



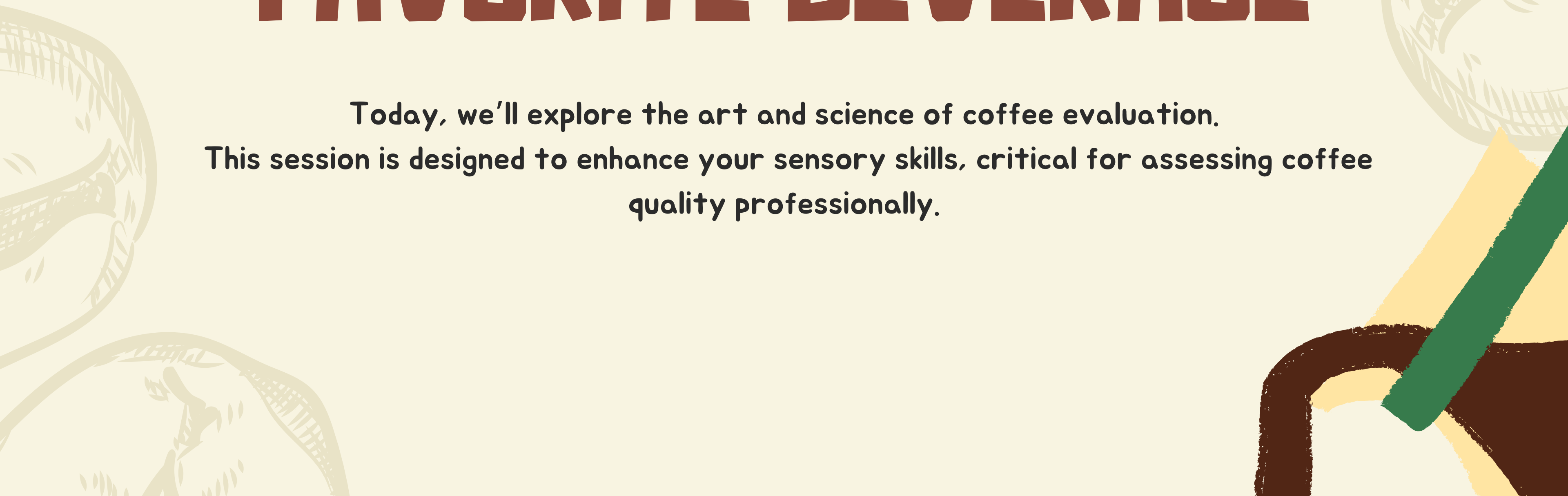
WELCOME TO THE SENSORY TRAINING WORKSHOP

Presented by Marcello Geraci



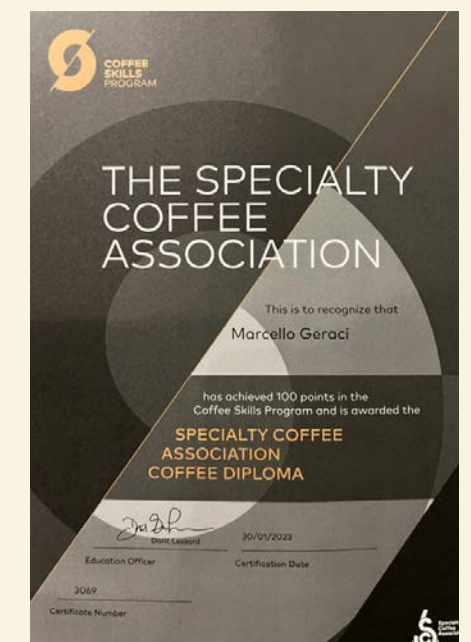
THE WORLD'S FAVORITE BEVERAGE

Today, we'll explore the art and science of coffee evaluation.
This session is designed to enhance your sensory skills, critical for assessing coffee
quality professionally.



BACKGROUND EXPERIENCE

- 12 YEARS IN THE COFFEE INDUSTRY
- EXPERTISE AS A BARISTA, TRAINER, ROASTER, AND IN QUALITY CONTROL & MANAGEMENT
- COMPETITOR IN COFFEE COMPETITIONS
- SKILLED IN SALES AND ACCOUNT MANAGEMENT
- CERTIFIED ARABICA Q GRADER & HOLDER OF SCA DIPLOMA
- JUDGE FOR THE SPECIALITY COFFEE ASSOCIATION
- JUDGE FOR THE GREAT TASTE AWARDS
- JUDGE FOR THE ACADEMY OF CHOCOLATE





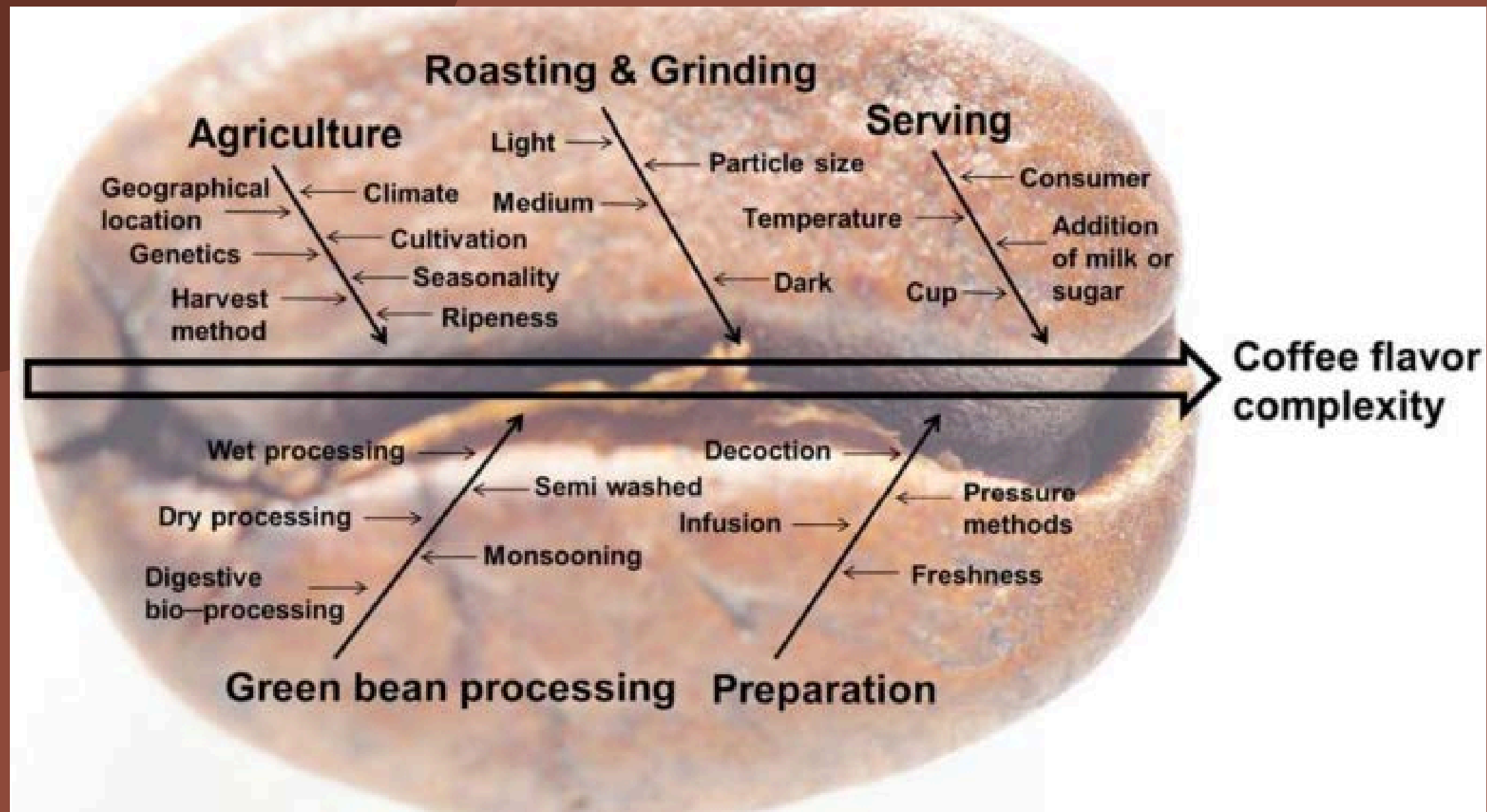
WHAT MAKES COFFEE UNIQUE?

Coffee is a sensory experience. From the farm to your cup, each step influences its flavour.

By understanding sensory evaluation, we uncover the story behind every sip —aroma, taste, mouthfeel and texture.



WHY COFFEE IS SO COMPLEX?





WHAT IS SENSORY EVALUATION?



A method to analyse how we experience products using our senses.

HOW WE EVALUATE COFFEE?

- **Appearance:** Colour and clarity of the coffee.
- **Aroma:** Smell of the brewed coffee, identifying specific notes.
- **Taste:** Sweetness, acidity, bitterness, balance, and aftertaste.
- **Mouthfeel:** Body, texture, and smoothness of the coffee.



COFFEE'S FLAVOR: TASTE & AROMA

Understanding coffee flavor involves distinguishing between three key concepts: aroma, taste, and texture and flavor. While often used interchangeably, they represent distinct sensory experiences that contribute to the overall enjoyment of coffee.

Taste:



Taste refers to the sensations perceived by the taste buds on our tongue. These receptors detect five basic tastes:

- Sweet
- Sour
- Salty
- Bitter
- Umami

Aroma:



Aroma refers to the volatile aromatic compounds released from coffee during roasting and brewing. These compounds are perceived by our olfactory receptors in the nose. When we smell coffee, these molecules travel through the nasal passages, triggering signals that our brain interprets as different scents.



COFFEE'S FLAVOR: FLAVOUR

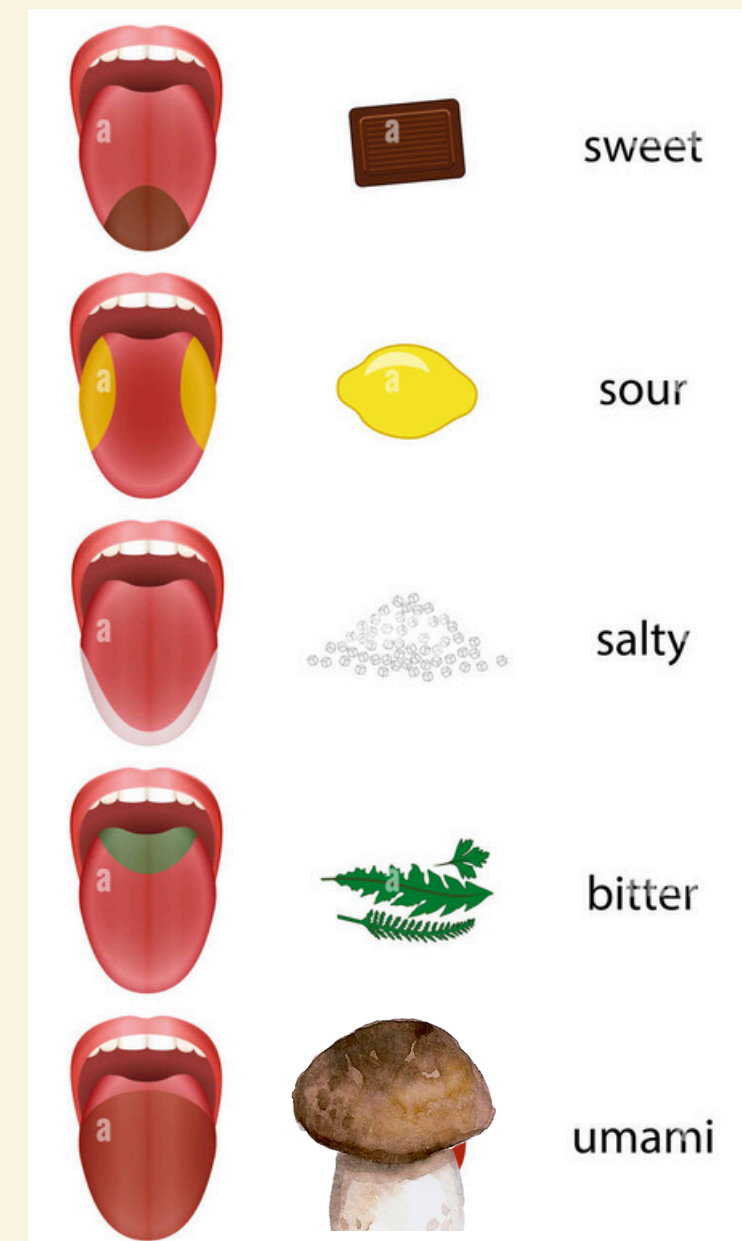
Flavor is the overall sensory experience we have when drinking coffee. It's a combination of taste, aroma, and mouthfeel (the physical sensations in the mouth).

Flavor is a more complex and holistic perception than either taste or aroma alone.

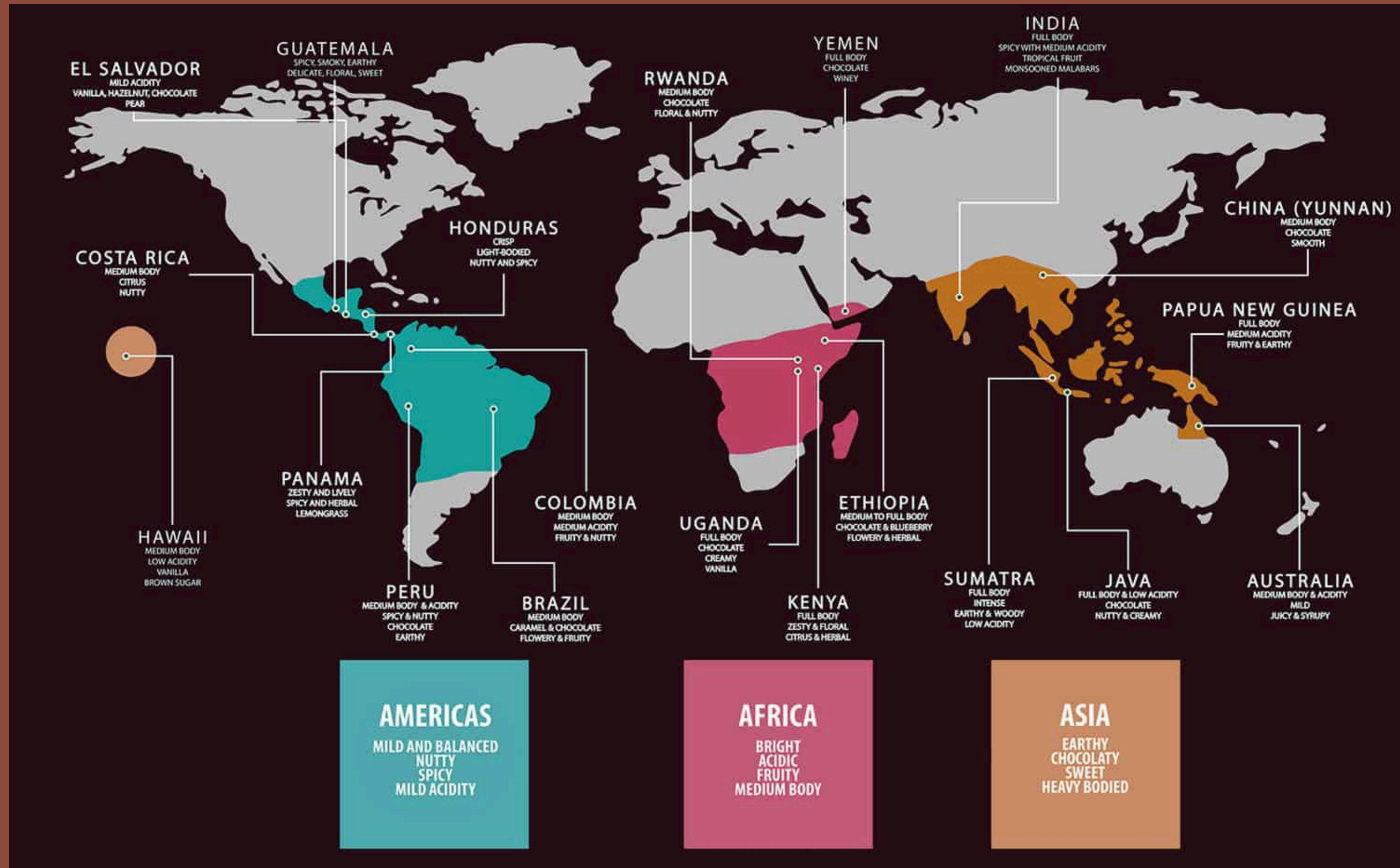
Flavour = Taste + Aroma

In summary:

- Taste: The basic sensations detected by the tongue (sweet, sour, bitter, salty, umami).
- Aroma: The scents perceived by the nose.
- Flavor: The overall sensory experience combining taste, aroma, and mouthfeel.



COFFEE BELT: GROWING REGIONS



ARABICA VS ROBUSTA: KEY DIFFERENCES IN FLAVOUR

• Arabica (*Coffea arabica*)

- Grown at higher altitudes in cooler climates
- Taste Profile: Sweet, complex, vibrant acidity
- Flavour Notes: Fruity, floral, chocolate, citrus
- Body: Medium to light
- Bitterness: Low
- Caffeine Content: ~1-1.5%
- Higher sugar content enhances sweetness

• Robusta (*Coffea canephora*)

- Grown at lower altitudes in warmer climates
- Taste Profile: Bold, earthy, strong
- Flavour Notes: Woody, nutty, dark chocolate
- Body: Full and heavy
- Bitterness: High
- Caffeine Content: ~2-2.7%
- Lower sugar content results in a more robust flavour

Differences in flavour:

Arabica: Favoured for its delicate complexity, often used in specialty coffee.

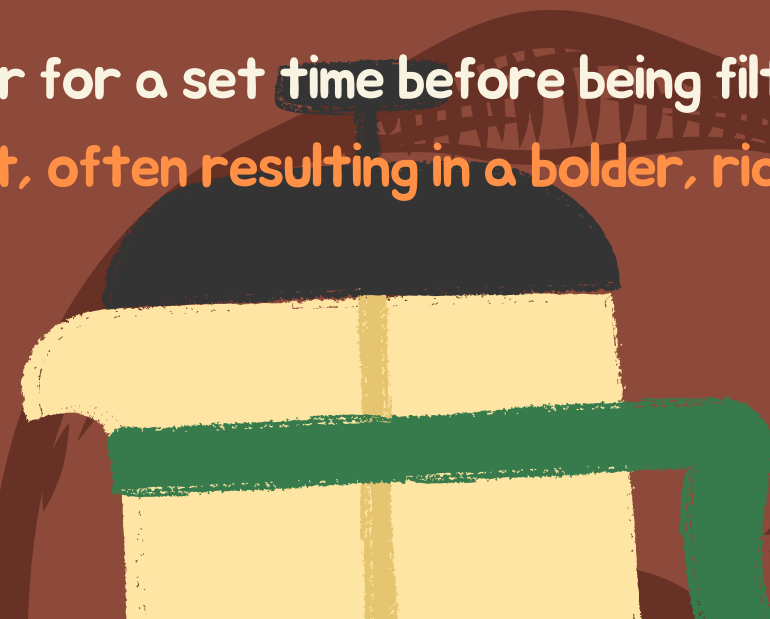
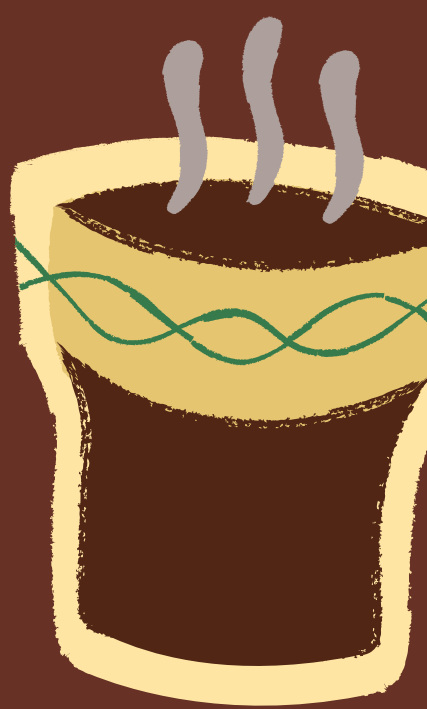
Robusta: Bold and full-bodied, commonly used in blends and espresso for strength and crema.



HOW BREW METHODS AFFECT FLAVOURS?

Brew methods alter coffee taste by affecting extraction, filtration, and contact time. Each method extracts different compounds and to varying degrees, leading to unique flavor profiles even with the same coffee beans

- Espresso: High pressure forces hot water through finely ground coffee, extracting concentrated flavors and oils quickly. This results in a small, intense shot with a thick, creamy body (crema) and often emphasizes sweetness and acidity while minimizing bitterness if done correctly.
- Filter (Pour-over, Drip): Hot water is poured over grounds and passes through a filter (paper or metal), resulting in a cleaner, brighter cup with less body and sediment. These methods often highlight delicate floral and fruity notes and allow for greater clarity of flavor.
- Immersion (French Press): Grounds are fully immersed in hot water for a set time before being filtered by a mesh screen. This produces a heavier-bodied coffee with more oils and sediment, often resulting in a bolder, richer flavor with less clarity than filter methods.



WHAT IS COFFEE PROCESSING?

HOW THEY AFFECT THE FLAVOURS

After coffee cherries are harvested, the beans inside must be removed, cleaned, and dried. The method used to do this is called coffee processing, and it has a significant impact on the final flavour of the coffee.

- **Washed (or Wet) Process:**

The beans are removed from the fruit, fermented, and washed to remove all the fruit residue before drying.

Taste Profile: Clean, bright, and vibrant. This method highlights the coffee's natural acidity and origin flavours, such as citrus, floral, or fruity notes.

- **Natural (or Dry) Process:**

The entire cherry is left to dry with the beans inside before the fruit is removed.

Taste Profile: Sweet, fruity, and full-bodied. This method imparts flavours like berries, tropical fruit, and sometimes a wine-like complexity due to the prolonged contact with the fruit.

- **Honey Process:**

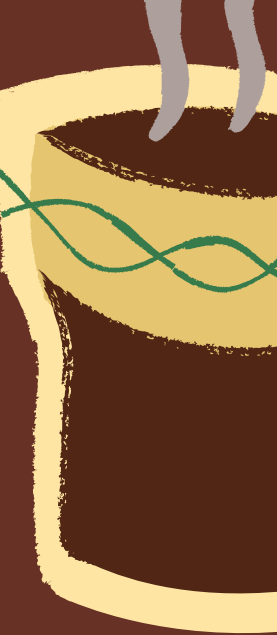
The outer skin is removed, but some of the sticky fruit pulp (mucilage) is left on the beans while drying.

Taste Profile: A balance between washed and natural. It often has sweetness and body like natural coffee, with a hint of the brightness from washed coffees.

- **Anaerobic Process:**

Beans are fermented in sealed tanks without oxygen, creating complex flavours.

Taste Profile: Exotic and experimental, with unexpected notes like spice, tropical fruit, or even fermented flavours.



COFFEE TASTING TECHNIQUES: SLURP, AERATE, NOTE

To taste coffee effectively, use these key techniques:



- Slurping: Inhale sharply while taking a spoonful to aerate the coffee and spread it across your palate for maximum flavour perception.



- Aerating: Move the coffee around in your mouth and exhale through your nose between sips to release aromas and enhance flavour.



- Noting: Record your observations of aroma (dry and wet), taste (sweet, sour, bitter, etc.), body (mouthfeel), acidity, aftertaste, and overall impression to develop your palate.

Other tips: use a cupping spoon, taste at different temperatures, cleanse your palate between coffees, and practice regularly.



READY TO TASTE



An illustration featuring a hand holding a white spoon over a bowl of coffee grounds, and a stylized coffee plant on the right. The background is a warm yellow-orange color.

WASHED PROCESSED

Washed specialty coffees are known for:

- Clean, bright flavors: Free from fruit/ferment notes.
- High acidity: Creates a lively, refreshing taste (citrusy, etc.).
- Complex flavors: Floral, citrus, and nutty notes are more pronounced.
- Lighter body: Less heavy on the palate.

An illustration featuring a hand holding a white spoon with a small amount of brown powder, positioned above a bowl filled with a similar substance. To the right, a large, stylized coffee bean is shown with a detailed, textured interior. The background is a warm, yellowish-orange color with a large, dark brown curved shape on the left side.

NATURAL PROCESSED

Natural processed specialty coffees are known for:

- **Fruity and sweet flavors:** Due to drying with the fruit intact, they have prominent berry, tropical fruit, or even wine-like notes.
- **Heavier body:** They often feel richer and more viscous in the mouth.
- **Lower acidity:** Compared to washed coffees, they tend to be smoother with less of a "tang".
- **Complex and sometimes "wild" flavors:** The extended contact with the fruit can lead to unique, sometimes unexpected flavors, including fermented or funky notes (when not processed carefully).

TASTE THE COFFEE!!!



An illustration depicting the coffee tasting process. At the top, a hand holds a white spoon with a small amount of coffee powder, while another hand holds a white cup filled with coffee. Below the cup, a large, stylized coffee bean is shown with a detailed internal structure. The background is a warm yellow-orange color with a large brown shape on the left side.

COFFEE TASTING

A. WASHED

B. NATURAL

An illustration featuring a hand holding a white spoon with coffee powder, a cup of coffee, and a large coffee bean on a yellow background.

COFFEE BLEND

A washed and natural coffee blend aims for balance:

- **Balanced Acidity:** Brighter than purely natural, smoother than purely washed.
- **Fruity Sweetness:** Combines clean sweetness with fruity/berry notes.
- **Medium-Full Body:** Richer than washed, lighter than natural.
- **Complex Flavors:** Offers a wider range of notes than single-origin coffees.

The exact profile depends on the blend's ratio, origins, varietals, and roast level. Expect a dynamic cup with bright acidity, fruity sweetness, and a satisfying body.

An illustration at the top of the page shows a hand holding a white spoon over a bowl of dark coffee. The background is a warm, yellowish-orange color. On the right side, there is a large, stylized brown shape that resembles a coffee bean or a drop.

DARK ROAST

Dark roast coffees are characterized by:

- **Bold, smoky, and roasty flavors:** The extended roasting process develops intense flavors of smoke, char, and sometimes even burnt notes.
- **Low acidity:** Most of the acidity is roasted away, resulting in a smooth, mellow cup.
- **Heavy body:** They often have a full, rich mouthfeel.
- **Less origin character:** The intense roasting process tends to overshadow the inherent flavors of the bean, resulting in a more uniform "roast" flavor.

They offer a strong, intense flavor profile, prioritizing roast characteristics over the bean's origin.

THE BIG REVEAL.....



An illustration showing a coffee tasting process. At the top, a hand holds a white spoon with a small amount of coffee, while another hand holds a white cup filled with coffee. Below the cup, a large, stylized coffee bean is shown with a detailed internal structure. The background is a warm yellow-orange color.

COFFEE TASTING

C. BLEND

D. DARK ROAST

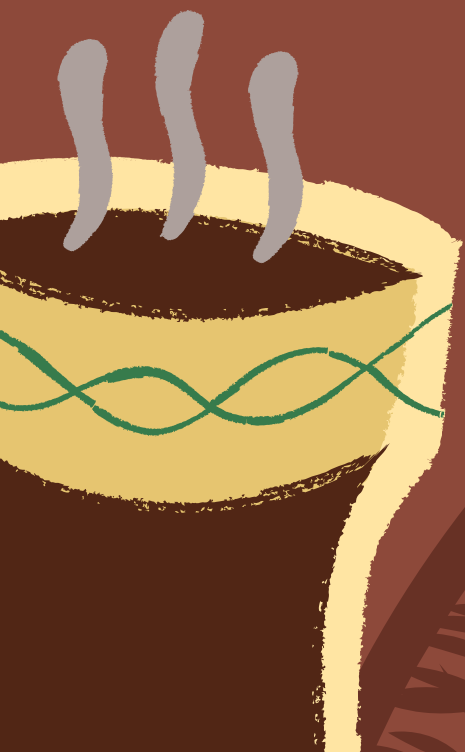
CONCLUSION

To conclude our exploration of coffee, let's recap the key elements of effective tasting, which will allow you to fully appreciate the nuances we've discussed:

Filter Coffee: Emphasizes nuanced flavors and clarity. Focus on acidity, delicate sweetness, lighter body, and complex finish. Enjoyed at a slightly lower temperature.

Espresso: Emphasizes intense flavors and texture. Focus on crema, balanced acidity/sweetness/bitterness, and heavy body. Best enjoyed hot.

Key Difference: Filter coffee is about appreciating subtle notes, while espresso is about experiencing a concentrated burst of flavor and rich texture.



Washed: Clean, bright, high acidity, lighter body.

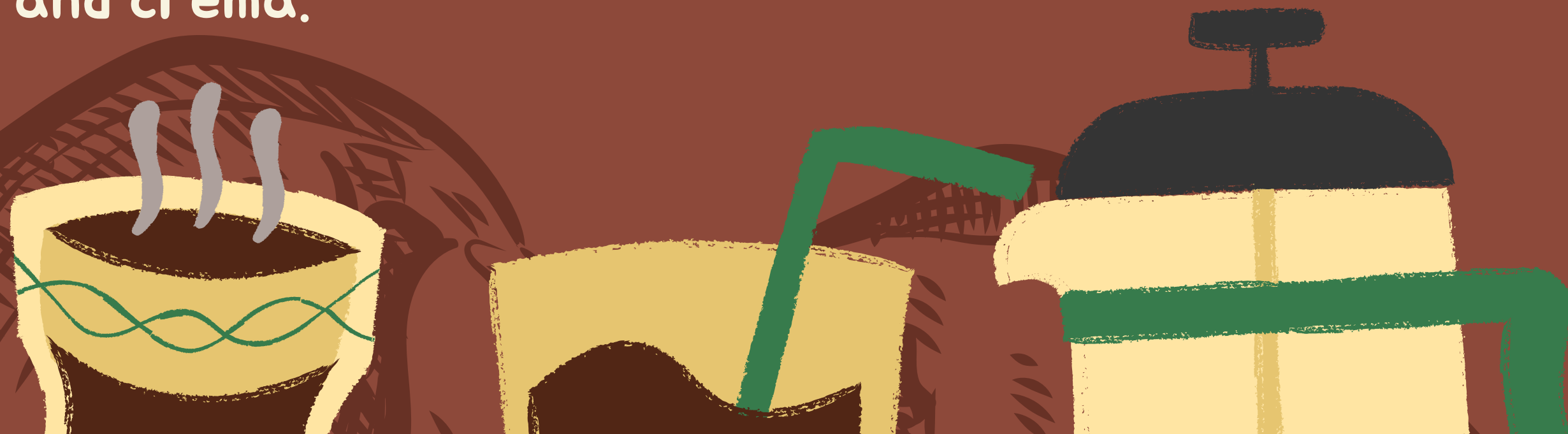
Natural: Fruity, sweet, lower acidity, heavier body.

Blend (Washed & Natural): Balanced acidity and sweetness, medium-full body, complex flavors.

Dark Roast: Roasty (smoky, char), low acidity, heavy body.

Arabica: Favoured for its delicate complexity, often used in specialty coffee.

Robusta: Bold and full-bodied, commonly used in blends and espresso for strength and crema.





QUESTIONS TIME THANK YOU

Marcello Geraci