



User Guide To The Perfect Espresso

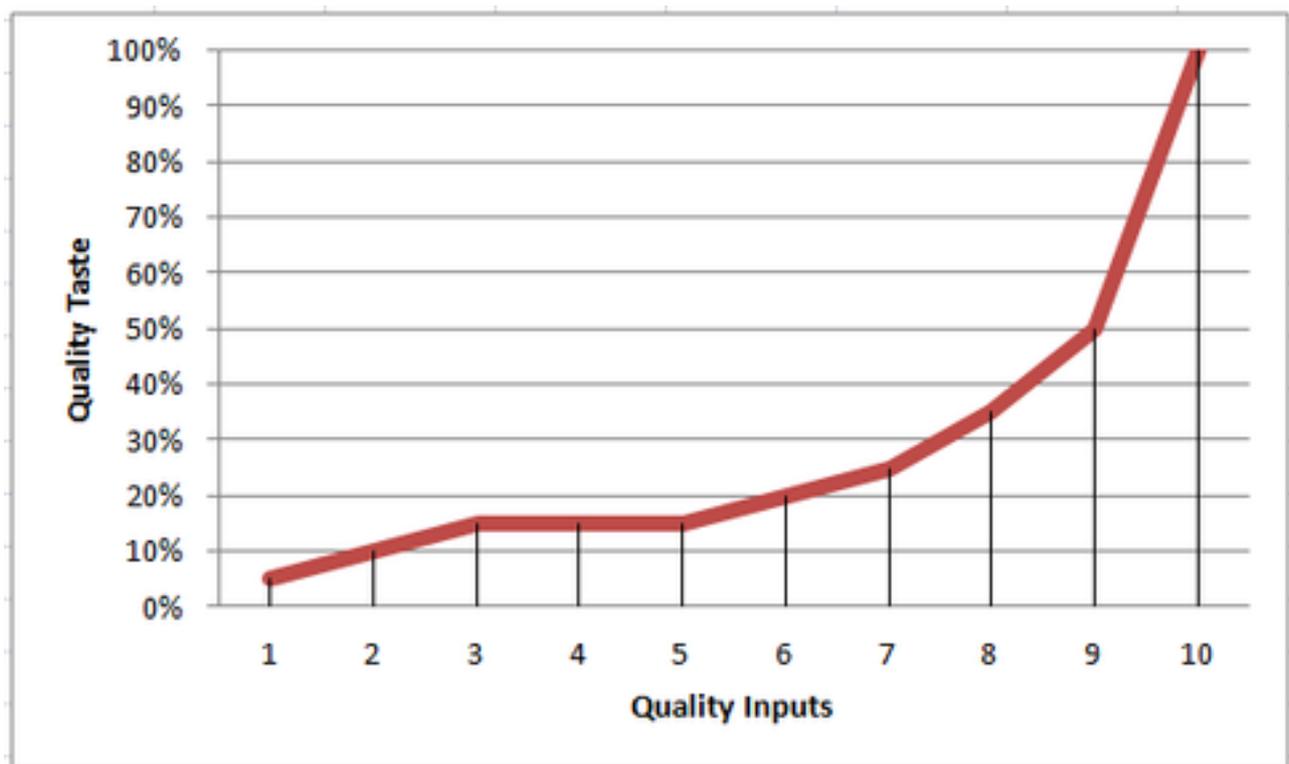


Consistency is the key to perfect Espressos

This guide was created to help assist you in your ability to pour a great shot of coffee using a group-head espresso machine consistently.

The Graph below is a visual representation which demonstrates that if all procedures are done correctly, a 100% outcome is achieved.

(Note: If one of the basic procedures are missed your quality is halved! This graph is brutal but an effective visualization that shouldn't be misunderstood if you'd like to make quality coffees)



Beans Selection and Storage

Beans can be single origin, a mix of varieties, sizes and roasting degrees. They come from many areas and are subjected to different handling treatments in their journey. Beans are unique, which influences the quality irrespective of the barista's skill.

“Once a fresh bag of roasted beans are opened always store them in a sealed darkened container in the best low humidity stable environment possible. e.g. a cupboard near a sink.

Your beans are best used within 7 days of purchase.”

Things to look out for:

- Poor quality roasted coffee beans. Usually evidenced by their small size, containing more than 5% chipped and broken beans, too much shell-only, insect damaged and 'black beans' included.
- Roasted coffee beans that have been exposed at home or at the vendor for an extended period to moisture, excessive heat, ambient air or sunlight. Result in sweating of the coffee oils oxidizing on the surface.
- Coffee grounds that have been left in the grinder's hopper dispenser overnight and have absorbed moisture and surrounding odours making it impossible to extract the aromatic oils.
- Purchase beans weekly not monthly from a good coffee vendor, try not to buy from supermarkets.



I-----I best for milk coffees

Best for a shot of coffee I-----I

Filling & Tamping the Portafilter

This is where you, the Barista, exercise your hands-on skills to assure the quality aromatic tendencies of the beans are being extracted.

Failure here results in bad coffees being served.

(Note: Even with fresh beans, it can't be stressed enough that the correct technique in filling and tamping the portafilter is essential to the process)

It's that simple!

Filling:

Fill the portafilter via the grinder creating a mounded finish. It's essential to fill the portafilter completely.



(Note: There must be enough ground coffee in the portafilter to settle up against the espresso machine's grouphead. Under filling results in pit holes occurring in the cake and the coffee being washed rather than having the oils extracted.)



Caressing:

Gently maneuver the grounds around with the blade of your pointer finger until all gaps are filled. (Note: Failure to do this will impact on consistent density across the cake, and water will only pass through the least densely packed areas of the cake.)

Tamping:

Using the Tamper, be sure to place it on top of the filled portafilter perfectly flat. Then apply a single downward push (approx. 20 pounds of pressure using your palm, thumb and finger as a guide) Rotate the tamper a 1/4 twist to seal edges of the formed cake before releasing your pressure. (Note: You can tamp twice, as long as you tamp every coffee twice thereafter.)





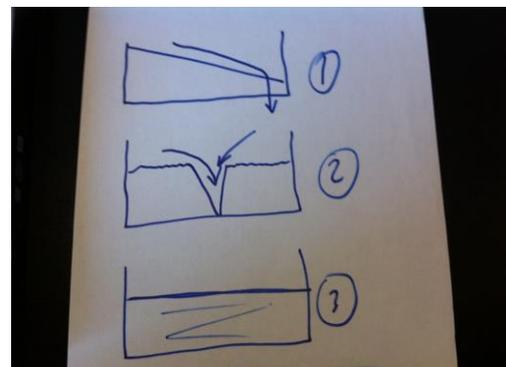
You can purchase a weighted spring tamper that is ideal for achieving the required consistent tamp pressure. Alternatively, use your body weight with a normal tamper! You can do this by leaning on the tamper without any pushing. Your body weight generally remains constant compared to pushing via your arm muscles.

The finished tamped cake should be about 5 to 8 mm from the top of the rim (left), however this is subject to the individual machines shower head depth, which should leave a small imprint on the surface of the extracted cake.



(Note: You can test for the correct height of the tamped cake to suit your machine by placing a five cent piece in the middle of the tamped portafilter. Then insert and remove your group handle. If the five cent piece gets slightly embedded as shown here, it's over filled) It should leave an imprint but not be embedded.

Make sure your tamp is flat (fig 3), firm and approx. 5-8 mm from the top of the rim. (Note: Water under pressure will always find the easiest route to exit through the cake without compromise, and greatly effects any chance of the coffee oils getting extracted)



The Extraction

“Any undesired results are remedied by carefully watching the extraction”

(Note: A properly filled single portafilter will contain approx. 7-8 grams of ground coffee, and the double approx.. 14-16 grams.)

The basic science of an extraction is as follows:

*“7-8 grams of coffee extracted for 26 – 30 seconds
= 30ml without blanding into a single warm cup”*

*“14 - 16 grams of coffee extracted for 26 – 30 seconds
= 60ml without blanding into two warm cups”*

But! Before putting the tamped portafilter into place make sure you Have:

“Purge the Group-head and use warmed cups!”

(Note: Purging the water from the group-head prior to fitting the portafilter will allow the excess heat contained in the group-head to be released and not burn the coffee)

(Note: Cold cups will start separating the coffee oils from the water)

These steps are commonly missed, but it's very important as there is no coming back from these errors, your coffee will definitely taste either bitter or burnt and all your previous work is undone.

Blonding:

The shot should last 26-30 sec before blonding occurs.

Blonding looks like very opaque dirty water in color and can begin to flow with a twist.



A good shot looks like a Rich honey chocolate rats tail, initially starting from a color representing the bean and fading to a lighter tanned version.

(Note: You have to stop the extraction before blonding occurs regardless of time and quantity, or you get a bitter coffee)

Critical elements to observe:

- More than 30ml in less than 26sec
(Note: The water doesn't have enough time to melt the oils from the grounds, creating a bitter flavour)
- Blonding occurring before the 30ml is extracted
(Note: Generally created by bad/old grinds without oils, or tamping errors as the water is passing through weaker points called pit holes and missing a large percentage of the coffee, creating a bitter flavour)
- Less than 30ml in 30sec
(Note: The hot water is now burning the coffee oils as it's taking too long to pass through and will create a burnt bitter flavour)

Grinding

The above 3 scenarios are your guide to the next step.

Setting the grinder:

“If you have fresh low humidity stable beans, and have mastered the consistency of filling and tamping your portafilter, then all you have to do is adjust your grinder”

*“The finer the grind the slower the pour.
The coarser the grind the faster the pour.”*

I realize my description of grinding seems like a let down,

I could go into detail and say things like your grind needs to feel like gritty powder, or how humidity changes throughout the day makes you adjust your grinder, but that just confuses the simple issue of being consistent and reading the pour every time.

A good Barista will fill and tamp the portafilter consistently every time without fail maybe a couple of hundred times a day. They'll always clean the portafilter, use warm cups, read the pour, purge the group-head and especially look after the bean freshness.

All they do then is adjust the grind to get the perfect extraction.

“Your goal as a Barista is to be consistent in your preparation, removing any variables and then adjust the grind to match the bean for that perfect extraction”

Enjoy your new found passion!