

nutripro®

NESTLÉ PROFESSIONAL NUTRITION MAGAZINE
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Coffee and
Health Q&A

Our Barista's
Perspective

Make Mine
Decaf



Coffee

The love of the bean



This edition of Nutripro Magazine focuses on our worldwide love affair with coffee and the question of how it affects our wellbeing. A question pondered by many. Today, much of the latest scientific research shows coffee can have a positive effect on our lives.

Modern coffee beverages are prepared and enjoyed in many forms so we also take a look at these to help you make informed decisions about your own beverage use and the recommendations you might make to your customers.

And of course, a natural component of coffee, and a big talking point for many coffee drinkers is caffeine. Not side stepping the big issues we take a closer look at what it is, where else you'll find it and how it can affect your day-to-day life. All important facts you need to place moderate coffee consumption into context within a healthy diet and lifestyle.

Karen Kingham
BRAND NUTRITIONIST
Nestlé Professional



Universal Appeal

From morning to night and summer to winter, we all love our coffee.

One of life's greatest pleasures, coffee continues to be one of the most consumed beverages in the world.

And with around 1.6 billion cups of coffee enjoyed globally, every day¹, it's probably the most requested item on your menu.

DID YOU KNOW?

A black coffee contains a mere 10kJ (2kCal) per 200mL cup.



Benefits from the Beans

A black coffee contains small amounts of a number of nutrients, particularly potassium, magnesium and niacin, and has a low sodium level.

NUTRIENT CONTENTS PER 200mL CUP*	
SODIUM	4mg
POTASSIUM	148mg
MAGNESIUM	14mg
RIBOFLAVIN	0.15mg
NIACIN	0.4mg

* Source: Nuttab 2010 long black coffee

Drink up: COFFEE COUNTS!

Staying hydrated is essential for our health and wellbeing. Australia's National Health and Medical Research Council recommends adults get on average 8-10 cups of fluid a day to achieve this.²

Caffeine has long been thought to have a diuretic (fluid loss) effect on the body. However research shows caffeine containing beverages such as coffee, when enjoyed regularly and in moderation, as part of a normal lifestyle don't lead to excess fluid losses and won't compromise hydration.

So those 3-4 cups of coffee you, or your customers may have each day can make a valuable contribution to daily fluid needs.^{4, 5}

GOOD TO KNOW

Contrary to popular belief, drinking coffee can help meet hydration needs.³

COFFEE & HEALTH Q&A

should you cut back on coffee to control weight?

ANSWER: No. Weight increases over time when we regularly consume more kilojoules (energy) than we need. And, many drinks can be a source of hidden excess kilojoules.

Coffee when made with skim milk or without milk altogether is a lower kilojoule beverage that you can recommend to your customers.

BEVERAGE	AVERAGE kJ PER SERVE	SERVE SIZE
COFFEE, ESPRESSO	27	30mL shot
COFFEE, INSTANT, BLACK	10	200mL cup
COFFEE, INSTANT WITH SKIM MILK (30mL)	55	230mL cup
TYPICAL CAFÉ CAPPUCCINO WITH SKIM MILK	260	220mL cup
TYPICAL CAFÉ CAPPUCCINO WITH FULL CREAM MILK	500	220mL cup
COLA SOFT DRINK	650	375mL can
ORANGE JUICE	670	600mL bottle
HOT CHOCOLATE WITH FULL CREAM MILK	750	200mL cup

*Source: NUTTAB 2010

is coffee addictive?

ANSWER: No. While caffeine in coffee is a mild stimulant, recent studies tell us moderate coffee drinkers are unlikely to develop a physical dependence to caffeine.^{6, 7, 8}

does coffee dehydrate?

ANSWER: No. Caffeine containing beverages such as coffee when enjoyed as part of a healthy lifestyle won't compromise hydration.^{4, 5} See previous page for details.



DID YOU KNOW?

Many of us don't get enough dietary calcium. Adult calcium needs range from 1000-1300mg a day², and one cappuccino or latte with milk can provide as much as 20% of these* making a milk based coffee a valuable contribution.

*220mL coffee from ground beans, cappuccino/latte/flat white style with reduced fat milk 210mg calcium or skim milk 178mg calcium (Nuttall 2010)

is instant coffee highly processed and full of chemicals?

ANSWER: No. The process of instant coffee production can be described in 7 easy steps as you can see in our infographic. **Simply made from 100% coffee beans and nothing else, the only processing 'additive' used is water.**

THE PROCESS OF MAKING INSTANT COFFEE



step 1.

The ripened coffee cherries are harvested from the coffee plant.



step 2.

Carefully selected green beans are graded and sorted.



step 3.

The beans are roasted to transform them from green beans to aromatic brown beans.



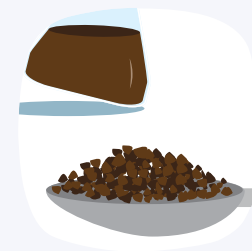
step 4.

The freshly roasted beans are ground.



step 5.

The grounds are freshly brewed to extract a smooth full-bodied liquid.



step 6.

Water is removed from the liquid extract.



step 7.

Perfect cup of coffee, delivering a smooth satisfying cup every-time.

Caffeine



More than just coffee

Coffee is widely known for its caffeine, a mild stimulant. Caffeine is found naturally in around 60 plant species such as:

- cocoa beans
- kola nuts
- tea leaves
- coffee beans

It is also added as an ingredient to popular soft drinks and energy drinks.

See Table on the right for caffeine content of popular foods and beverages.



CAFFEINE CONTENT PER SERVE*

	DESCRIPTION	CAFFEINE CONTENT* (mg)	SERVE
Coffee 	Instant coffee	60-80	250mL cup
	Café coffee (latte or cappuccino)	113-282	250mL cup
	Espresso/short black	107 (25-214)	1 shot
	Iced coffee	30-200	500mL bottle
Other Beverages 	Energy drink	80	250mL can
	Cola	36-48	375mL can
Tea 	Black tea	25-110	250mL cup
	Green tea	30-50	250mL cup
Chocolate 	Milk chocolate	20	100g
	Dark chocolate	59	100g

*Source: FSANZ, AFCD1 and Better Health Channel – Caffeine <https://www.betterhealth.vic.gov.au/health/healthyliving/caffeine>

MAKE MINE A DECAF

Want the delicious flavour 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.

*A decaffeinated coffee must contain less than 3mg caffeine per kg of coffee or no more than 5mg of caffeine per prepared cup.

You would need to drink around 20 cups of decaf in a row to deliver as much caffeine as one cup of regular coffee.



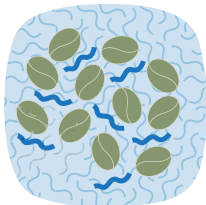
WATER DECAFFEINATION PROCESS

There are numerous ways to decaffeinate coffee however it's the natural water decaffeinating process that we use to make our decaf.

- 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 caffeinated water is decaffeinated.



- 5 Beans are soaked in the decaffeinated water to reabsorb flavor compounds lost in the initial extraction.



- 6 Decaffeinated coffee beans are dried and ready for roasting.



DID YOU KNOW?

Nespresso research⁹ reveals nearly 30% of coffee drinkers in Australia drink decaf. And what's more, close to half of this group is represented by those 18-34 years.



Taking care with coffee

How much is too much?

Around 3-4 cups a day or the equivalent of approximately 300-400mg of caffeine is considered a moderate coffee intake. And we know that for most healthy adults there is little risk to health and even some evidence of benefit at this level of consumption.¹⁰

Some people need to take more care with their coffee consumption and because we are all individuals, and caffeine affects everyone differently, paying attention to the way you feel after you drink a coffee can help you determine the “right” amount of coffee for you.

The doze factor

It's acknowledged that caffeine in coffee is a stimulant and avoiding it can improve sleep; both the time it takes to fall asleep and sleep quality.¹¹

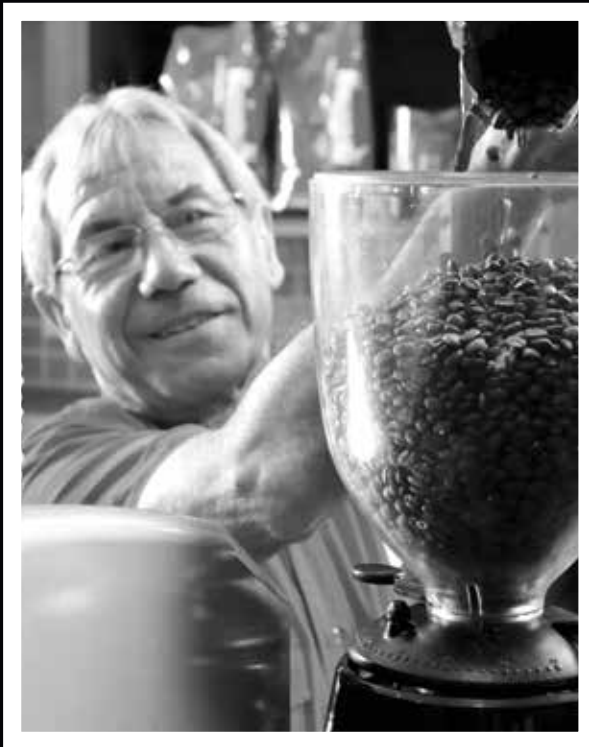
However, regular coffee consumers are reported to be less affected than occasional coffee drinkers¹² and large differences exist between individuals.^{13, 14, 15} More research is needed, but limiting caffeine later in the day by switching to decaffeinated beverages can help with a better night's sleep.

Caffeine withdrawal

While moderate coffee drinkers are unlikely to develop physical dependence to coffee, sensitive individuals may find suddenly removing caffeine from their diet leads to mild, temporary withdrawal symptoms, like headache, reduced alertness and drowsiness.

Avoid these symptoms by taking a more gradual approach to reducing caffeine from your daily routine.¹⁶

A word from our *Barista*



Meet Tony

Tony Durante is our Nestlé Professional coffee expert.

Involved in coffee preparation for over 40 years, Tony has seen the evolution of coffee preparation from the open pot to current state of the art delivery systems. Troubleshooting coffee issues in modern espresso making is Tony's specialty.

He is passionate about sharing his espresso coffee making skills with every customer and particularly loves sharing his knowledge with trainee baristas.

TONY'S TIPS

for a perfect espresso

- » Start with **PREMIUM QUALITY** espresso coffee beans
- » Retain the **FRESHNESS** of your espresso coffee beans
- » Maintain the **CLEANLINESS** of your espresso machine and grinder
- » Deliver clean water at the **CORRECT TEMPERATURE** of around 92°C
- » Ensure **CORRECT GRIND** for the machine
- » Maintain **SPOT ON DOSING** of group handles
- » **TAMPING** correctly
- » Keep **TIMING** to 25-30 seconds for a 30mL shot



Troubleshooting:

“Coffee pouring too quickly”

- Grind too coarse and or group handle is under dosed.

“No crema”

- Coffee stale, coffee kept in fridge, extraction too fast or too slow.

“Coffee tastes bitter”

- Most often caused by unclean espresso machine or rancid coffee oils inside the group handle.

Did you KNOW?



Some differences between Arabica and Robusta coffee



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 flavours, then ground, brewed and enjoyed, one cup at a time.

TIME FROM FLOWER TO RIPE CHERRY	9 months	10-11 months
RIPE CHERRIES	fall	stay
YIELD (KG BEANS / HA)	1500-3000	2300-4000
ROOT SYSTEM	deep	shallow
OPTIMUM TEMPERATURE (YEARLY AVERAGE)	15-24° C	24-30° C
OPTIMUM RAINFALL	1500-2000 mm	2000-3000 mm
OPTIMUM ALTITUDE (METRES ABOVE SEA LEVEL)	1000-2000 m	0-700 m
CAFFEINE CONTENT OF BEANS	0.8-1.4%	1.7-2.5%
SHAPE OF BEAN	flat	oval
TYPICAL BREW CHARACTERISTICS	acidity	bitterness, full

COFFEE CONQUERS THE WORLD¹⁷

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.

COFFEE ORIGINS^{18, 19}

- Coffee grows in around 80 countries in South and Central America, the Caribbean, Africa, and Asia.
- Arabica coffee accounts for over half the 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 Brazil.
- Brazil is the largest coffee exporting nation, but Vietnam tripled its exports between 1995 and 1999, becoming a major producer of Robusta beans.
- Colombia is the third-largest exporter and the largest producer of washed Arabica coffee.



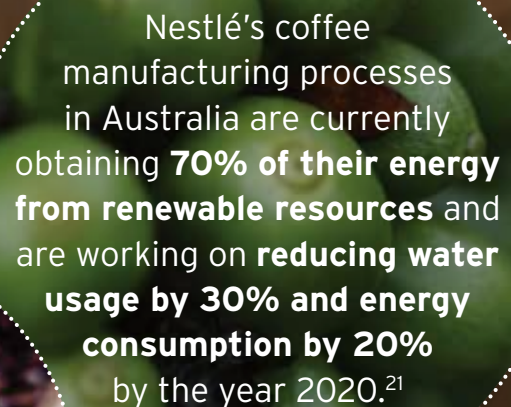
ACCORDING TO THE LEGEND...

A goat is responsible for introducing us to coffee. After watching his goats frolicking and dancing around after nibbling berries from a nearby bush, an Ethiopian herder decided to try them himself, and the rest is history.²⁰

MAKING A *difference*

As the world's leading Nutrition, Health and Wellness Company, Nestlé also cares about our planet.

The NESCAFÉ Plan looks beyond the cup and is our commitment to support the responsible farming, production and consumption of coffee around the world.

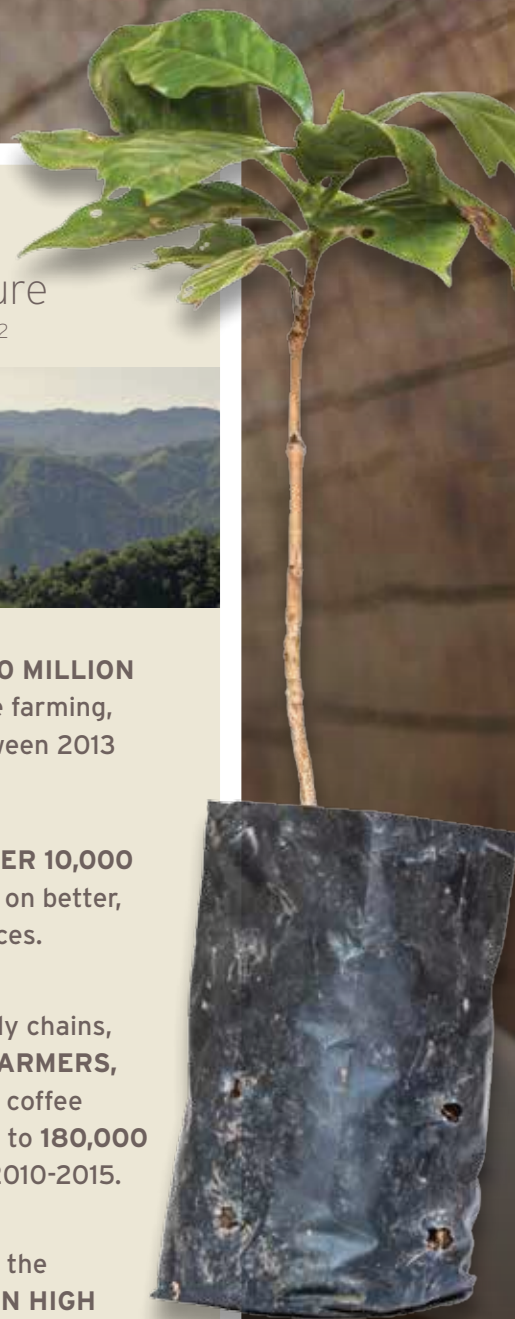


Nestlé's coffee manufacturing processes in Australia are currently obtaining **70% of their energy from renewable resources** and are working on **reducing water usage by 30% and energy consumption by 20%** by the year 2020.²¹



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THE NESCAFÉ PLAN

Work is done at every stage to ensure sustainability and fair treatment.²²



Investment

Commitment to invest **CHF \$320 MILLION GLOBALLY** for more sustainable farming, distribution and production between 2013 and 2020.



Training

Every year Nestlé **REACHES OVER 10,000 FARMERS** with training focused on better, more sustainable farming practices.



Farmers Connect

An initiative ensuring local supply chains, **INCLUSIVE OF SMALL HOLD FARMERS**, Farmers Connect aims to double coffee purchased directly from farmers to **180,000 TONNES OF COFFEE** between 2010-2015.



Future Guarantees

Investment in plant science with the **DISTRIBUTION OF 220 MILLION HIGH YIELD DISEASE RESISTANT PLANTLETS** by 2020 to ensure a viable living for local farmers and long term supply of quality green coffee.

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As your reliable nutrition partner, we have developed the Nutripro magazine to refresh your knowledge and present you with trends and scientific findings practically. Each magazine focuses on a Health and/or Nutrition topic.

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