

nutripro®

NESTLÉ PROFESSIONAL NUTRITION MAGAZINE

Coffee: Facts
& Myths

A Barista's Perspective:
Respect the Bean

Make Mine
Decaf



The Culture of Coffee



Universal

Appeal

From morning to night and summer to winter, people love their coffee.

Around the world, we drink 1.6 billion cups of coffee every day[1], and it's probably one of the most requested items on your menu.

There are hundreds of ways to prepare and enjoy this beverage, and consumer tastes are evolving all the time. In this issue, we will look at the facts behind coffee, share the latest findings about its effects on people's health, help you prepare for customer requests and concerns, and suggest new opportunities to increase your coffee sales.



DID YOU KNOW?

According to legend, a goat is responsible for introducing our species to coffee. After watching his goats start frolicking and dancing around after nibbling berries from a nearby bush, an Ethiopian herder decided to try them himself, and the rest is history[2].



coffee



MYTHS ABOUT COFFEE AND HEALTH

New studies show that some common ideas about coffee and caffeine are actually not true.

MYTH: Even small amounts of caffeine are addictive.

TRUTH: Recent scientific studies using brain scans suggest that moderate coffee drinkers do not develop a physical dependence to caffeine[3,4,5]. Scientifically speaking, caffeine does not fulfill the criteria defined by the medical community for addiction, especially since it does not act on the centre of pleasure and reward.

MYTH: Coffee is bad for cholesterol levels.

TRUTH: Coffee's effect on cholesterol levels is largely dependent on the method of brewing. Filtered and soluble coffee are not associated with a significant increase in cholesterol levels, while boiled coffee can raise cholesterol levels[6].

MYTH: Coffee is bad for cardiovascular health.

TRUTH: Studies show that moderate coffee consumption is not linked to an increased risk of cardiovascular problems such as heart disease, heart attacks, irregular heartbeat or high blood pressure[7,8].

Friend or foe to your health?

Is drinking coffee good for you, or not? It's a question people have pondered for years, but much of the latest scientific research seems to come down in its favor. That's right, it is good for you. The studies here show you some of the ways coffee and caffeine have been linked to positive effects on physical and mental health.

BENEFITS FROM THE BEANS

Just like any other food or beverage, coffee beans contain some nutrients. The average cup of coffee can add small amounts of micronutrients, magnesium, and potassium, along with polyphenols which have been shown to enhance some health outcomes[9].

DRINK UP: COFFEE COUNTS!

Leading health organizations recommend that adults drink 1.5 liters of water per day, and evidence shows that drinking coffee can help meet those needs. Contrary to what people once thought, new research has revealed drinking coffee in moderation (4-5 cups per day) does not cause dehydration[10]. In fact, black coffee contains more than 95% water[11], so each cup of coffee you drink gets you closer to the recommendation for proper hydration.

A MUG FOR POSITIVE OUTLOOK

Could coffee help with a more positive outlook? Recent research regarding coffee, caffeine, and depression suggested a positive association.

In a study of 50,739 women (average age 63 years), those who consumed at least 2-3 cups of caffeinated coffee per day were about 20% less likely to develop depression, compared to those who drank up to one cup of coffee per week[12].

DID YOU KNOW?

Lattes and cappuccinos can be functional foods. When your customers are looking for the calcium their bodies need from milk, cappuccinos and lattes can also be an option.

Caffeine

More than just coffee

Caffeine is found in coffee, tea and cocoa-based drinks. The caffeine content of foods and beverages varies according to the plant they are made from in addition to the way the ingredients are prepared.

Caffeine in Milligrams[13]

	Typical	Range
Coffee (240 ml)		
Brewed, drip method	85	60-120
Brewed, percolator	75	60-85
Decaffeinated	3	2-4
Espresso (30 ml)	40	30-50

Tea (240 ml)

Brewed	40	20-90
Instant	28	24-31
Iced	25	9-50

	Typical	Range
Other Beverages (240 ml)		
Some soft drinks	24	20-40
“Energy” drinks	80	0-80
Cocoa beverage	6	3-32
Chocolate milk	5	2-7

Chocolates (30 grams)

Milk chocolate	6	1-15
Semi-sweet chocolate	20	5-35
Baker’s chocolate	26	26
Chocolate-flavored syrup (30 ml)	4	4

EYE-OPENING FACTS ABOUT CAFFEINE

Caffeinated coffee has a reputation for keeping people awake and alert, and recent studies back up those claims.

- According to the European Food Safety Authority (EFSA), 75 mg of caffeine (about one regular cup of coffee) leads to both increased attention and alertness [14].
- The effect on alertness is greatest when an individual’s alertness level is reduced, for example, after eating lunch [15].
- Caffeine may help improve performance of people aged 40 or under, who suffer from jet lag[16].
- Caffeine has been shown to reduce cognitive errors outside the workplace [17].
- A study of college students in 2009 reports that 200 mg caffeine (the amount found in approximately 2 regular cups of coffee) improves word recall compared to placebo [18].

How much is too much?

A regular cup of caffeinated coffee contains approximately 60-120 mg of caffeine. Because caffeine affects everyone differently, paying attention to the way you feel after you drink it can help you determine the "right" amount of coffee for you.

- Low to moderate doses of caffeine have been shown to improve ratings of happiness and reduce levels of anxiety, but high doses can increase anxiety, nervousness and jitteriness [19].
- Some health authorities recommend that pregnant women should limit their daily caffeine intake to 200-300 mg from all sources [20].

Make mine decaf

Want the delicious flavor of coffee without the stimulating effect? Decaf is the answer. The decaffeination process removes nearly all of the caffeine from coffee beans even before they are roasted.



You would need to drink twenty cups of decaf in a row to deliver as much caffeine as one cup of regular coffee [13]

How decaffeination works

1. The green coffee beans are soaked with water.
2. Water is circulated around the beans to extract the caffeine.
3. The mixture is drained and the process is repeated until most of the caffeine is gone.
4. The beans are soaked again in the decaffeinated water to reabsorb flavor compounds that were removed in the initial extraction.
5. The decaffeinated coffee beans are dried and ready for roasting.

Meet Ola

Ola Persson is the Nestlé Professional coffee expert. A barista with 15 years of experience, he knows coffee from the plantation to the cup. He is passionate about helping our customers transform a good cup of coffee into a great cup of coffee and leveraging knowledge into action to provide a competitive advantage. Ola is also an artist, musician, DJ, and author of several books on coffee creations.



A white, stylized signature of Ola Persson on a dark background.

—“The bean continues to teach you more.”



A word from our

Barista

"My favorite coffee always changes. Today my favorite is a soluble decaf because it is less bitter and has a natural sweetness and acidity, which is perfect for some of my coffee creations. But if you ask me next week, I would probably have another favorite. This is why I love to work with coffee, because it has so many variations."

Respect the bean

It takes three to five years to harvest a crop of coffee, making it difficult and resource-intensive. Beans are harvested only when ripe, and almost every one is picked by hand. Then they are perfectly roasted, ground, and brewed to offer a purely natural beverage for your wellbeing.

So much work and expertise goes into growing a coffee bean, and it's up to you to keep that passion alive when you serve it. Just as you wouldn't start cooking with poor quality ingredients or serve food on a splattered plate, coffee should be served mindfully. Here are some tips to give you a competitive advantage against those who fail to respect the bean.

1. Always look at the cup of coffee to ensure it looks great: no spills on the saucer, crema is red-brown (not white), cappuccino foam looks fresh. You can even dress it up with latte art or a sprinkle of cocoa or cinnamon.
2. Engage with the drink and the customer. Always serve with a smile and mention your customer's name if you know it. If you don't know it and they are a repeat customer... learn it. When you know what your repeat customers want, you can reduce your waste, better manage your orders and make them feel special by having their order ready earlier. This enhances the sense of wellbeing for your customers and creates a positive experience at your establishment.

Setting the bean scene

Your restaurant setting can attract certain types of coffee-drinking customers. Do you want to appeal to an audience that wants intimate one-to-one connections? Set up small tables with no more than four chairs. Would you rather be THE most popular meeting place for a village or school campus? Create open seating for a large number of people. This will create a welcoming environment where individuals can expect to meet others to talk.

What makes the perfect cup?

Coffee enjoyment is very personal, so the best coffee is the one you like. A good cup of coffee reaches most of the taste buds on the tongue. The initial extraction of coffee provides salty, sweet, slight acid, and bitter notes. If a coffee bean is extracted too long, it will create an unpleasant sensation we call a "grab in the throat." This will typically leave a coffee cup half full (and potentially prevent someone from becoming a repeat customer).



LOVE

Global tastes: A few of Olà's favorite recipes

CAFFÉ MOJITO (COLD)

- 1 double espresso**
- 1 oz Mojito mint syrup**
- 2 lime wedges**
- 3-4 mint leaves**
- Crushed ice**

Make a double espresso and put it aside to cool down. Put the lime and mint leaves in a glass and mash them with a muddler. Then pour the syrup into the glass and fill it with crushed ice. Pour the cold espresso over the ice. Decorate with mint leaves and a straw. Don't forget to mix the drink before you serve it.

MADE IN INDIA

- 1 pinch of saffron**
- 1 tsp sugar**
- 2 cups milk**
- 4 servings espresso coffee**

Mix saffron and sugar into milk. Heat and froth the milk to about 60°C/140°F. Make espresso according to package directions. Pour the saffron milk over the espresso. Makes two drinks.

FRAPPE COCONUT (COLD)

- 1 double espresso**
- 1 cup milk**
- 2 Tbsp. coconut syrup or 4 Tbsp. Malibu**
- 6-8 ice cubes**
- Chocolate sauce for decoration**

Drizzle the chocolate sauce in a wave pattern on the inside of the serving glass. Put all other ingredients in a mixer and mix to a milkshake consistency. Then pour the drink into the sauce-decorated glass and garnish with some grated coconut.



COFFEE CONQUERS THE WORLD

14th Century

Coffee beans are first roasted, ground and made into a beverage in Yemen.

15th Century

The coffee tree is taken to India.

16th Century

The French refine the coffee making process by filtering off the finely ground beans through a cloth bag.

1750

The French design the drip pot for making a better tasting cup of coffee.

1855

Italian espresso made with forced water under pressure is launched at the Paris Exhibition [21].

A worldwide AFFAIR

A GOOD CROP OF COFFEE

In the area between the tropics, conditions are consistent all year round, with temperatures ranging from 15-24°C/59-75°F. This is the ideal growing condition to encourage photosynthesis, the way plants use sunlight to turn carbon dioxide and water into the energy they need for proper growth. Photosynthesis is slower above these temperatures, and coffee plants can be damaged by frost when temperatures approach freezing.

Even changes throughout the day can make a difference. Experimental evidence has indicated that a large gap between day and nighttime temperatures is beneficial to the flavor of fruits. Since a coffee cherry is a fruit and the seed is in contact with the fruit, these benefits will be passed on to the seed and therefore into the cup [22].

- Coffee grows in around 80 countries in South and Central America, the Caribbean, Africa, and Asia.
- Arabica coffee accounts for about three-quarters of coffee cultivated worldwide. It is grown throughout Latin America, Central and East Africa, India and, to some extent, Indonesia.
- Robusta coffee is grown in West and Central Africa, throughout Southeast Asia and, to some extent, Brazil.
- Brazil is the largest coffee exporting nation, but Vietnam tripled its exports between 1995 and 1999, becoming a major producer of Robusta beans.
- Indonesia is the third-largest exporter and the largest producer of washed Arabica coffee [23].

Nectar from a red fruit

Those aromatic dark brown beans we know and love begin their life on a coffee tree. These shrub-like plants are grown all around the world, from the Tropic of Cancer to the Tropic of Capricorn. They bear round red fruits called coffee cherries, and the “beans” are actually the seeds of these cherries. After these soft green seeds are removed, they are roasted to bring out certain aromas and flavors, then ground, brewed, and—ahhh, enjoyed, one cup at a time.

A Hot Market

Research suggests an opportunity to drive orders of hot drinks by addressing the demands of younger consumers. Hot drinks already appeal to older people, with 89% of those over 34 years old choosing tea and 93% choosing coffee. Purchase rates among younger people are lower, particularly for coffee. Around a fifth of adults under 25 years old do not purchase coffee, while 14% do not purchase tea. Tea and coffee purchasing is particularly strong among middle-aged people, which might emphasize the family element that surrounds hot drink consumption [24].

- Hot drinks, especially tea and coffee, are generally viewed as a healthy beverage option relative to other drinks. This creates an opportunity to attract more health-aware consumers who are trying to moderate their intake of non-healthy beverages.
- Brazil, China, and the US are the largest markets for hot drinks; however, per capita expenditure is higher in European markets.
- Hot drinks (including instant and roast/ground coffee, tea, and other hot drinks) represented \$90 billion in global spending in 2011 [25].
- Consumers care about their health. 73% would like to choose healthy options, yet 40% are confused over which drinks are healthy [26]. By providing information and healthier options, you can satisfy their desires.



Is cold the new hot?

Some like it hot, but others like it cold. The demand for chilled and iced coffee products is rising, with people choosing cold coffee for pure refreshment and relaxation. Here are the locations where your guests are looking for cold offerings [27].

Café, Coffee Shop and Bar	54%
Fast Food Restaurant	26%
Full Service Restaurant	25%
Convenience Store	24%
At Work	22%
At School	17%
Fine Dining	17%
Hotel	15%

Low-cal options

Are your customers looking to cut calories from their favorite coffee beverages? Here are three simple solutions:

Milk

Provide lower-fat milks. If you have a health-conscious customer base, offer soy or nut milk such as almond milk.

Sugar

Serve coffee without added sugar and offer alternative sweetener.

Syrups

Let your customers know how many calories the added syrups provide so they can make the best choice for themselves. You might want to check into lower-sugar syrups to meet this demand.



A growing taste for specialty coffee

- Over 500 billion cups of coffee are sold every year, with a 20% increase per year [28].
- Over a third of coffee sales are now specialty coffees such as latte macchiatos and cappuccino [28].
- The average latte macchiato sells for almost double the price of a standard coffee [28].
- Specialty coffee drinkers are younger than black-coffee drinkers and they are forming their brand loyalties now [28].
- 42% of global consumers say that a claim of "customized" or "personalized" would improve their perception of a grocery product [29].

DID YOU KNOW?

Soluble coffee accounts for 17% of the green coffee produced every year and contains only beans and water. Nothing else!

WHY WE LOVE IT

Let us count the ways! Coffee is a favorite to wake us up in the morning or recharge us later in the day. But there are many other reasons people choose this drink, and understanding those motivations can help you increase your sales and generate more consistent traffic throughout the day.

Reasons to drink coffee [30]



THE TRIUMPH OF NESCAFÉ MILANO

Since the 1930s, Nestlé has been working to produce better tasting coffee. Years of research and experience have led us to the realization that great coffee comes from finding a process that eliminates inconsistencies, and that's why we created Nescafé Milano.

This specialty coffee solution prepares coffee on average 30% faster than bean to cup and 75% faster than manual espresso machines, while delivering consistency, freshness, simplicity, and less waste. As a result, it helps you make happy repeating customers [28].

Sources

- 1 International Coffee Organization.
- 2 Mdahoma, Sauda. "Kaldi and the Dancing Goats." Shama Books.
- 3 Nehlig A et al (2000). Dose-response study of caffeine effects on cerebral functional activity with a specific focus on dependence. *Brain Res*; 858:71-77.
- 4 Acqas E et al (2002). Differential effects of caffeine on dopamine and acetylcholine transmission in brain areas of drug-naive and caffeine-pretreated rats. *Neuropsychopharmacology*; 27:182-193.
- 5 De Luca MA et al (2007). Caffeine and accumbens shell dopamine. *J Neurochem*; 103:157-163.
- 6 Jee SH et al (2001). Coffee consumption and serum lipids: a meta-analysis of randomized controlled trials. *Am j Epidemiol*; 153:353-62.
- 7 Lopez-Garcia E et al. (2011) Coffee consumption and mortality in women with cardiovascular disease. *Am J Clin Nutr*; 94 (4):1113-1126.
- 8 Klatsky AL et al (2011). Coffee, caffeine, and risk of hospitalization for arrhythmias. *The Permanente Journal*; 15(3): 1519-25.
- 9 Bhatti SK, O'Keefe JH, Lavie CJ. Coffee and tea: perks for health and longevity? *Curr Opin Clin Nutr Metab Care*. 2013 Nov;16 (6):688-697.
- 10 Popkin BM et al. (2006). A new proposed guidance system for beverage consumption in the United States. *Am. J. Clin. Nutr.* 83, 529-542.
- 11 Kolasa KM et al. (2009). Hydration and health promotion. *Nutr Today* 44, 190- 203.
- 12 Lucas M, et al (2011). Coffee, caffeine, and risk of depression among women. *Arch Intern Med*;171:1571-8.
- 13 U.S. Food and Drug Administration and National Soft Drink Association.
- 14 EFSA (2011). Scientific Opinion on the substantiation of health claims related to caffeine and increased alertness (ID 736, 1101, 1187, 1485, 1491, 2063, 2103), and increased attention (ID 736, 1485, 1491, 2375) pursuant to Article 13(1) of Regulation (EC) No 1924/2006. *EFSA Journal*;9(4):2054. Available at: www.efsa.europa.eu/en/efsajournal/pub/2054.htm.



**Nutripro is a publication of
Nestlé Professional © 2013**

Contact nutripro@nestle.com for
further information.

Editorial Team: Patricia Siwajek, Tim Wolfe
Creative Direction: Mr & Mrs
Editor: Karin Lannon
Photography: Nestlé Professional,
Yolanda Gonzalez

- 15 Smith AP, et al (1990-1991). Effects of caffeine given before and after lunch on sustained attention. *Neuropsychobiology*; 23:160-3.
- 16 Ker K, et al (2010). Caffeine for the prevention of injuries and errors in shift workers. *Cochrane Database Syst Rev*; (5): CD008508.
- 17 Smith AP (2009). Caffeine, cognitive failures and health in a non-working community sample. *Hum Psychopharmacol*; 24:29-34.
- 18 Capek S, et al (2009). Caffeine's effects on true and false memory. *Psychol Rep*; 104:787-95.
- 19 Lucas M, et al (2011). Coffee, caffeine, and risk of depression among women. *Arch Intern Med*; 171:1571-8.
- 20 American College of Obstetrician and Gynaecologists (2010). Moderate caffeine consumption during pregnancy. Committee opinion no. 462. *Obstet Gynecol*; 116:467-8.
- 21 McGee on Food and Cooking An encyclopedia of kitchen science, history and culture by Harold McGee 2004.
- 22 www.coffeeresearch.org/agriculture/climate.htm.
- 23 www.coffeeandhealth.org.
- 24 Datamonitor Consumer and Innovation Trends in Hot Drinks Report 2012.
- 25 Datamonitor's Market Data Analytics.
- 26 www.nescafe-milano.com/grow-your-business/beverage-trends.
- 27 Nestlé Professional consumer research 2011.
- 28 www.nestleprofessional.com.
- 29 Datamonitor Consumer Survey, July/August 2010.
- 30 Nestlé Beverage Study 2009.

Read More

Available Nutripro Issues

Additives Simplified

Cooking Methods

Fat, Oil and Cholesterol

Minerals

Tea - A Global Beverage

Beverages - A Key to a Healthy Life

Desserts - Feed the Soul

Food Allergies

The Pleasure of Eating and Drinking

Vitamins: The Orchestra For The Body

Carbohydrates

Dietary Fibre - And Its Various Health Benefits

Meals for Kids

Sodium

Cocoa and Malt

Menu Planning

Sweetened Beverages

Coffee: Wherever, Whenever, However

Milk - The Added Value

Coming Soon

East Meets West



Nestlé Professional
Nestec S.A.
Avenue Nestlé 55
CH-1800 Vevey
Switzerland

www.nestleprofessional.com