are often found in Arabica coffees.

B. Medium Roast

Medium roast coffee resembles a slightly darker shade of brown and delivers flavours consistent with notes of roasted nuts, vanilla and butter. Ideal when served with milk or brewed for emphasis based on well-rounded flavours. Highly aromatic when ground and one of the more popular roasts in the industry, due to the balancing of flavours and reduction in intense acidity.

C. Dark Roast

A dark roasted coffee bean is often used to create notable flavours of dark bitter chocolate, liquorice and spicy notes of black pepper or clove. Dark roasts are usually very bitter in comparison to medium or light roasts and have a hallmark aroma. They tend to be smokey if roasted for long periods of time.

Grinding

Understanding Your Coffee Grinder

Coffee flavor comes from the oils in roasted beans which need to be released evenly for better-tasting coffee, hence the process of grinding coffee. Using a coffee grinder allows you to alter the consistency of your grinds and is the tool that produces small volumes of even-sized particles of

coffee.

What Is Espresso

Espresso is a Italian-inspired beverage, made quickly by forcing extremely hot water and steam through coffee that has been pre-ground. The taste of espresso has evolved to become strong and intense and is designed to be experienced by all coffee lovers.

Dosing Ground Coffee

Dose is the weight of dry ground coffee that you use to make an espresso and can be anywhere from 18-21g. It is really important that you dose the correct amount of coffee in your basket. Ensure you deliver a full dose in your basket with each full click of the lever. To make a double espresso, you will need a dose of 18g of coffee grounds to fill 2 oz cup (60 ml) that will take 25-30 seconds to make.

At Lake Safari Lodge, we use 20 grams of coffee grounds to 40 mls of espresso which is a 1:2 ratio.

Here is a list of things to do when preparing your espresso shot.

1. Warm the cup before using it and rinse with hot water.
2. Check your portafilter handle to ensure it is clean and dry. Old coffee residue will affect the taste of the espresso.
3. Dose your ground coffee into your portafilter and pay attention to the grind size to make sure you don't over- or under- extract your shot.
4. Tap the portafilter handle gently on the tamp mat to distribute the coffee evenly.

5. Next, take your tamper and press it down onto the ground coffee by using sufficient pressure to help retain its shape.
6. Using the tamper, polish the surface of the ground coffee ensuring the surface is smooth and flat.
7. Clean any excess dry coffee off the top, ears and spouts of the portafilter.
8. Rinse the grouphead before inserting the portafilter to remove old coffee particles.
9. Insert the portafilter handle into the grouphead and start brewing the espresso.
10. Once the machine stops at 25 seconds, either automatically or manually, remove the cup from the machine tray and serve.
11. Remove and clean portafilter and Rinse the grouphead before reinserting the portafilter.

The Operating Parts

1. Group Or Grouphead

This is where you insert the portafilter when preparing to extract espresso. It showers pressurised hot water through the diffusion plate over the bed of freshly ground and tamped espresso.

2. Portafilter

The portafilter is the device you grind coffee into and then place in the group to brew coffee

3. Portafilter Basket

The filter screen located in the portafilter that comes in both single and double sizes.

4. Group Gasket

A large rubber o-ring that seals the portafilter to the group and is inserted into a groove machined into the group.

Usually if the portafilter is leaking, this is the part you need to replace.

5. Group Screen

The group screen is a dispersion screen located in the group and should be replaced every three months or so.

6. Steam Wand

Part of the machine you steam milk with also known as a steam pipe. It is activated by the steam valve and steam valve knob or lever.

7. Steam Tip

Located on the end of the steam wand and is the part that disperses the steam from the wand into a splayed pattern allowing you to steam milk.

8. Hot Water Tap

The part of the machine where you dispense hot water.

9. Group Dosing Keypad

These are often found on automatic and super automatic espresso machines and are buttons that you press to activate the group head on the machine. They show various dispense times and quantities as well as programming and continuous flow.

10. Group Dispense Switch

A simple on/off switch located over the top of the group it actuates.

11. Power Switch

The power switch on most espresso machines is located on the backsplash of the machine and is indicated by numbers 1-0-2.

12. Pressure Gauge

Located on the front of the machine and has two needles indicating both boiler pressure and pump operating pressure. This monitors the health of your machine and parameters of your coffee brewing temperatures.

13. Sight Glass

Most machines have a sight glass located at the front of the machine to indicate the boilers water level and marked with maximum and minimum markings.

14. Top Of Machine

The vented top of the espresso machine designed to keep ceramic cups or glasses warm before serving.

15. Drain Grate Or Trough

Used with drip pan and drain. Where the liquid drains.

Making & Perfecting The 'Extraction Time'

It is impossible to make a quality cup of coffee without extracting it first. A well extracted coffee balances countless variables to produce a cup of perfection. The acidity is balanced and positive and there is a welcoming sweet aroma. Extracted coffee typically contains water-soluble compounds including caffeine, acids, lipids and fats, sugars and carbohydrates. Many barista's refer to the process of perfecting the extraction time as "dialing in" a coffee, by starting with a single recipe and making adjustments in dose or grind setting to affect the flavor.

Preparation

The yield is the weight of the liquid obtained in the cup and is the starting point for every barista. More yield means a more bitter tasting coffee and less yield means a more sour tasting coffee. A standard yield is usually twice the amount of the dose you grind. For example, when grinding 20 grams of coffee, the yield will be 40 grams.

Next is the brew ratio. This is the ratio between the amount of ground coffee and the quantity of water you will use. The water will affect the flavours. Less water means not all the flavours will be extracted and too much water will extract undesirable flavours from the coffee. For espresso the standard ratio is 1:2 and is the equivalent of one gram of coffee for every 16 parts water. Measuring both your coffee and brew water is crucial if you want to pour these ratios correctly.

Grind size is another crucial factor in the coffee extraction process. The finer the grind size, the more energy that is required from the grinder. When working with a lighter roast, you will need to grind the coffee finer compared to a darker roast to achieve the right amount of total energy. Using a simple flow rate formula can help measure the fineness of the grind when using a coffee grinder. For instance, if it takes a total of 20 seconds to pull a 40 gram shot of espresso, you will have 2 grams of liquid espresso per second.

Espresso Extraction Checklist

1. Dose

the weight of the ground coffee, i.e. 16 grams.

2. Extraction Time:

the amount of time the espresso is extracted including the pre-infusion time, i.e. 27 seconds.

3. Espresso Weight:

the actual weight of the liquid.

4. Grind Setting:

the number on the grinder for the grind.

The Rate Of Extraction

A) Extraction

This is where the coffee has perfect espresso features. These features will be beautiful brown with cream stripes, an intense aroma and a rich, balanced flavour. The ideal coffee takes between 25-30 seconds for the extraction process to be complete without compromising on flavour or quality of coffee. Well-extracted coffee will fill your mouth with richness, is luscious, smooth and full of life.

B) Under-Extraction

Coffee is under-extracted when it has a very light crema and inconsistent, poor aroma, flavour and aqueous body with the presence of an unpleasant taste profile. An under extracted coffee occurs when you haven't taken enough

flavour out of the coffee grinds. It becomes sour, lacking sweetness and is extremely salty to taste.

B) Over-Extraction

The coffee will feature crema with a dark black line at the edges and a possible white spot at the centre. It will have aromas and flavours that represent a burning taste and smell. This occurs when you take too much of the soluble flavours out of the coffee and is brewed between 40-50 seconds. Dryness in coffee is also a sign of over-extraction caused by polyphenols chemicals found in coffee which create a dry sensation in the mouth.

Working Practices

1. Dry the basket inside the handle and dose the basket with freshly ground coffee until level with the rim.
2. Firmly and evenly tamp the coffee so it becomes flat.
3. Clear any loose coffee grounds off the rim of the handle.
4. Secure the handle in to the pre-heated grouphead.
5. Place a warm cup underneath the spout of your espresso machine.
6. Start the shot extraction. There should be a delay before the coffee pours between 3-6 seconds. Then the first crema will begin to drip from the end of the spout.
7. The bulk of the espresso will flow and the liquid will be lighter in colour.
8. The extraction will take no longer than 25 seconds. The end result should be a rich, deep-brown crema.
9. Rinse the basket under hot water.

The Art Of 'Foaming' & 'Steaming' Milk

The key to making a great coffee is a good espresso shot and perfectly steamed milk. Steamed milk is the end result of milk being exposed to high pressured steam from your espresso machine. It is made by introducing steam into milk which then expands to create a micro-foam layer of milk bubbles. The end result is a smooth, silky textured coffee for espresso based drinks.

The Difference Between Foaming And Steaming

Milk pairs so well with coffee as it offers a layer of flavour complexity that compliments the natural flavours of coffee. When added to coffee, it creates a complex flavour profile that highlights the natural floral and roasted notes.

Foamed milk, also known as frothed milk is the result of taking heated milk and shaking or mixing it to add air and texture. The rapid movement of the milk will introduce air and separate the milk into two distinct layers. One layer is milk and the other a thick, frothy foam and is ideal for drinks like cappuccinos where the foam will sit on top of the coffee and create an interesting mouth-feel.

Steamed milk on the other hand, uses pressurised steam to heat the milk and develop texture simultaneously. As the fluid breaks down the air bubbles that form, known as micro-foam helps create a velvety texture that combines foam and milk in one unit. Steaming milk is often a desirable process for making lattes.
