

Your Cosmetic Passed the Microbial Test

but Can It Stay Safe After Opening?

A 2026 review in **Frontiers in Microbiology** highlights the risk of secondary microbial contamination in cosmetic products after they leave the controlled manufacturing environment.



What Happens After Opening?

Repeated opening and direct contact with the skin, lips, or eyes can increase the chance of microorganisms entering cosmetic products.



71 Mascara, eyeliner,
and eyeshadow
used eye cosmetic
products studied



Most Frequently Found

- *Bacillus spp.*
- Coagulase-negative staphylococci (CoNS)



66.7%

of Staphylococcus isolates
showed resistance to at
least one tested antibiotic.



Not Detected

- *S. aureus*
- *E. coli*
- *P. aeruginosa*



Why It Matters

This findings highlight the importance of monitoring microbial contamination and antimicrobial resistance in used cosmetic products.

Why does Packaging Matter?



Packaging can help reduce microbial exposure after opening.

Airless pumps, closed systems, and single-use packaging can minimize contact between the product and the surrounding environment.



However, packaging alone is not enough.

Effective microbial control requires a combination of good manufacturing practices, appropriate formulation, an effective preservation system, suitable packaging, microbiological testing, and proper consumer handling.



Recent cosmetic recalls also demonstrate that microbial contamination remains a real-world quality concern.

with products recalled following the detection of bacteria such as *Pluralbacter gergoviae*, *Burkholderia cepacia* complex, and *Klebsiella oxytoca*.

Microbial safety should be considered throughout the entire product life cycle



Manufacturing



Testing



Packaging



Storage



Consumer Use

Why does Packaging Matter?

References:

1. <https://www.frontiersin.org/journals/microbiology/articles/10.3389/fmicb.2026.1836448/full>
2. <https://pmc.ncbi.nlm.nih.gov/articles/PMC13233510/>
3. <https://cosciencehub.copangroup.com/contamination-in-cosmetics-recalls/>
4. <https://www.mdpi.com/2076-2607/14/5/1011>



More Than Just Instant

Coffee is now part of everyday life in Thailand. Consumers drink over 340 cups per person each year, and the market was worth about THB 65 billion in 2025.⁽¹⁾

Instant coffee remains the leading format due to its affordability and convenience, while premium options like pods are becoming more popular among younger and urban consumers.⁽²⁾



Thai consumers drink

340+

cups per
person/ year



THB 65
billion

market value (2025)



What Shape the Instant Coffee Experience

Beyond Convenience, the aroma, flavor, intensity, and mouthfeel of instant coffee can vary depending on three main elements.

Coffee Species

 Arabica Floral / Fruity / Caramel	 Robusta Nutty / Cocoa / Roasted
 Acidity: Medium-High  Body: Medium  Sweetness: Medium-High	 Acidity: Low  Body: Full  Sweetness: Low-Medium
	

Roast Profile

Roasting significantly influences coffee flavor and sensory characteristics.⁽⁴⁾

 Light Roast More acidity, fruitiness, and sweetness
 Medium Roast A balanced profile between light and dark roasting
 Dark Roast Stronger roasted characteristics and bitterness

Lighter → Darker

Even when the same coffee is used, changing the roasting conditions can produce noticeably different sensory profiles.⁽⁴⁾

From Bean to Soluble Coffee

Soluble coffee production typically involves



During extraction, soluble compounds from roasted coffee are transferred into water. The extract is then concentrated before spray drying transforms it into a fine, soluble powder that is convenient to prepare.⁽⁵⁾

Careful control throughout the process helps maintain flavor, aroma, and product consistency from batch to batch.

References:

1. Department of Business Development. Thai Coffee Market Overview. 2025.
2. Euromonitor.com/coffee-in-thailand
3. Seninde DR, Chambers E. Coffee Flavor: A Review. Beverages. 2020;6(3):44.
4. Münchow M, et al. Roasting Conditions and Coffee Flavor: A Multi-Study Empirical Investigation. Beverages. 2020;6(2):29.
5. Neoh TL, et al. Instant Coffee. In: Coffee in Health and Disease Prevention. Springer; 2016:65–89.





INTEGRATED WELLNESS
Beauty & Longevity Solutions

Newsletter

09/2026

One Bean, Two Personalities:

Exploring Brazil & Kenya Coffee Flavor Profiles

Coffee contains more than

1,000
volatile
compounds⁽¹⁾

Flavor is shaped by a combination of factors:



Origin



Altitude



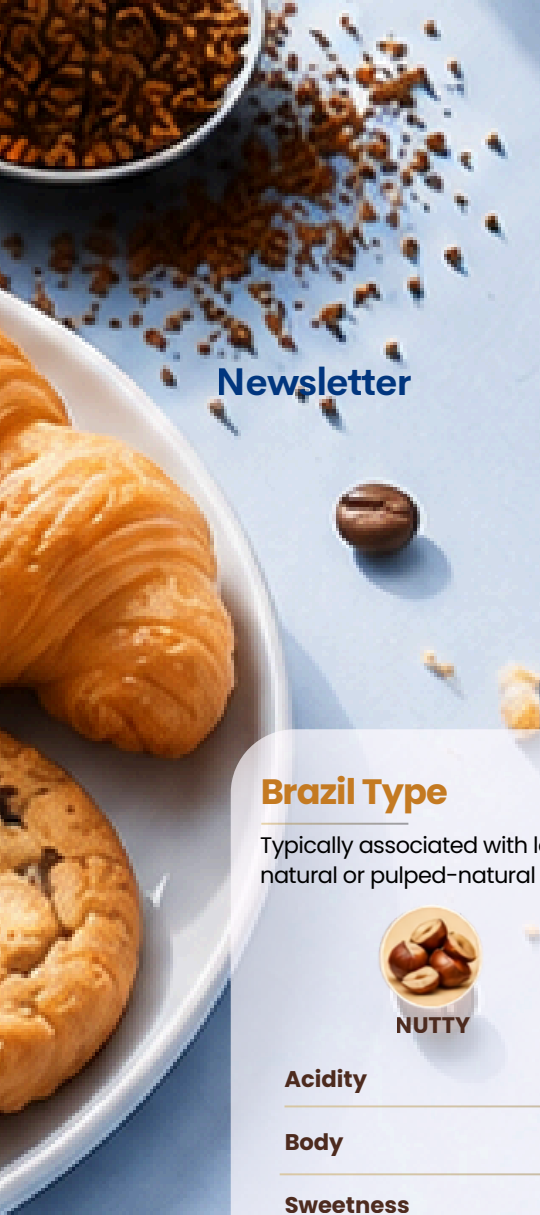
Variety



Processing



Roasting



Coffee Flavor

Brazil Type

Typically associated with lower-to-mid altitude growing regions
natural or pulped-natural processing

		
NUTTY	CHOCOLATE	CARAMEL
Acidity	Low	
Body	Full	
Sweetness	Medium-High	

Natural and pulped-natural processing keep more of the coffee cherry in contact with the beans during drying, contributing to rounded sweetness and fruit-derived characteristics. A 2026 study found that higher-altitude Arabica from Minas Gerais showed greater sensory complexity, with floral, fruity and honey-like notes compared with lower-altitude coffee^[2]

Typical sensory character:
Smooth, rounded and sweet, with roasted-nut, chocolate and caramel nuances.

Kenya Type

Typically associated with high altitude • washed processes

		
BLACKCURRANT	CITRUS	BERRY
Acidity	Bright	
Body	Medium	
Sweetness	Medium	

Kenyan coffee is typically grown at high altitude and commonly processed using the washed method, contributing to a clean, crisp cup that allows its bright acidity and fruit-forward character to stand out.^[3,4] Much of this distinctive character is associated with varieties such as SL28, one of Kenya's signature Arabica varieties, which has been linked to strong sensory and aroma characteristics.^[5]

Typical sensory character:
Crisp and vibrant, with berry, citrus and blackcurrant notes, sometimes accompanied by distinctive savory-sweet or tomato-like nuances.^[3]

From Origin to Innovation

As coffee continues to evolve beyond traditional profiles, fruit-forward and RTD coffee concepts are opening new opportunities for flavor innovation.^[6]

From the rich sweetness of Brazil to the vibrant fruitiness of Kenya, coffee offers a versatile canvas for creating new sensory experiences.

References
[1] Identification of Key Aroma-Active Compounds in Commercial Coffee Using GC-O/AEDA and OAV Analysis, 2025 (journal article)
[2] Chemical and sensory profile of Coffea arabica L. cultivated in different regions of Minas Gerais – Brazil, March 2026 (journal article)
[3] Cometeer, Kenyan Coffee Bright Acidity Profile: Why Kenya Tastes So Vibrant, April 2026 (blog)
[4] Fork in the Road Coffee, Kenya Coffee: Flavor Profile, Regions & Best Beans, April 2026 (blog)
[5] Comprehensive analysis of quality characteristics in main commercial coffee varieties and wild Arabica in Kenya, June 2022 (journal article)
[6] Mintel, A Year of Innovation in Coffee, 2026 (industry research)

UPCOMING EVENTS

< Oct 2026



DATE

- 6-8** Beautyworld Middle East 2026, Dubai, UAE
- 14-15** Cosmetic360 2026, Paris, France
- 14-16** SEPAWA 2026, Berlin, Germany
- 14-16** Health ingredients Japan 2026, Tokyo, Japan
- 15-17** FoodVision Expo - Chennai, Chennai, India
- 15-17** K-Beauty Expo Korea 2026, Goyang-si, South Korea

- 17-18** Gluten-Free EXPO, Melbourne, Australia
- 17-21** SIAL Paris, Paris, France
- 19-21** Beautyworld Japan Osaka, Osaka, Japan
- 21-22** Cosmetorium, Barcelona, Spain
- 26-30** SupplySide Global 2026, Las Vegas, USA
- 28-30** Pet Fair South East Asia 2026, BITEC, Bangkok, Thailand

