

Tasting the Variables in Espresso

Preliminaries

The objective is to familiarise yourself with the sensory result of flavour manipulation by grind size, contact time and brew ratio.

Tasting the coffee is fundamental to your job as a barista.

Before starting this worksheet you should be able to consistently distribute and tamp evenly getting a centre pour with no channelling.

After each pour note the tastes and flavours on the worksheet.

Drink some water and have some bread between each tasting.

Materials

You will need the following materials:

- Tasting the Variables in Espresso Worksheet 1-3. One set per participant.
- Scales accurate to 0.1 g.
- Timer.
- Espresso machine.
- 15 g VST baskets.
- Grinder.
- Fresh roasted single origin coffee with some acidity.

Setup

1. Set the grinder to a very fine level.
2. Tare the portafilter (if your scales are too small, take the basket out of the portafilter and tare it).
3. Fill the basket and place the portafilter back on the scales.

14 g is about the minimum 15 g baskets can hold. If you're using 18 g baskets, dose 17 g and if you're using 20 g baskets, dose 19 g. Now adjust the pours to maintain the brew ratios.



Tare the basket.



± to get 14 g into the basket.



Pour a shot of 28 g.

4. Add more coffee grinds or remove them with a spoon until it weighs 14 g.
5. Tamp (if you've taken out the basket, carefully place the basket back into the portfilter and tamp).
6. Tare a cup and time a shot of 28 g. As the pour progresses, the flowrate increases. You'll need to anticipate and stop the shot before 28 g to accommodate the last drops.
7. Change the grind size and repeat steps 2-7 to get the 28 g within 25 to 35 seconds.

Dose

8. Pull a shot to 28 g and taste it.
9. Tare the portafilter and dose 16 g. Pull a shot to 28 g and taste it.
10. Tare the portafilter again and dose 18 g. Pull a shot to 28 g and taste it.

Yield

11. Dose 14 g. Pull a shot to 20 g and taste it.
12. Dose 14 g. Pull a shot to 24 g and taste it.
13. Dose 14 g. Pull a shot to 28 g and taste it.
14. Dose 14 g. Pull a shot to 32 g and taste it.
15. Dose 14 g. Pull a shot to 36 g and taste it.

Extraction

16. Dose 14 g. Pull a shot to 16 g. Add 20 g water.
17. Dose 14 g. Pull a shot to 20 g. Add 16 g water.
18. Dose 14 g. Pull a shot to 24 g. Add 12 g water.
19. Dose 14 g. Pull a shot to 28 g. Add 8 g water.
20. Dose 14 g. Pull a shot to 32 g. Add 4 g water.
21. Dose 14 g. Pull a shot to 36 g.

Contact time/preinfusion

22. Dose 14 g. Don't stop the shot. Pour to 28 g.
23. Dose 14 g. Stop the shot as the water hits the filter holes. Wait 2 s and start the shot again. Pour to 28 g.
24. Dose 14 g. Stop the shot as the water hits the filter holes. Wait 4 s and start the shot again. Pour to 28 g.
25. Dose 14 g. Stop the shot as the water hits the filter holes. Wait 6 s and start the shot again. Pour to 28 g.
26. Dose 14 g. Stop the shot as the water hits the filter holes. Wait 8 s and start the shot again. Pour to 28 g.
27. Dose 14 g. Stop the shot as the water hits the filter holes. Wait 10 s and start the shot again. Pour to 28 g.

Grind

28. Dose 14 g. Pull a shot to 28 g.
 29. Increase the grind size (make it coarser) by one step (if your grinder is stepless, increase the grind an increment).
 30. Purge the grinder. Tare the portafilter and dose 14 g. Pour to 28 g.
 31. Increase the grind size by one step. Purge the grinder. Tare the portafilter and dose 14 g. Pour to 28 g.
 32. Decrease the grind size by three steps. Purge the grinder. Tare the portafilter and dose 14 g. Pour to 28 g.
 33. Decrease the grind size by one step. Purge the grinder. Tare the portafilter and dose 14 g. Pour to 28 g.
 34. Decrease the grind size by one step. Purge the grinder. Tare the portafilter and dose 14 g. Pour to 28 g.
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Tasting the Variables in Espresso Worksheet 1

Name:

Date:

Coffee:

Roasted on:

Dose			Brew Water			Brew Water		
	Acidity	/10		Acidity	/10		Acidity	/10
14 g coffee	Sweetness	/10	14 g coffee	Sweetness	/10	14 g coffee	Sweetness	/10
28 g pour	Bitterness	/10	20 g pour	Bitterness	/10	32 g pour	Bitterness	/10
BR = 2	Mouthfeel	/10	BR = 1.43	Mouthfeel	/10	BR = 2.29	Mouthfeel	/10
	Aromas			Aromas			Aromas	
	Acidity	/10		Acidity	/10		Acidity	/10
16 g coffee	Sweetness	/10	14 g coffee	Sweetness	/10	14 g coffee	Sweetness	/10
28 g pour	Bitterness	/10	24 g pour	Bitterness	/10	36 g pour	Bitterness	/10
BR = 1.75	Mouthfeel	/10	BR = 1.71	Mouthfeel	/10	BR = 2.57	Mouthfeel	/10
	Aromas			Aromas			Aromas	
	Acidity	/10		Acidity	/10			
18 g coffee	Sweetness	/10	14 g coffee	Sweetness	/10			
28 g pour	Bitterness	/10	28 g pour	Bitterness	/10			
BR = 1.56	Mouthfeel	/10	BR = 2	Mouthfeel	/10			
	Aromas			Aromas				

Tasting the Variables in Espresso Worksheet 2

Name:

Date:

Coffee:

Roasted on:

Extraction



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

16 g pour

Mouthfeel /10

20 g water



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

20 g pour

Mouthfeel /10

16 g water



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

24 g pour

Mouthfeel /10

12 g water



Aromas

Extraction



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

8 g water



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

32 g pour

Mouthfeel /10

4 g water



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

36 g pour

Mouthfeel /10



Aromas

Preinfusion



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

0 s



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28g pour

Mouthfeel /10

2 s



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

4 s



Aromas

Tasting the Variables in Espresso Worksheet 3

Name:

Date:

Coffee:

Roasted on:

Preinfusion



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

6 s



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28g pour

Mouthfeel /10

8 s



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

10 s



Aromas

Grind



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

Std Grind



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

+ 1 step



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

+ 2 steps



Aromas

Grind



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

- 1 step



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

- 2 steps



Aromas



Acidity /10

Sweetness /10

14 g coffee

Bitterness /10

28 g pour

Mouthfeel /10

- 3 steps



Aromas

Tasting the Variables in Espresso

Dose

Espresso Brew Ratio [EBR]



Tasting the Variables in Espresso

Yield

Espresso Brew Ratio [EBR]



Tasting the Variables in Espresso
Extraction

14 g
16 g
+ 20 g

14 g
24 g
+ 12 g

14 g
32 g
+ 4 g

14 g
20 g
+ 16 g

14 g
28 g
+ 8 g

14 g
36 g
+ 0 g

Tasting the Variables in Espresso
Contact Time

14 g
28 g
Stop 0 s

14 g
28 g
Stop 4 s

14 g
28 g
Stop 8 s

14 g
28 g
Stop 2 s

14 g
28 g
Stop 6 s

14 g
28 g
Stop 10 s

Tasting the Variables in Espresso
Grind Size

