

ONLINE COURSE

BARISTA FOUNDATION

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LESSON 3: ROASTING BASICS AND COFFEE FRESHNESS

What is Roasting?

Roasting is the process of applying heat to green coffee beans to develop aroma, colour, and flavour. Green beans are dense, grassy-smelling, and undrinkable in their raw form. Roasting causes a series of complex chemical reactions that unlock the flavours created during farming and processing.

THERE ARE THREE COMMON ROAST LEVELS YOU'LL OFTEN SEE:

LIGHT ROAST	MEDIUM ROAST	DARK ROAST
<ul style="list-style-type: none">• Light brown colour• Is usually floral, fruity, acidic• Preferred for manual brews like pour over or Aeropress• Can be more difficult to extract for espresso	<ul style="list-style-type: none">• Medium brown colour• Balanced sweetness and acidity• Flavours often include chocolate, nuts, and caramel• Suitable for both espresso and filter brewing	<ul style="list-style-type: none">• Dark brown to nearly black• Lower acidity, more bitterness• Roasty, smoky, and sometimes oily surface• Often used in traditional espresso blends or milk-based drinks

Remember, roast level is a stylistic choice, not necessarily a quality indicator. A well-roasted dark coffee can be delicious in milk, just as a light roast can be a flavour bomb on filter.



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COFFEE FRESHNESS

Coffee is best consumed within a specific window after roasting. Immediately after roasting, beans begin to degas, releasing carbon dioxide trapped during the roast. If you brew too soon, this gas can interfere with extraction, especially for espresso.

FRESHNESS TIMELINE:

- **0–4 DAYS: STILL DEGASSING; CAN CAUSE CHANNELING AND UNSTABLE CREMA**
- **5–21 DAYS: PEAK BREWING WINDOW - FLAVOUR STABILISES**
- **1–2 MONTHS: GRADUAL LOSS OF AROMA AND COMPLEXITY**
- **3+ MONTHS: FLAT, DULL, AND POTENTIALLY RANCID IF NOT STORED PROPERLY**

Always check the roast date, not the “best before” date. Because even after months, can we still use the coffee beans? Yes, we can. But it will be stale.

For espresso, aim to use beans 7–21 days post-roast.
For filters, you can start as early as day 4 or 5.



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HOW ROASTING AFFECTS BREWING

Roast level impacts how you should grind and extract.

LIGHTER ROASTS ARE DENSER, SO THEY OFTEN NEED FINER GRIND, LONGER EXTRACTION, AND HIGHER TEMPERATURES.

DARKER ROASTS ARE MORE POROUS, SO THEY EXTRACT FASTER, AND CAN TASTE BITTER IF OVER-BREWED.

Knowing the roast level helps you adjust variables like dose, time, and water temperature with intention.



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HOMEWORK

1. Check the roast date on your coffee bag.
2. Brew the coffee and ask yourself:
 - Does it taste bright, sweet, bitter, or flat?
 - Do you think it's too fresh, just right, or stale?
3. Bonus: If you have beans of different roast levels, compare them. Observe colour, aroma, and flavour.

Write down your observations and take note of how roast affects taste, texture, and even grind setting.



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