

# FROM PLANT *to cup*

THERE'S MORE TO A CUP OF TEA THAN MEETS THE EYE



DESPITE OUR LOVE OF A CUPPA, BRITS LACK TEA KNOWLEDGE ACCORDING TO A NEW TEA CENSUS STUDY

# FOREWORD

Dr Sharon Hall, head of the UK Tea and Infusions Association



## THE INS AND OUTS OF A UK ESSENTIAL: THE CUP OF TEA

If there's one thing that Brits are good at, it's making a cup of tea. The humble cuppa has become a staple in our lives, and with so many teas to choose from - black, green, or a herbal infusion. We are spoilt for choice.

There's a type of tea for everyone it seems, and for every occasion. But how much do we REALLY know about our deliciously warming mug of tea?

Did you know that UK tea drinking goes way back in time as it was originally brought into the UK from China back in the 16th century!

Dr Sharon Hall, the head of the UK Tea and Infusions Association (UKTIA) says: "When Charles II married Portuguese princess and tea lover, Catherine of Braganza in 1662 (which by coincidence was the 21st May 1962 - the same date the United Nations has assigned as International Tea Day) tea's popularity grew, and it gradually became popular with wealthy Brits."

"In 1664 when the East India Company imported its first order of tea into Britain<sup>1</sup> - 100lbs of China tea shipped from Java. From then on, the UK has fallen head over heels for tea."

Today, tea is grown in more than 60 countries around the world; some is even grown in the UK and on the Channel Island of Jersey. However, we import around 100,000 metric tons of tea each year to provide for the more than one hundred million cups a day we drink in the UK.



Tea production is so important that the UN has designated 21 May as International Tea Day, which is an opportunity to celebrate the cultural heritage, health benefits and economic importance of tea, while working to make its production sustainable from plant to cup ensuring its benefits for people, cultures and the environment continue for generations. Tea production and processing represent a source of livelihood for millions of families, including those in least developed countries, where export earnings from tea help to finance food import bills, supporting the economies of major tea-producing countries. See [www.fao.org/international-tea-day](http://www.fao.org/international-tea-day)

The UK is SO attached to their tea that in a new real-world research survey, commissioned by the UKTIA, not one single respondent in the annual Tea Census Research Super Study said that they didn't drink tea!<sup>2</sup>

"All ages are partial to a cup of tea; in fact, research by the UKTIA has found that the younger generation has taken a real liking to tea too." says Dr Hall.

Over eight in 10 (83%) 18 to 24-year-olds have developed a taste for tea. In fact, taste is the reason 80% of under-25s and 85% of over-25s make tea their drink of choice. But of course, a cuppa is so much more than just a tasty beverage; it's a hug-in-a-mug, it's a morning pick-me-up, it's a go to for rehydration and it's an end-of-the-day wind down. Although there's a myriad of teas to choose from, and an array of different flavours, it seems the UK's favourite is black tea, with or without milk.



Dr Sharon Hall adds: "The classic black tea hits the spot for most Brits as over three quarters (77%) have voted this tea to be their favourite and many respondents in our annual Tea Census Research Super Study admitted to making their way through several cups each day."

But how was your tea made? Where does it come from? And how on earth is it possible for tea to taste so good?

"Every stage of tea making is delivered with care and attention. Tea growing and harvesting really is an art, and exact conditions are needed to create the teas we love to drink every day. Then there are the various stages following harvest that ensure the tea that ends up on our supermarket shelves provides the same great taste, day in, day out." explains Dr Sharon Hall.

This report delves deeper into tea making, the care and hard graft that goes into each brew, and the tasting processes that are put in place to ensure our tea tastes great. Plus, we cover the ins and outs of our tea habits; the whys, the whens and the wheres!

**Pop the kettle on, make yourself a warming brew and immerse yourself in the world of tea...**



## TEA LOVE: FROM PLANT TO CUP

The world of tea is an interesting one, but despite tea being such a popular drink, it seems as though many of us are lacking in knowledge when it comes to exactly how tea ends up on our shop shelves.

According to the new UKTIA Tea Census Research Super Study data, just 40% of people claim to know the difference between the production methods of black and green tea. In fact, 65% incorrectly believe that black and green tea are made from the same process, whilst 55% say that they are made from different plants. Then there's the 33% who believe that green tea is the same plant but coloured. **But what's what when it comes to tea production?**

- 65% believe it is the leaves of the plant which are used to make tea, nine percent the fruit, seven percent the flowers and six percent the roots.

A lot of love goes into that cup of tea you're drinking. And, the tea itself has been on a caring journey.

Tea specialist and author of *The World Tea Encyclopaedia*, Will Battle says that all types of true tea come from the same bush - *Camellia sinensis*. However, only 24% of people know the name of this tea producing plant.

So, whether it's green tea you love, black tea, jasmine tea or oolong tea; there's no difference in the plant that it comes from.

"It is in fact the processes that the leaves and buds go through after being picked, which influence the type of tea that is produced."

Dr Sharon Hall adds that tea bushes do vary depending on the country that they are from. "Typically, there's the assamica type and the China type. Assamica is found mainly in India, East and Southern Africa, whilst the China type tends to be found in China, Japan and Sri Lanka (the latter has a mix)."





A good way to tell the difference is by looking just at the bush is by leaf size. The assamica plant has bigger leaves whereas the China style has smaller leaves.

Assamica plants tend to produce a fuller-bodied, richer, more robust tasting tea making assamica ideal for black tea, plus, Dr Sharon Hall, head of the UK Tea and Infusions Association (UKTIA) adds that the assamica tea takes milk quite well - perfect for us Brits and our Builder's Brews!

"Delicate white, green and oolong tea are usually made from China varieties as they tend to make for naturally more aromatic brews," says Will Battle.

Dr Sharon Hall explains that 75% of the black tea we drink in the UK comes from East Africa. She notes further: "While a large proportion of the tea we drink comes from East Africa, very few tea products on our shelves in the UK are from a single origin (country or tea estate). In fact, most are blends containing different grades and origins; there can be up to 20 different teas in a blend!"

## BUSTING TEA 'GROWING' MYTHS

The new UKTIA Tea Census Research Super Study data has found that nearly half (43%) of people think that teas are seasonal, assuming that green tea is picked in summer and black tea is picked in winter. A big proportion of respondents (67%) believe that green tea is picked from young tea plants whilst 32% reckon green tea is only from Japan. A quarter (25%) of people believe that black tea comes from India. A similar number think it derives from the UK (23%) whilst 18% chose China and 11% Sri Lanka.

Over two-thirds (70%) correctly believe that black tea comes from plant leaves, however 6% think it comes from tree bark and 4% of respondents believe it is formulated in a laboratory, which is not the case.

Much like plants, whether it be a rose bush or a hydrangea, every tea bush is different, because after all, every seed is different.

"You'll see some phrases like 'seedling tea' and 'clonal tea'. Seedling tea is from a seed - each seed is slightly different so therefore it produces a slightly different taste, different yield and even different growing rates." says Will Battle.

"Clonal tea involves taking a bunch of shoot cuttings from your desirable bush. So, when you find a bush that's robust, has a good yield, appealing taste and grows fast, then that's a bush we want to replicate.

"These shoots are raised in the nursery for six months, and then planted out.

Will Battle continues: "The tea plant is typically reared in a biodegradable pot and growth can be encouraged with various bacteria that help 'fix' nitrogen - an important element for growth. You pretty much grow it like any plant in a nursery environment with a bit more shade and water. Then, it gets moved to an outside location and planted in lines."

"Typically, two tea bushes are planted back-to-back, then a walkway, then two tea bushes, then a walkway. So, the rows of tea bushes are only ever two bushes deep. Keeping the bushes pruned is important, to help with harvesting."

"We ensure through pruning and shaping that the table top of the plant is about waist height as this makes it easier to harvest. Tea bushes can be harvested before the optimum four years but the first and second years of a tea bushes life are about getting the bush established and shaping."

Will Battle explains that all bushes need fertiliser. But when the plant has been moved from the nursery to the ground, it only really needs fertiliser once a year. However, tea bushes are fairly self-sufficient provided there is adequate rainfall (at least 1100mm) and usually require no irrigation.

"Tea is planted in areas where it will thrive. One of the biggest misunderstandings about tea is the amount of rainfall it needs - ideal tea cultivating areas of Kenya enjoy around 1900mm of rainfall each year - that's about 3 times the average rainfall of London. As for how long a tea bush takes to grow, Will Battle says that it takes at least four years to produce a plant that flushes at its full productive capacity of tea.

## IT'S A LONG GAME...

Anyone hoping to grow a new batch of tea bushes best have some time on their hands. "It can take 15 years to develop a new variety of tea - from your first idea to having anything you can actually harvest." says Dr Sharon Hall.

"It's a long game with tea. You want to ensure your tea bush has the specific traits/ characteristics that you want e.g. drought resistant, good yield with exquisite taste, so you'll need to plant a patch to see which bushes perform better, to make sure they can survive and grow. They might all fail, in which case you have to start again."

Unless of course you get a great batch straight off the bat, but this is unlikely, according to Dr Sharon Hall.

"You could find a tea plant that's drought resistant but the yield is low. You've also got to balance pest resistance. There's a low chance of finding one straight away that ticks all the boxes."

### It seems as though Brits are very unaware of the time scale needed to grow a tea plant as:

- 39% believe that it takes a year from planting a tea bush to harvesting
- 23% think it takes just a month
- 9% say they think it takes just one week. If only...!

## THE TEA HARVEST

Harvesting comes next, either on smallholdings or larger estates. Field managers and smallholders apply their vast experience in determining which areas are ready to pluck.

Pluckers then come in and harvest. Will Battle notes further: "Tea grows all-year in regions closer to the equator such as Sri Lanka, South India and East Africa. Other places however have cold winters and therefore periods of dormancy.

"The further away from the equator you go, the more seasonal the weather will be. For the areas that endure a dormant period, the new growth following this period is called a flush.

"Sometimes the enduring of a hard, dry winter can create really incredible stress in a tea bush which itself results in genuinely special and much sought-after teas being produced.

"Some of the best teas are produced during the first flush (Spring crop), such as green tea in Japan and Darjeeling black tea. In fact, the first flush delivers a highly aromatic tea which is why people refer to the first Darjeeling flush as the champagne of teas. The second flush is different as it is more fruity.

"When tea is growing, plants are harvested every 10 to 40 days – depending on how quickly the plant is growing and how it is harvested. Both manual and machine harvesting is possible.

"Pluckers normally start first thing in the morning; maybe 6am or 7am. They tend to live on-site and often, due to the tea estates being in such remote locations, they need to provide housing, water, medical dispensaries, a creche and a school for their children."

Dr Sharon Hall says that in some areas, it is now hard to find people who want to pluck tea.

"Labour shortages are becoming a challenge because of greater levels of education, which is positive, and as a result many people look for jobs in cities rather than manual labour."

The harvest type depends on the quality of the tea you want and the market you're trying to sell to, confirms Dr Sharon Hall.

Whilst machinery is a useful alternative, humans are gentler when harvesting, more specific on what is 'plucked' from the bush and there is less chance of damaging the leaves. However, with innovation machine harvesting will continue to improve over time - producing a considerable amount of fantastic tea. In fact tea is already machine-plucked in Japan and some other parts of the world. Again, it just goes to show how much care goes into your cuppa!

When told that tea comes from the tea plant, 70% of people believe it is just the leaves which are used.

Dr Sharon Hall explains: "The finest quality white tea involves picking just the bud and this is done by hand. The best quality black tea involves harvesting just two leaves and a bud."

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## THE DANGERS OF THE CLIMATE

Unfortunately, with climate change and generally unpredictable and sometimes extreme weather conditions, comes the possibility that tea bushes will be affected in some way.

“A hard drought will mean some tea bushes die.” says Dr Sharon Hall. “Climate change is forcing farmers to find new areas to plant and ways to make plants more tolerant. For example, in the first couple of years of the bush’s life in some estates in South India and Malawi, water is ‘injected’ 3 feet down under each bush. This encourages deeper roots accessing groundwater making the plant more tolerant to hot weather.”

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Climate change is forcing farmers to find new areas to plant and ways to make plants more tolerant

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## QUALITY BEGINS IN THE FIELD

Tea is plucked to a standard. Pluckers (those who are harvesting the tea plants) are paid by weight. The weighing and sorting of the harvest is mostly done in the field, before a truck arrives to take the harvest to the factory.

Interestingly, 27% of respondents in the latest UKTIA survey believe that there is a day between leaves being plucked and prepared, 24% think three days and 16% think a week. In reality, it’s an absolute maximum of 24 hours<sup>3</sup>.

The leaves and buds are checked before going to the factory to ensure there is the right amount of leaves and buds for a good quality tea.

Of those questioned in the UKTIA survey, over half were correct (57%) in saying that there are quality checks at every stage of the process. Clearly, we are a little in the know when it comes to the attention needed to produce our precious tea.

“The harvested green leaf needs to be looked after really carefully as it can become damaged on the journey to the factory,” says Will Battle. “Damage can occur if tea is stacked high and if the temperature goes above 40 degrees which results in a loss of control of the process and premature oxidation. This is where the cells of the tea leaves become damaged and you start the biochemical reactions that you really want to be controlling in the factory. If it’s already started in the truck, your quality management will be so much more difficult.”

In fact, in Japan, the tea is put in a flatbed truck and there are holes through which air can be blown, to help ensure the harvested leaves and buds do not get too hot and ultimately, become damaged.

## AT THE FACTORY

“In Japan and Darjeeling (North India) factories are small and artisanal. In East Africa, however, the factories are large and multi-floored.” says Dr Sharon Hall, explaining the various factory types.

Once the leaf quality has been assessed, ‘withering’ begins in black and oolong tea manufacture.

“If we don’t remove moisture from the leaves the tea is hard to process and juices will leak out when we start to do further steps. Tea leaves are piled into withering ‘troughs’ with a mesh base. Withering involves removing moisture from the leaves, an expensive part of tea processing. It’s also one of the most important stages.” explains Dr Sharon Hall.

65% of us Brits correctly believe that tea goes through withering as part of the production process. That’s according to the new UKTIA Tea Census Research Super Study data.

“If you get it wrong at the withering stage, then the rest of the tea is doomed to fail.” reveals Dr Sharon Hall, who says that the withering process can take around 11 hours / overnight.

“Excess moisture is removed by using fans and – when needed - heating elements. Air is blown from beneath the tea, driving off moisture.



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The factory itself will often be built in the direction of prevailing wind as this helps wither the leaves naturally. This is also important as it helps to use less energy, save money and be more environmentally friendly.

If there has been monsoonal rain, the tea will be saturated so withering can potentially take longer.

There are two stages to withering; physical withering – the natural process that occurs when moisture is being removed - and ‘chemical’ withering where changes to aroma and taste occur naturally in the leaves and buds.

“Oolong tea is a good example where withering is a key step – tea leaves are withered in the sun first. Solar withering initiates different natural biochemical reactions than doing it inside. Very complicated biochemical processes are going on in this process.” says Dr Sharon Hall.

How much moisture is removed is also a key factor and depends on the types of tea you are manufacturing. ‘Hard’ withering removes more moisture and is used when making orthodox tea types (where the leaves are rolled); soft withering removes less moisture and is typically used when making tea in the Crush, Tear, Curl (CTC) method.

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“Solar withering initiates different natural biochemical reactions than doing it inside”



Black tea generally has the same stages of pluck, wither, cell disruption, aeration and drying. A key difference is how the cells are disrupted. Orthodox rolling, as the name might suggest is a more traditional form of processing where tea is squeezed against a rotating flat surface with batons on it. This ruptures and twists the leaves mixing the enzymes with the polyphenols.

Black tea made with this rolling stage is larger in size, often blacker in colour and takes longer to brew with more delicate complex flavours. These teas are typically brewed in a teapot as the leaf tends to be too big to pack into a tea bag (the smaller grades are used).

CTC stands for Crush, Tear, Curl and the process was invented in the 1930s. Tea is passed through sets of cylindrical rollers with small ‘teeth’ cut into the surface. The cylinders are placed close together (hence crush) and as each roller moves at a slightly different speed the crushed leaf is torn and curled into small pieces. CTC tea tends to result in fast brewing and create full-bodied robust teas that take milk well and are well suited to brewing in tea bags.

“Black tea made with this rolling stage is larger in size, often blacker in colour and takes longer to brew”



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## CHECKING THE COMPLETION OF WITHERING

“Factory workers will walk around and assess the leaves and they will also use a moisture metre to determine when withering is complete. Getting this stage right requires considerable experience,” says Will Battle.

## CREATING LOOSE TEA AND TEA BAG TEA

“After withering, the tea is passed through a stone sorter which gets rid of stones before the tea is either turned into orthodox tea or tea for tea bags.” explains Dr Sharon Hall.

In tea leaves the different components (enzymes, polyphenols etc) are kept apart in different parts of the leaf. To make black tea we want to break up the leaf structure to bring these components together. Then, the next process needs air and is called ‘aeration’ (formerly known as oxidation).

To make large leaf tea, an orthodox roller is used which presses down the leaf onto a moving plate with ‘battons’ which twist and squeeze the leaves and mixes their components.

For most tea bags, the particles need to be smaller. A machine, much like a mincing machine (crush, tear, curl machine), will break up the particles before the tea heads to a number of cutters where small teeth on the rollers help to crush and tear the leaves into very small pieces.” says Dr Sharon Hall.



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## NEXT UP: AERATION

It’s during the aeration stage that the broken leaves are laid out to allow the required biochemical processes to happen before they then go on to be dried.

Around four to six hours is typically needed for ‘aeration’ to be completed and the colour to go from green to coppery-brown. This of course depends on the ambient temperature so the tea maker needs to be vigilant.

For green tea however, aeration should not occur.

Perhaps you’re wondering why tea needs so much drying? Particularly as the primary withering stage focuses on removing moisture from the tea leaves to make it easy to process and to start the important biochemical processes that high levels of water will hold back.

“If you under-aerate, you’ll be left with harsh green notes. If the process goes on too long you end up with flat, dull tea. People are always walking around, assessing and tasting tea to check up on how the process is going,” says Dr Sharon Hall.

“Even at the end of an aeration, the leaves could still be holding 20% moisture. You want to go down to 3 to 4% moisture at the end of the drying process so the tea lasts when packed.” says Dr Sharon Hall.

“A dryer - similar to a tunnel - with massive hair dryers underneath - dries the tea. The air is blown so fast that the tea vibrates up and down, ensuring even drying and helping to develop further taste and aroma. You end up with a complete mix of particle sizes. Any stalks that remain are removed by electrostatic rollers that the conveyor belts carrying the tea move under. The tea is then separated into grades based on size. The large grades that sit on the wider sorting screens will be used for loose leaf whilst the smaller grades will be used for teabags.”

## WHAT TEA SUITS YOU?

“Every culture has its own preferences when it comes to tea.” says Dr Sharon Hall. “However, in the UK, we like good strong robust teas, typically drunk with milk and brewed from a tea bag.”







## CREATING THE TEA TASTE YOU LOVE

To make sure that your cuppa tastes just so, there's a fairly vigorous tasting process. It's not as simple as throwing together a few tea leaves and hoping for the best.

If you've ever been wine tasting, then you'll be familiar with the various techniques used to really detect the flavours of wine. It might sound bizarre, but tea tasting also goes through a similar tasting process, where expert tea tasters slurp the tea at different stages in the journey from factory to final blend. Slurping pulls the tea across the whole surface of the tongue, so the flavour molecules can be picked up and then they are drawn towards the olfactory passage so the tea tasters can note the aromas as well.

Dr Sharon Hall explains: "Quality control experts in the tea factory at the tea-growing origins will check out and analyse the dry leaf appearance, before making a brew. They will look at the colour, how dark and deep it is; how golden or red. They may add milk to test how the tea blends with milk.

"They will then take a spoonful and taste it with a big slurp, bringing it into their mouths with air which helps them to help evaluate the flavours. Then, they swish it around their mouth and taste buds."

Dr Sharon Hall adds that the testers are assessing the flavour and sensation of the tea. In fact, there are agreed standards on tasting methods, terminology and even specific crockery used to make the brew to ensure everyone around the world is assessing quality the same way.

"The tea needs to be spat out into a spittoon, as some tea tasters are tasting 1000s of brews a day."



## FROM AUCTION TO PACK

“Tea is typically sold at a local auction,” says Dr Sharon Hall, “such as in Mombasa in East Africa, which is where much of the UK’s tea comes through. Tea auctions are on a weekly basis.”

Dr Sharon Hall explains that packets of tea are sent from tea factories all around the world to the various tea brands to buy. Here, again, ‘slurping and spitting’ is used to assess the tea quality and if it will fit into the brand’s blended tea.

In the UK, there are several tea brands that have become household names.

“The tea blender from the UK tea company will decide what they want and how much they need and tell someone in the auction centre to buy it for them.” says Dr Sharon Hall.

Did you know that very few tea products on our shelves in the UK are from a single origin (country or tea estate). In fact, most are blends containing different grades and origins; there can be up to 20 different teas in a blend!

So how can you be sure the tea you buy every week in your weekly shop will taste the same, time and time again?

“That’s where the skill of the blender comes in.” says Dr Sharon Hall, who says that the chances of buying your brand next month and it being different to previous months, is very, very low. “Blenders have years of experience, knowledge of possible alternatives they can use and stock to play with.”

Blenders also taste the teas, in the same way as the quality control experts in tea factories and then decide just how much of each tea to include in the blend to consistently achieve the taste consumers know and love.



“Blenders have years of experience, knowledge of possible alternatives they can use and stock to play with”



## 3: TAKE A MOMENT, WITH TEA

Tea isn't just a drink. It's part of our daily lives. Perhaps you love socialising over a cuppa, you might drink tea to revive and hydrate you after exercise; maybe tea helps you to relax at the end of the day; or it's simply a lovely way to warm yourself up.

But the main reason us Brits love tea is - as expected - the taste. Dr Sharon Hall notes further: "In our very latest research data collected in this year's Tea Census Research Super Study we found the following:

- Just over half (**54%**) of those questioned in the latest UKTIA survey rated taste as their number one reason for drinking tea.
- **19%** like the "pick me up" most about tea.
- **13%** have a cuppa to take a break - perhaps during the work day.

"Just over a third (**34%**) say that their tea break is 'essential'. Our British tea breaks are a key part of the day!"



Ever found tea the perfect way to wind down? Well, you're not alone:

- **41%** of respondents in the UKTIA census survey believe drinking tea reduces anxiety and stress and **21%** say it improves a low mood.
- Just over half (**55%**) say that tea makes them feel relaxed and **37%** say that tea makes them feel calmer.

"For those who need a little pick me up during the day **29%** say that a cuppa helps to boost their mood." says Dr Sharon Hall.

Other recent UKTIA research<sup>4</sup> also found how many young adults (aged 18 to 24) in the UK are turning to a cuppa to enjoy the many benefits of tea. Nearly **38%** kickstart their day with a cuppa - they have their first cup of the day when they get out of bed.

Then there's **44%** who say they love tea as it helps them feel warm<sup>4</sup> when they're cold, **45%** love tea for its relaxing effect<sup>5</sup> and **24%** are fans of tea because 'it's a good reason to take a break'.<sup>6</sup> Well, we couldn't agree more. There's nothing quite like a tea break.

Although English Breakfast (everyday black tea) is the most popular tea for 18 to 24-year-olds with **65%**<sup>7</sup> preferring this tea:

- **34%** love green tea
- **24%** like fruity tea
- **21%** are fans of mint tea
- **19%** enjoy herbal teas.

**55%** say that tea makes them feel relaxed and **37%** say that tea **makes them feel calmer**



Plus, half (**50%**) of this age group said they drink herbal and fruit infusions for the taste; almost one in two (**48%**) admitted that they don't just like the taste of tea and herbal and fruit infusions - they love it!

## PLANET LOVE: SMART TEA CHOICES

In a time when energy bills are soaring to epic heights, and the discussions about climate change are constantly ongoing, there are ways to make tea a little more planet and purse friendly.

How often have you boiled the kettle, only to end up with an excess of water that just goes cold and unused?

Over two-thirds (69%) of people leave boiled water in the kettle after brewing their tea, whilst 16% use it for something else and 7% throw it away, according to the very latest UKTIA Census Tea Study data. So, although the leftover water may not be thrown away by most people, there's a fair bit of energy being wasted, especially if you continually boil the kettle with too much water.

According to energy calculations by sustainability experts at Carbon Intelligence, commissioned by the UKTIA<sup>8</sup>, a whopping 2,649,792 kWh of electricity is wasted each day, creating 618 tCO<sub>2</sub>e greenhouse gas emissions just to boil this extra water. Our bank balances pay for it too as overfilling the kettle could add a painfully high £900,900 a day overall to the nation's energy bill! And with rates going up, who knows what figure this could end up at.

Dr Sharon Hall notes: "Our latest UKTIA Tea Census Research Super Study Data found that 39% of people boil double the amount of water they need, others boil more! Only 23% boil one cup (to make one cup) according to our poll, which means that 77% of the nation are over-boiling the kettle for every cup of tea they are making, wasting electricity."



It also affects the taste of the cuppa. Using freshly drawn water (and only the amount you need), will deliver a better-tasting cup of tea, because the oxygen in the water will draw out the best tea flavour. Re-boiled water loses its oxygen and results in a cuppa that tastes flat and dull.

"It's not surprising that many of us are boiling too much water, 38% of respondents in our latest research survey admitted that they have never used a cup to measure the amount of water they are going to boil in the kettle. So, it's basically a guessing game. Just under a quarter (23%) say they rarely measure with a cup, 27% do measure in cups most times and 12% do it every time."

Despite the rise in UK energy costs, the humble cuppa remains an absolute essential. Around half (50%) of people have not changed their tea consumption because of energy price rises. Only 25% have less tea than before and the same number, 25%, actually make more tea.

So, in a bid to reduce the amount of unwanted water boiling, the UKTIA has introduced the Smart Boil campaign.

Dr Sharon Hall says that by simply altering the way we make our tea - boiling the correct amount of water needed- we could be cutting back on carbon emissions, which not only helps our planet but also saves money too.



“Boiling the correct amount of water needed- we could be cutting back on carbon emission”

The Smart Boil campaign is also backed by UKTIA members including PG Tips, Pukka, Tetley, Twinings and Yorkshire Tea who are encouraging consumers to boil 'just what you need' when making your cuppa.

Dr Sharon Hall explains: "The Smart Boil campaign returns for another year and it's not a moment too soon. With rapidly rising energy costs, for consumers and businesses alike, every bit we can save on our electricity bills helps us deal better with the cost-of-living crisis.



“The UK is a tea-drinking nation and everyone loves their tea breaks, so it really can make a difference to boil only what you need. Using your mug to measure out the water for one or two cuppas is easy to do, yet our survey found that only a third of people were doing this routinely.”

Dr Sharon Hall adds that the taste of tea can also be improved by just boiling the right amount of water. “In fact, to draw the best flavour out of the tea, the water must contain oxygen to ‘energise’ the leaf and extract all the character of the tea. If you top up the kettle, water is repeatedly re-boiled which drives out the oxygen and makes the tea taste dull. So, using the right amount of freshly drawn water will deliver a great-tasting cuppa.”

Despite the fact that most of us are boiling more water than is needed, 88% of people questioned believe that boiling only the amount of water needed will reduce energy bills. More than three-quarters (76%) believe that it will help save the planet.

Whilst we slowly start to improve on our water-boiling, it would also appear we’re becoming a little savvier on other sustainability fronts; when ordering tea out and about, the latest UKTIA Tea Census Research Super Study survey results have shown how 31% of people use their own reusable cup when ordering tea out of home and now 41% of people take a reusable cup on their commute. Because ultimately, single-use, disposable cups are only adding a further burden to the planet.

As we all continue to sip on tea, it’s only logical that we make it as sustainable as we can!



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Using your mug to measure out the water for one or two cuppas is easy to do yet our survey found that only a third of people were doing this routinely

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## 5: TEA RITUALS & HABITS

A cup of tea is as habitual to many as brushing their teeth or putting on the news in the morning. In fact, for many, tea drinking is an occasion. Whether you pop the kettle on as soon as you get in from work, or fix up a pot of tea to enjoy with a biscuit (or two!), many of us follow a consistent tea routine, drinking tea at the same time most days, and having it a certain way. After all, we're creatures of habit and like things done a certain way!

Dr Sharon Hall says: "The thing with tea is that, in the UK, it's a staple drink. You'd be hard-pressed to go into any UK home and not see a kettle on the worktop and a pack of tea bags in the kitchen cupboard. It's entrenched into our lives, so it's no surprise we have developed certain habits around tea."

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### TEA: AT HOME AND ON-THE-GO

Of course, tea can also be bought in cafes, supermarkets and restaurants, however 71% of black tea is drunk at home. Just 12% of respondents in the latest UKTIA Tea Census Super Study Survey said they drink their cuppa in cafes with just 10% consuming their tea in coffee shops. Then there's the 9% of black tea drunk at work, 8% drunk at friends' or families' homes and 7% drunk in restaurants.

For those who do buy their tea on the go, 63% say English breakfast is their go-to, followed by herbal (24%) and green tea (21%).

But judging by the UKTIA Tea Census Super Study Survey results, tea doesn't always go down too well when drunk outside of the home. Just over a third (32%) say that tea in cafes is too expensive and 30% say that tea in cafes tastes awful. The industry is looking at this and as a result we are set to see smart innovation which will deliver a more consistent taste experience out of home.

However, we Brits like the way we make tea ourselves, which is why it is no surprise to discover 47% take the tea they make at home with them in a flask.

It's fair enough; we are in a pretty crazy cost of living crisis. On that note, the latest survey results show that 60% of people have turned to tea instead of heating to warm themselves up during recent energy price rises.

Tea really is like a hug in a mug. In fact, 49% of those questioned in the 2022 UKTIA Tea Census Super Study<sup>9</sup> claimed to drink more tea during the winter months. This was followed by 32% who drink more tea during the autumn.

### TEA HABITS ON HOLIDAY

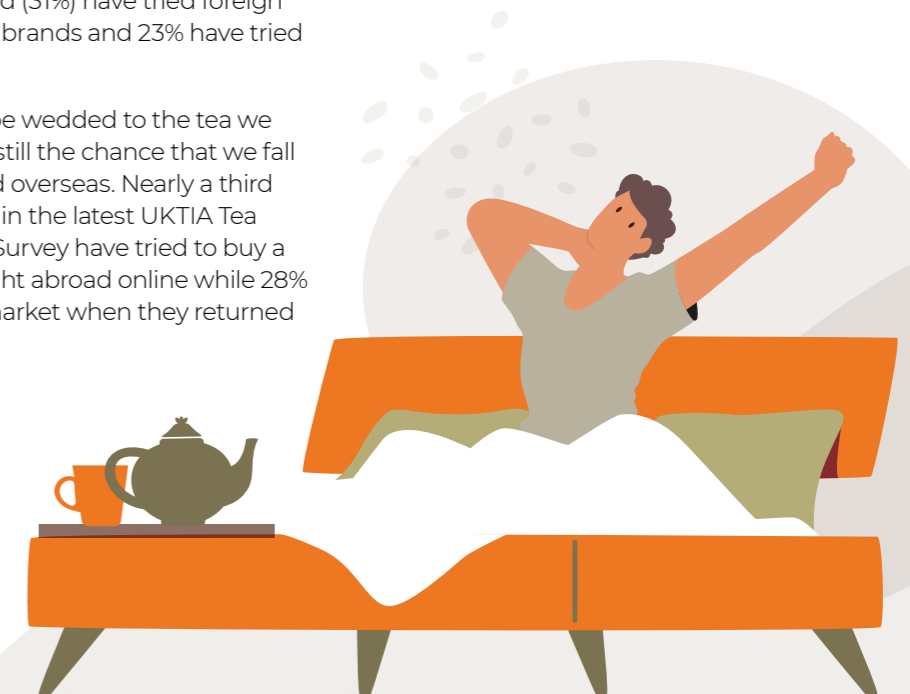
We're so in love with our staple tea, that 32% of people try to stick to their same brand of tea when travelling abroad. 13% of those polled say they even take their favourite brand with them on holiday. Plus, a third (31%) have tried foreign supermarket bought brands and 23% have tried local brands.

Although we might be wedded to the tea we buy at home, there's still the chance that we fall in love with a tea tried overseas. Nearly a third (29%) of respondents in the latest UKTIA Tea Census Super Study Survey have tried to buy a type of tea they bought abroad online while 28% searched in a supermarket when they returned home.

### IT'S TEA O'CLOCK

So, when are Brits drinking their beloved tea? Well, tea has become somewhat of a morning essential for many. So much so that 72% of respondents said that they would feel there was something missing if they didn't have a cup of tea in the morning. Of the morning-tea lovers, 38% said it was important or very important to get them going whilst 43% said that it was important or very important to drink tea in the morning as they need it to get them up!

Some of us drink our tea with meals. A third of respondents (30%) sit down for breakfast with a cup of black tea, 29% sit down at lunch and 19% enjoy a cup of tea with their evening meal.



## TEA FOOD PAIRINGS

Us Brits also like specific foods as an accompaniment with our cuppa.

- Just under half (49%) like a biscuit with their tea
- Cake was favoured by 31%
- 17% of the nation like some chocolate with their tea

However, while some of us have a sweet tooth, many of us choose something savoury as a food preference with our tea:

- 15% of the nation choose a savoury biscuit
- 10% of the nation go for a cereal bar
- 11% of Brits go for crackers while 10% opt for crisps
- 5% of the nation choose a samosa

However, our age also affects what we eat with our tea and although sweet treats too are popular to choose with a cuppa, those people polled aged 18-29 years also consume the following with their tea:

- 22% choose a savoury biscuit
- 14% opt for a cereal bar
- 16% choose crackers while 11% opt for crisps
- 8% choose a samosa with their tea

And while some of us like a sweet or savoury accompaniment with our tea, 20% of the nation like to have their cuppa just by itself.

But what teas are Brits drinking and when? And more importantly, HOW are they being drunk?

According to the new UKTIA Tea Census Research Super Study:

- 38% of people drink 1 to 2 cups of tea per day
- 36% drink 3 to 4 cups
- 15% drink 5 to 6 cups
- A tiny 2% drink more than 11 cups

Tea bags trump loose teas when it comes to Brits' tea choices. For black tea:

- 77% of people use tea bags
- 13% use loose leaf tea
- 10% use both

As for herbal teas:

- 69% use tea bags
- 15% use loose leaf
- 16% use both loose leaf and tea bags

And, for those who enjoy green tea, 67% use bags, 15% use loose leaf and 19% enjoy a bit of both.

“ 22% choose a savoury biscuit with their tea ”



## TEA COLOUR

Everyone likes their tea at varying strengths. “Just over a quarter (26%) of people leave their tea bag to brew for 1 to 2 minutes whilst 19% leave it in for less than a minute and 17% let it brew for a lengthy 2 to 3 minutes,” says Dr Sharon Hall, according to the new UKTIA Tea Census Research Super Study. She adds: “In fact, most black teas should be brewed for three to four minutes, while Lapsang Souchong black tea tastes best after four to five minutes. Green tea on the other hand should be brewed for three to four minutes and oolong tea for three to five minutes, depending on the strength preference.”

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64% of people take green tea with no milk

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Dr Sharon Halls adds: “Although black tea is the tea most favoured by Brits, peppermint is the most popular herbal tea, voted for by 45% of people who drink herbals in our latest UKTIA Tea Census Research Super Study. Chamomile is loved by 34%, ginger by 31% and spearmint by 21%.”

Dr Sharon Hall notes further, “With UK tea being famously robust and able to take milk, it’s no surprise in our latest UKTIA Tea Census Research Super Survey Poll that 42% of people enjoy their black normal tea with semi-skimmed milk and just 22% take it with no milk.

“There’s also the 19% who enjoy their tea with skimmed milk and 14% who like a creamy whole milk mixed in with their tea bag.

“Interestingly our new poll found that 29% of people have switched to using plant-based milk, of these 52% prefer oat milk, 37% coconut and 30% add soy.”

Herbal teas are far less likely to be mixed with milk if the latest UKTIA data is anything to go by. More than two-thirds (64%) of people take their herbal tea with no milk whilst 15% like their herbal tea with semi-skimmed milk, 10% have it with skimmed milk, 8% enjoy whole milk and 3% take their herbal tea with plant milk.

It’s the same for green tea, as 64% of people take green tea with no milk, 15% use semi-skimmed milk, 9% use whole milk, another 9% go for skimmed milk and 3% use plant milk. We’re a sweet tooth nation clearly as the majority of those who took part in the latest UKTIA Tea Census Research Super Study said they mix either sugar or sweetener into their tea.

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There’s so much more to a cuppa, says the UKTIA Tea Census Study

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Only 35% of people don't take any sugar or sweetener in their black tea, whilst 29% have one teaspoon of sugar, 24% have two teaspoons and 6% have three teaspoons! Luckily, just 1% have more than four teaspoons of the sweet stuff and 5% use sweetener.

Brits also enjoy some sweetness in their herbal teas; 27% have one teaspoon of sugar, 18% have two teaspoons and 6% have three whilst 2% have more than three spoons of sugar. Just 43% of people have no sugar in herbal tea.

Green tea is similar as 44% of people have no sugar in green tea whereas 26% have one teaspoon, 18% have two teaspoons, 6% have three teaspoons and 3% have more than three teaspoons of sugar in their green tea.

So, there's a tea bag, hot water, milk and sugar. But which of the mix is placed into the mug first?

Dr Sharon Hall says: "The vast majority (80%) put the tea bag in first, 15% put the sugar in first and 11% put milk in first. Just 8% put hot water in first and oddly, 1% put a spoon in first. That's according to our new UKTIA Tea Census Research Super Study."

Dr Sharon Hall continues: "Some of these habits (including the spoon!) may be a generational thing. In fact, tea drinking in general is something that many of us may acquire from our parents.

"Most of those questioned in our latest survey say that their parents drink more tea than they do, however 31% say they drink more than their parents and 21% say it is about the same.

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Routine and habits rule the roost when it comes to tea and everyone has their own way of creating their warming cuppa

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"Over half (52%) say that they don't take tea the same way as their parents, but this leaves 48% who do! Just over a quarter (26%) of people drink more herbal teas than their parents, 23% drink more black tea, 18% have more sugar than their parents and 21% have less sugar than their parents.

"It's clear to see from the data that routine and habits rule the roost when it comes to tea, and everyone has their own way of creating their warming cuppa."



# LAST WORD

Evidently, the production of tea is something that requires serious care and attention. From planting the *Camellia sinensis* tea bush to spending years nurturing and growing and then plucking, withering, crushing, rolling, aerating and drying, before being packed up and sent across the globe for the many tea tasters to sample.

Dr Sharon Hall adds: "It's not just the process itself which is particularly time-consuming and meticulous, but throughout, the tea is being constantly checked and analysed. Nothing can go wrong throughout the tea-making process, or else it's back to the drawing board."

And just to note as much care and rigour goes into producing herbal and fruit infusions. Up to 300 different plants and 400 parts of plants can be used for making a herbal or fruit infusion. The parts selected for use depend on where the aromatic substances are located in the plant itself such as the leaves like the orange leaves or peppermint leaves, fruits and part of the fruits or the flowers such as chamomile.

After all the care and attention that goes into making tea, it is no wonder us Brits love our tea. Black tea continues to be crowned our favourite tea, and there are several reasons other than taste why we love it. It's comforting, hydrating, an

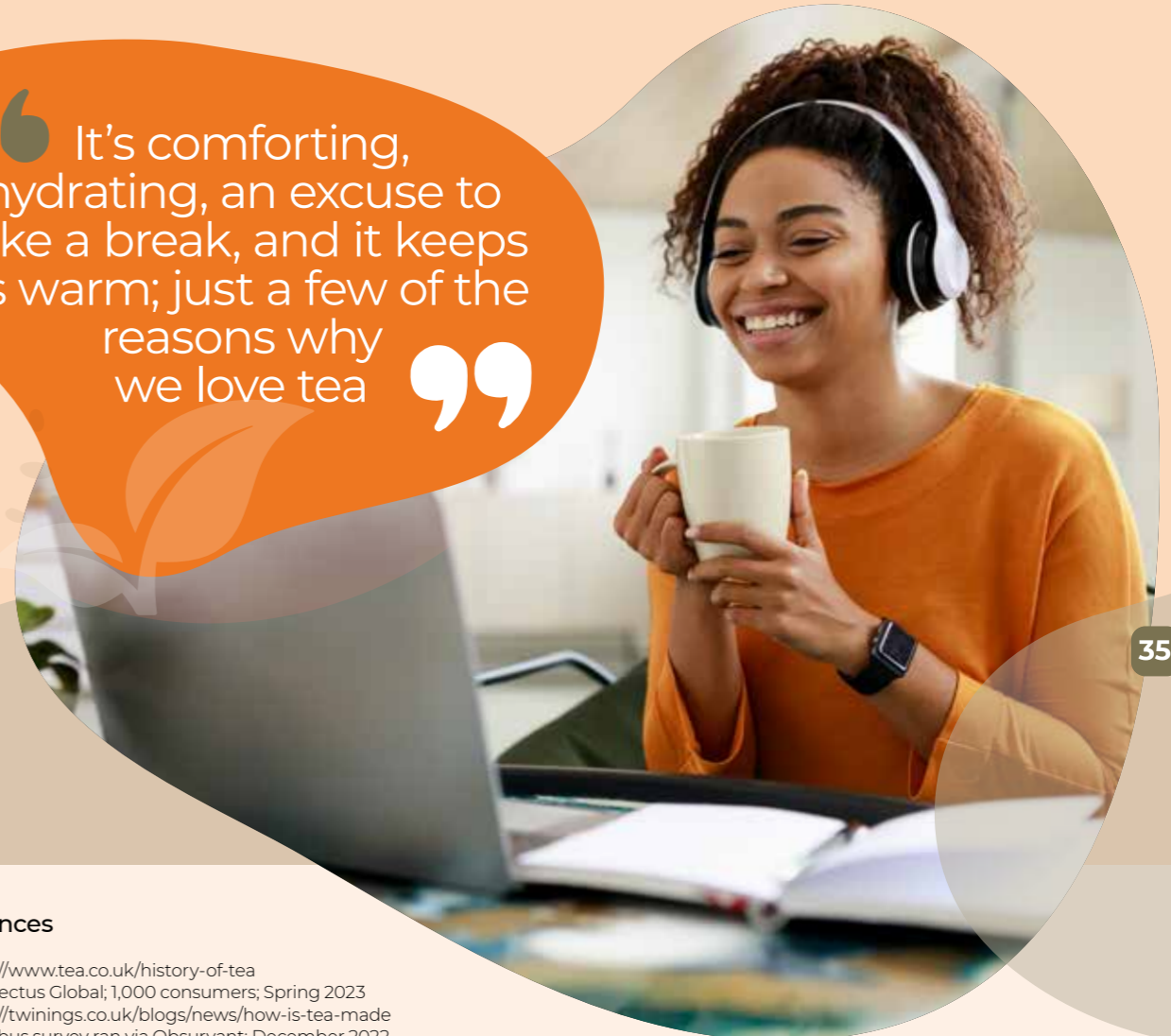
excuse to take a break, and it keeps us warm; just a few of the reasons why we love tea. And, for the 18–24-year-olds, taste is the key reason to choose tea.<sup>10</sup> Tea is loved by all ages.

Dr Sharon Hall says: "We know from the new UKTIA Tea Census Research Super Study data that everyone has THEIR way of making tea; from the milk they use, to whether they pair it with a biscuit – sweet or savoury, cake, sandwich or samosa. For the perfect cup of tea though, use freshly drawn water and just boil the amount of water you need. Pour this over either one tea bag or one rounded teaspoon of loose tea for each cup to be served."

Dr Sharon Hall recommends for the perfect cuppa letting most black teas brew for three to four minutes, green tea for three to four minutes and oolong tea for three to five minutes. Add milk (or go without), especially for green and oolong the tea has brewed.

You might have finished your cup of tea by now, but when you go and make another one (after all, we now know that Brits do love several cups a day!), spend a moment and think just how far that tea has come from and how much care went into producing it. It's been on quite a journey from plant to cup!

“ It's comforting, hydrating, an excuse to take a break, and it keeps us warm; just a few of the reasons why we love tea ”



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