European Coffee Trip & Gwilym Davies presents:

LEARN COFFEE WITH GWILYM

#3 DOSING MISTAKES

AIM:

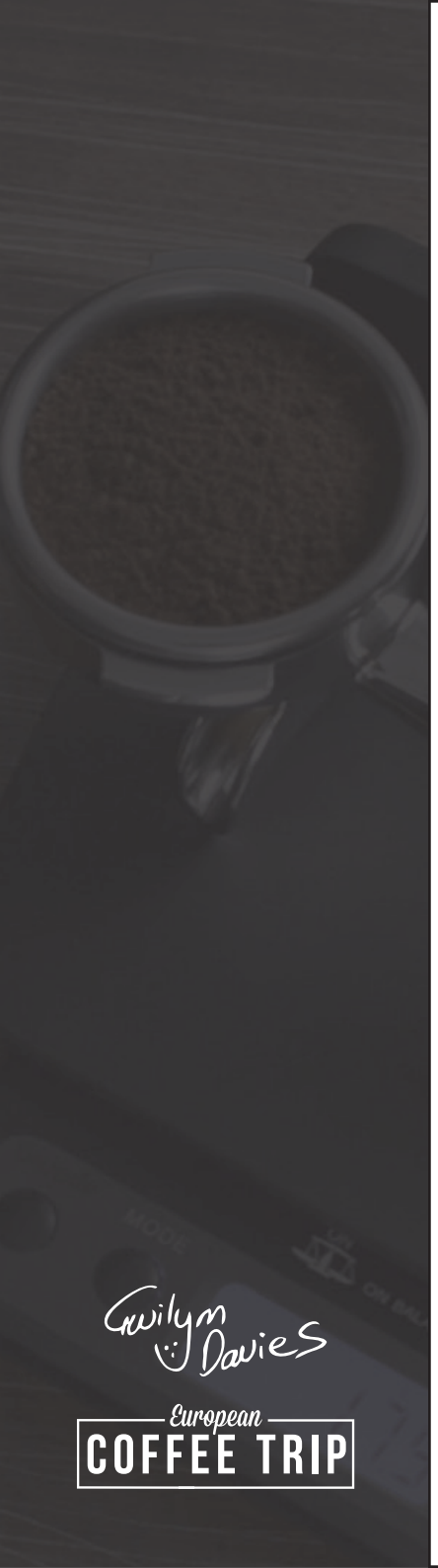
- To be consistent in your dose and beverage weight
- To understand the relationship between dose and beverage weight

WHY?

- Changes in dose and beverage weight affect the flavour and strength of your espresso, not being consistent with the dose and beverage weight means not being consistent with the flavour and strength of your espresso.

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DOSE

The most common dosing mistake I see is a barista not being consistent with the amount they dose. Dosing different amounts into the portafilter will result in different:

- Extraction times for the same amount of espresso.
- Flow speed: more dosed means a slower flow.
- Brewing temperature.
- Headspace.
- Strength.
- Extraction %

BEVERAGE WEIGHT

Different amounts of water will result in different flavours and levels of strength.

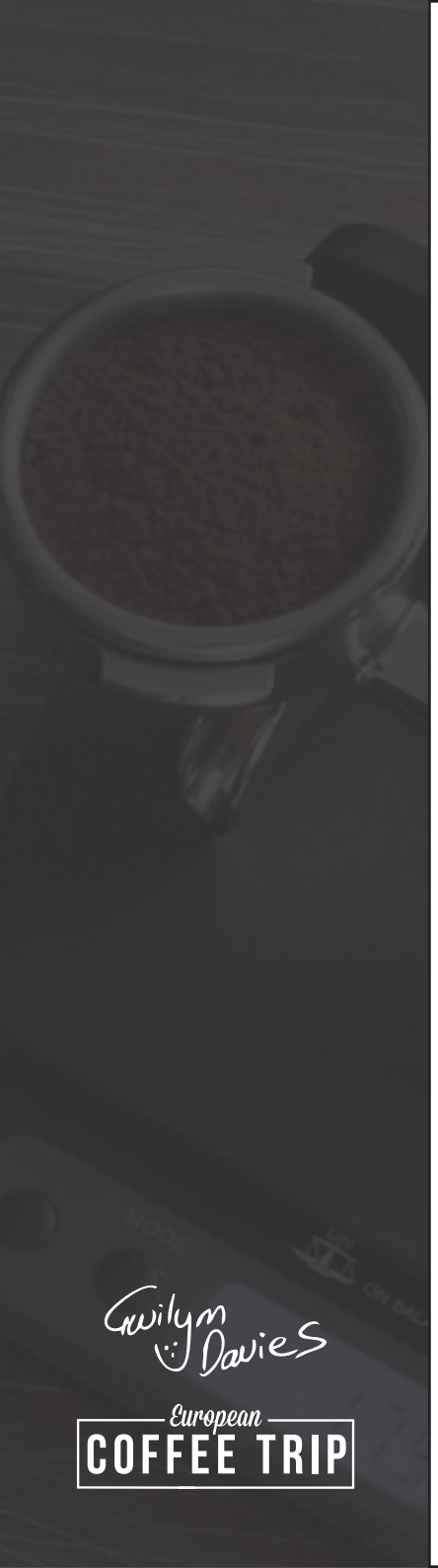
- More water with the same dose will increase the extraction and reduce the strength.
- Less water with the same dose will reduce the extraction and increase the strength.

USE WEIGHING SCALES

Estimating the dose by eye is possible but measuring it by using a scale is more accurate. Some leveling techniques can be quite accurate but it is still good practice to regularly check yourself using weighing scales.

Never trust a timed (grind on demand) grinder to consistently dose the same amount. Estimating the amount of liquid espresso by volume is not reliable; using a scale to measure the beverage weight is more accurate and less subjective than trying to estimate the amount of liquid espresso by eye.

The volume of espresso changes with how fresh it is, fresher coffee has more gas and the espresso looks bigger, the more it has ‘de-gassed’ the less volume the same weight of liquid will have.



THE RELATIONSHIP BETWEEN DOSE AND BEVERAGE WEIGHT

Measuring the Dose and Beverage both in weight makes it easy for us to see the relationship between them. The 2 common ways of doing this is as a ratio or an Espresso Brew Formula. The ratio is easier for me to understand but the EBF is used on the **Mojotogo App** so has become a common term.

$$\textbf{Brew Formula}\ \% = \frac{\text{Dose}}{\text{Beverage Weight}} \times 100$$

$$\textbf{Brew Ratio} = \frac{\text{Beverage Weight}}{\text{Dose}} \times 100$$

$$\textbf{50}\% = \frac{\text{20g Dose}}{\text{40g Beverage Weight}} \times 100$$

$$\textbf{1:2} = \frac{\text{40g Beverage Weight}}{\text{20g Dose}} \times 100$$

WHY MEASURE THE EBF/ BREW RATIO?

My introduction to this idea was through a chart by Andy Schecter which helped to offer a more precise explanation of a Lungo 27–40%, Espresso (40–60%) and Ristretto (60+).

- Gives an indication of the strength and extraction.
- Make repeating and altering recipes easier.

HOW ACCURATE DO YOU HAVE TO BE?

You will have to find out for your coffee, grinder, dose, machine and whether it is for espresso or milk drink. I find some coffees are very tolerant and taste good at different beverage weights but most are disappointingly only good within a short 4g–beverage weight window.

The recipe for the coffee I have been using recently is

- Dose: 18.5g, +/- 0.1g
- Beverage weight: 40g , +/- 2g
- EBF: 45 – 49%
- Seconds: 19 – 24 secs
- For those interested my temp is 92.5c, (from the grouphead), pressure 8.8bar with 0.5mm restrictor

MESSAGES TO GO AWAY WITH:

Know your dose, know your beverage weight and be consistent
Know how consistent you need to be.

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