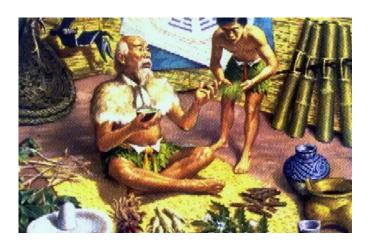




# **TEA STORIES & FACTS**



#### Genesis

It is believed that tea was discovered in 2737 b.c. by Shen Nong, a Chinese Emperor. There are two different stories of how tea was discovered. According to Chinese literature, Shen Nong was the founding father of today's Chinese herbal medicine and agriculture. Shen Nong was a scientist who invented and designed the way that Chinese's agriculture work for the past few thousand years. In many ways, Shen Nong was the person who started Chinese's civilization. The two stories about how tea was discovered are as follows,

- 1. Shen Nong suffered food poisoning after conducted experiments by tasting wild herbal medicine. His throat was dried and had severe stomach pain. While trying to recover from food poisoning, he found some leaves falling from trees. He picked some up and put in his mouth hoping that the pain would be disappeared. Not only did he find that the pain was disappeared, he also find the leaves to have special flavor that could hardly be described. The tea was not only a medicine, it was also a very good vegetable.
- **2.** On one summer day, while visiting a distant region of Shen Nong's realm, Shen Nong stopped to rest. The servants began to boil water for Shen Nong to drink. Dried leaves fell into boiling water, and a brown liquid was infused into the water. Shen Nong drank the liquid and found it refreshing and tea was discovered.

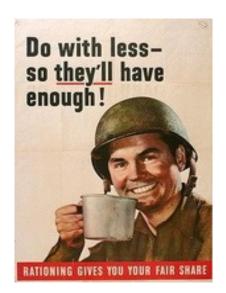
Tea was always as one of the Chinese medicine until around 3rd or 4th centuries that tea became a beverage. Tea originally was for "rich and powerful" people only because it was rare and hard to get. Around 3rd centuries and 7th centuries, tea became more and more popular and affordable in China. After 7th centuries, tea finally took over wine's place and became the most popular beverage among Chinese.

# TEA FACTS

Tea was taxed heavily in the 1770s in Britain, which made it as much of a hot property as alcohol for smugglers. The duty wasn't finally removed from tea until 1964.

It was so popular in London in the 1850s that tea clippers raced each other over the 100 day journey to get the new season's teas here – the fastest ships got the best price – and the most famous, the Cutty Sark, is now moored at Greenwich.





The most expensive

tea we know of was sold in 1891: £36 15s for 1lb of Ceylon Golden Tips. This would be about £1,500 for 250g these days – what a bargain your £1.56 pack of 80 Tetley tea bags is...

Tea was rationed heavily in the Second World War: 2oz (57g) was allowed per person per week for 12 years from 1940. That would only make around 20 cups of tea – no wonder they used to drink it weak.

And an American story: they became obsessed in the early years of the 20th Century with getting the leaf out of the pot once the tea was brewed to perfection. This lead to them inventing the tea bag in 1920...which Tetley brought to the UK in 1953 and started a revolution.



**Top 10** 

(The following Q & A is from the Tetley tea site)

### How do you make a proper cup of tea?

We all make tea the way we like it but there are a few fundamentals that help to get the best out of your cuppa - always use fresh water and bring it to the boil (re-boiled water has less oxygen in it and does not brew so well). If you do use a pot, take the bags out when the tea is brewed so the second cup is just as good as the first.

### Where does the tea we drink come from?

Most of us know that tea comes from China, Sri Lanka (Ceylon) and India but less well known are countries like Kenya, Malawi, Argentina, Indonesia and Turkey. The tea we drink in the UK comes mainly from Kenya, India, Indonesia, Malawi, Tanzania, Sri Lanka and China.

### Who drinks the most tea?

On a per head basis the most tea is drunk in the Irish Republic where annual consumption is 2.79 kgs/head. The UK drink a bit less at 2.12 kgs/head.



### Isn't tea bag tea just sweepings from the factory floor?

No, the tea used in tea bags is usually of a 'fannings' grade. The tea is simply cut to a smaller size. Its greater surface area infuses a stronger brew and even fetches a premium over leafier teas in auction.

### Is green tea better for you than regular black tea?

Green and black tea are from the same plant and so have simliar levels of antioxidants just slightly different ones. Green tea has a greater amount of flavonoids called Catechins, and black teas have greater concentrations of Theaflavins and Thearubigins.

### Aren't the 'tannins' in tea bad for you?

What are commonly referred to as 'tannins' are the flavanoids that play an important part in tea's colour and taste. Scientific research is starting to indicate that these are the compounds that have positive health benefits.

# How much caffeine is ok to take in per day and how many cuppas is that?

Tea contains only small amounts of caffeine and you'd need to consume over 6 cups a day to reach a 'moderate' caffeine intake.



It appears to be a side effect from the herbal tea you're drinking."

#### Tea is all the same isn't it?

Tea comes from one plant, camellia sinensis, but is grown in many different countries, at different altitudes, in different soil types and different weather conditions. These natural factors will all affect the taste of the tea, so we select and blend them together to get the best attributes of each of the gardens that we buy from, to deliver the right blend for our tea drinkers.

### Are herbal teas from the same plant?

No, herbal teas, such as camomile or peppermint do not contain any camellia sinensis (the tea plant), so they should really be called infusions.

What is the difference between green tea and black tea? Are they from different plants? Green tea and black tea both come from the same plant - camellia sinensis. After tea is plucked the leaf is left to whither in order to become soft and malleable prior to cutting. The cutting process releases enzymes and exposes the tea to oxidation. With black tea, this oxidation is allowed to continue until the leaf is brown before it is 'fired' in an oven to stop the fermentation process. Green tea will have little or none of this fermentation which is why it remains green.

### Do we actually grow tea in Australia?

Yes indeed. The main area of Australian tea cultivation is in the Daintree rainforest area of Queensland, near Cairns and Murwillimbah, New South Wales. Companies like 'Nerada' (Daintree) and Madura (Murwillumbah) are now quite established.





## Bush to cup

Here is the step by step guide to how we make tea from bush to cup.

#### **Process**

 $\textbf{Plucking} \rightarrow \textbf{Withering} \rightarrow \textbf{Cutting/Rolling} \rightarrow \textbf{Fermentation} \rightarrow \textbf{Drying} \rightarrow \textbf{Sorting}$ 

### **Plucking**

The first stage in the manufacturing process is plucking. The best quality teas are produced when the top two leaves and a bud are plucked.

Many believe that plucking is the most important task performed on the tea estate, since the quality of the final product depends on the quality of the raw material. The subsequent manufacturing process can only retain quality - it cannot improve it.

The green leaf has to be soft and malleable prior to cutting. During the withering process it loses about a third of its moisture with the help of warm or ambient air.

The plucked leaf lays in long shallow troughs, and the warm air is circulated by fans situated at the end of the trough.

If the leaf is not soft and withered then too much watery juice is released during the cutting process which reducing the quality of the finished product.

### Cutting

Leaf cells are ruptured by one of two processes - rolling or CTC. This releases enzymes and exposes them to oxygen.

(Orthodox manufacture: where the leaves are rolled into shape. CTC manufacture: the leaves are Cut, then Torn, then Curled through a series of 3 cutters. Hence CTC.)

#### **Fermentation**

This process involves the oxidation and condensation of tea catechins (polyphenols found naturally in tea that act as antioxidants). Visually the tea turns from green to brown. With green tea production fermentation does not take place so the leaf stays green.

### **Drying**

Typically the leaves are dried in a large oven. The heat destroys the enzymes and stops the fermenting process.

### Sorting

Different markets traditionally buy different sized leaf types. The tea bag markets (Europe/USA) will prefer smaller sized leaf that infuses quickly and gives a strong brew whilst packet markets such as Pakistan will prefer larger sized leaf.

The tea is passed over a series of sieves which sorts it into different sized leaf particles.

Then the tea is ready to be packed up and shipped to us and our expert tea tasters and great production teams get to work on preparing a blend to be enjoyed by Tetley drinkers.

# THE STORY OF TEA

### By Eileen Felbinger

All tea comes from the same plant - *Camellia sinensis* - an evergreen, tropical plant with green, shiny pointed leaves that was originally indigenous only to China and India. As its name suggests, tea is related to the popular Camellias that we love so much in our gardens for their showy flowers.

C. *sinensis* likes a deep, light, acidic and well-drained soil; and given these conditions, it will grow in areas ranging from sea level to altitudes of almost 7,000 feet. Like wine, variations in flavors and characteristics are due to the type of soil, cultivar selection, altitude, and climate conditions where the plants are grown.

Different types of processing and blending also affect the taste, as does the addition of essential oils or fragrant herbal additives.



According to Chinese mythology, tea was "discovered" by a Chinese emperor, Shen Nung. One of his far-sighted edicts included a requirement that all drinking water be boiled as a hygienic precaution. In the summer of 2737 B.C., while visiting a distant region of his empire, he and his entourage stopped to rest. Dried leaves from a nearby tea bush fluttered into the water that his servants were boiling for drinking. As the emperor was a creative scientist as well as a skilled ruler and patron of the arts, he was interested in trying this new liquid; when he drank some, he found it very refreshing and revitalizing. And that is how, according to legend, tea was created.

Tea drinking spread throughout Chinese culture. By the third century A.D. there were already many stories being told and written about tea and its benefit. The first book on tea, the *Ch'a Ching*, was written around 780 A.D. by Lu Yu, who had been raised by scholarly Buddhist monks in one of China's finest monasteries. The three-volume book covered tea growing, processing, brewing, and drinking, as well as the history of famous early tea plantations, and contained many illustrations of tea making utensils.

Yeisei, a Buddhist priest returning from China, who had seen how tea drinking had enhanced religious meditation, first introduced tea to Japan. The Japanese elevated drinking tea to an art form with the creation of the Japanese Tea Ceremony. According to the Irish-Greek journalist Lafcadio Hearn, "The tea ceremony requires years of training and practice to graduate in art...yet the whole of this art, as to its detail, signifies no more than the making and serving of a cup of tea. The supremely important matter is that the act be performed in the most perfect, most polite, most graceful, most charming manner possible".



The Portuguese, with their technologically advanced navy, had successfully gained the first trading rights with China, and were the first to develop a trade route for shipping their tea back to Lisbon. From there, Dutch ships transported it to France, Holland and the Baltic countries. In 1602, Holland, with her excellent navy, entered into direct trade with China. After a period of being exorbitantly expensive, tea became available to the general population in Holland by 1675.



Peter Stuyvesant in 1650 imported the first tea to colonists in America in the Dutch settlement of New Amsterdam. By the time Britain acquired the small settlement in 1664 and renamed it New York, the settlers there were already confirmed tea drinkers, consuming more tea than all of England put together.

Tea first reached England sometime in the mid-1600s. In 1660, the merchant Thomas Garway issued a broadsheet offering tea for sale at £6 and £10 per pound, extolling it as "wholesome, preserving perfect health until extreme old age, good for clearing sight," able to cure "gripping of the guts, cold, dropsies, scurveys" and claiming that "it could make the body active and lusty." (An early form of Viagra?)

By the middle of the 18th century, tea had become Britain's most popular beverage and had replaced ale and gin as the drink of the masses

In the early 1800's, Anna, the seventh Duchess of Bedford (1783-1857), conceived the idea of having tea with an assortment of little sandwiches and sweets around four or five in the afternoon to ward off hunger pangs between lunch and dinner.

She invited friends to join her, and these social gatherings became so popular they started a trend that is still an integral part of British life.

Today, in China, tea is grown mostly on estates, self-contained units hundreds of acres in size, with their own factory, tea growing area, and all the facilities of a small city; or it is grown on small holdings, which are privately owned, and range from about one acre to several acres, much like a small farm.

C. sinensis grows as a low bush approximately 3 feet high, for ease of plucking. When the young plants are ready, they're set into the ground about 4-5 feet apart in rows that are about 3 feet apart. The bush is trained into a fan shape, with a flat top, called a plucking plateau, and takes three to five years to reach maturity, the time depending on the altitude at which it is grown.

In spring, with the first flush of new leaves, the bushes are plucked every 7-14-days, mostly by hand. Altitude, as well as climate, determines the regrowth factor. A tea bush grown at sea level will regrow more quickly after plucking than one grown at a higher altitude, where the air is often cooler.



Plucked leaves are taken to a collection point and weighed before being taken to the factory for processing, or "making", as the manufacturing process is known in the trade. A skilled plucker can gather 65-80 pounds of leaf in a day - enough to produce about 16-20 pounds of processed black tea.

At the factory, the plucked leaves are spread on vast trays or racks and left to wither in the air at 77-86° F (25-30° C). This takes about 10 to 16 hours to evaporate the moisture leaving the leaves flaccid. The withered leaf is broken by machine so that the natural juices, or enzymes, are released and will oxidize on contact with the air.



For black tea, the broken leaves are then laid out on trays or in troughs in a cool, humid atmosphere for 3-4 hours to ferment (oxidize) and are gently turned frequently until all the leaves turn a golden russet color and fermentation is complete. The leaves are then dried or fired by passing the broken fermented leaves slowly through hot air chambers to evaporate all the moisture and turn the leaves a dark brown or black. The black tea is then ejected and sorted into grades, or leaf particle sizes, by passing through a series of wire mesh sifts of varying sizes into containers and are then weighed and packed into chests or "tea sacks" for loading onto pallets.

As black tea has the major share of the tea market in terms of production, sales and amounts drunk, most tea factories produce black tea.

For green tea manufacture, the withered leaves are steamed and rolled before drying or firing. This prevents the veins in the leaves from breaking and therefore stops any oxidization or fermenting. The brewed tea has a very pale color.

Oolong tea follows the same process as black tea, but the fermentation period is cut to half the time, about 1-2 hours, before it is dried or fired. When brewed, it has a pale, bright color and a very delicate flavor.

Factory tea-tasters taste the finished "make" and if they find nothing wrong, samples are then sent to brokers worldwide where it is evaluated for quality and price so it can be sold to the best advantage.

After each "make", the tea factory is washed from top to bottom to ensure that the completed "make" does not contaminate the next "make" of tea.

The tea is then shipped to the various packaging companies for blending and packing. Most teas on the market are popular leading blends that contain numerous different teas and remain constant in quality, character and flavor. The tea blender - a tea taster with many years experience - tastes between 200-1000 teas per day, adjusting his recipe to ensure that his company's brand remains constant. His findings are fed into a computer and the required amounts of the various teas are conveyed into a large blending drum that rotates to mix all the teas together. After blending, the tea is ready for packaging.

Tea reaches the retailer's shelf approximately 20 to 30 weeks after it has been plucked.

# **Common Tea Terms:**

### (excerpted directly from The Tea Council's General Tea Glossary)

**Afternoon Tea** - The name given to the British meal taken mid-afternoon, comprising finger sandwiches, scones, cakes and pastries accompanied by tea.

**Assam** - A region in northeastern India, known for its robust, high quality teas characterized by their smooth round, malty flavor.

**Black Tea** - Tea that has been fired or dried after the fermentation or oxidization period of manufacture.

**Ceylon** - Blends of teas grown on the island of Sri Lanka which take their name from the colonial name of the island. The traditional name of Sri Lanka was readopted by the island when it became a sovereign republic in the British Commonwealth in 1972.

**Darjeeling** - A tea growing area in north India on the foothills of the Himalaya Mountains. Teas grown here take their name from the area and are said to be the 'champagne' of Indian teas. Grown at altitudes up to 7,000 ft. above sea level, Darjeeling tea is known as a high-grown tea and is light in coloring with a delicate, muscatel flavor and aroma. The original tea planted in this area was grown from seeds and plants imported from China.

**Earl Grey** - A black China tea treated with the oil of bergamot which gives the tea a slightly orange aroma and taste. It was said to have been blended for and named after the second Earl Grey (1764-1845) while he was prime minister of Britain (1830-1834) by a Chinese mandarin following the success of a British diplomatic mission to China.

**English Breakfast Tea** - A name for the tea blend which originally applied to China Congou tea in the United States of America; in Britain it was a name applied to a blend of teas from India and Sri Lanka. Today this tea is a blend of black teas producing a full-bodied strong flavored colorful tea.

**Grade** - Term used to describe a tea leaf or particle size of leaf.

**Gunpowder** - Normally a China tea, but today this could be any young tea, which is rolled into a small pellet-size ball then dried. The finished tea has a greyish appearance not unlike gunpowder in color, which is how the tea got its name.

**High Tea** - The name given to a meal served late afternoon/early evening, which is a mixture of afternoon tea and dinner. The meal comprises a main dish, sometimes a pudding or dessert served with bread and butter, and cakes and tea. High Tea was the main meal for farming and working classes in Britain in the past.

Hoochow - A China green tea.

**Lapsang Souchong** - A black tea from China (and today also from Formosa), which is smoked to give it a smoky or tarry flavor and aroma.

**Oolong** - A semi-fermented or semi-green tea produced in China and Formosa.

Pan-fired - A kind of Japan tea that is steamed then rolled in iron pans over charcoal fires.

**Russian Tea** - The name given to a glass of hot tea liquor which is poured into the glass over a slice of lemon. Sometimes sugar or honey is added. In some countries, this type of tea drink is known as lemon tea. The name comes from the Russian way of taking tea.

**Scented Tea** - Green semi-fermented or black teas that have been flavored by the additions of flowers, flower petals, fruits, spices or natural oils. Examples of these are Jasmine Tea, Rose Puchong, Orange Tea, Cinnamon Tea or Earl Grey.

**Smoky Tea** - Black tea from China or Formosa that has been smoked over a wood fire such as in the case of Lapsang Souchong.

**Specialty Tea** - A blend of teas that takes its name from the area in which it is grown; a blend of teas blended for a particular person or event, or a blend of teas for a particular time of day.

**Tannin** - The name the tea trade worldwide gives to polyphenols contained in tea. Polyphenols are responsible for the pungency of tea and gives it its taste.

**Tea Factory** - Factory where the plucked leaf is made or manufactured into black or green tea.

**Tea Taster** - An expert judge of leaf and cup quality tea at all stages of production, brokerage blending and final packaging.

**Tip** - The bud leaves on a tea bush.

**Twankay** - A low grade China green tea. This word was corrupted Twanky, which was applied to the men manning the ships bringing tea back from China. These ships often foundered on reaching the British coast and the bodies of Twankys would be washed ashore to be found by their widows - hence the name given to the Aladdin character 'Widow Twanky' by a Victorian impresario.

# **Black & Oolong Teas**



Sources: <u>www.teacpuncil.co.uk</u> - The Tea Council Ltd.; London, England

www.stashtea.com - The Stash Tea Company, Tigard, Oregon

www.cuisine.com/digest/ingred/tea/index.shtml - DineSite.com; Schaumberg

# **8 REASONS TO DRINK TEA**

- 1. Improving the Immunity system and preventing cancers!
- 2. Slowing down aging process!
- 3. Preventing loss of bone calcium!
- 4. Alleviating blood lipoid, cholesterol, blood pressure, and arteriosclerosis!
- 5. Sterilizing and reinforcing the teeth and intestine!
- 6. Reducing urine hyperacidity and gout!
- 7. Eliminating body fat and maintaining good figure!
- 8. Preventing sunburn and resisting UV!

### Reason #1 for drinking Tea?

### Improving Immunity system and preventing cancers!

Dr. Wu mentioned that drinking tea could help to prevent cancer and that scientific evident has been verified in international medical reports in particular, unoxidized green tea has been shown to be beneficial in the prevention of tumors, as well as lung, skin, and cervical cancer. Some research reports have shown that tea is most effective in preventing skin cancer! Reference#1 Ann NY Acad Sd 2001 Apr

# Reason #2 for drinking tea?

## Slowing down aging process!

Tea will help the anti-oxidation of cells, therefore it is beneficial in slowing down aging process. Many medical researches in Europe show that drinking tea is effective in preventing Parkinsonism, and other aging diseases.

The catechins in green tea is best natural anti-oxidation solvent, especially for the symptom of decay suffered by modern people who does more brainstorm that body exercise, consequently drinking tea is the best choice for modern everyday people. *Reference#2 Europe Joural of Epidemiology?* 

### Reason #3 for drinking Tea?

### Preventing loss of bone calcium!

The fluoride in tea is good for preventing tooth cavity. According to the research report of "the impact of drinking-tea on the density of bone Calcium" published by Dr. Wu, the bone density of people who drink tea is higher than the ones who do not. Especially, the bone density of people who have drunk tea for over tea years is 2.1% higher than the ones who do not. Apparently, drinking tea does help prevent the loss of bone calcium! People will start to lose bone calcium at the age of thirty, especially for women who has her menopause will suffer the loss of bone calcium at the rate of 1-3%/year, therefore it is crucial to save bone calcium as early as possible!

Refernce#3 Archives of internal Medicine 2002, 162:1001-6

### Reason #4 for drinking Tea?

### Alleviating blood lipoid, cholesterol, blood pressure, and arteriosclerosis!

According to the research by Dr. Y.C and Dr. Wu of Chen-Da Family Medical Division, a 12. year study done on 9856 male and 10233 female shows that people who drink over 5 cups of tea a day are with lower blood pressure and cholesterol. Moreover, the long-term study performed on Japanese, Netherlanders, and Finns shows that drinking-tea does help lowering blood pressure and blood lipoid also prevents Arteriosclerosis. *Reference#4 The Journal of pharmacology & Experi-mental Therapeutics* 

### Reason #5 for drinking Tea?

### Helping sterilization and reinforcing teeth and intestine!

Dr. Wu stated that tea helps maintain normal count of germs in mouth; therefore it helps to keep good breath, prevent periodontal and tonsiclitis. In addition, catechins is good for suppressing the activation of leptospirosis, which causes gastric ulcer, duodenal ulcer and also Arteriosclerosis! *Reference#5 Aliment Pharmalcol Ther 2002 May* 

### Reason #6 for drinking Tea?

### Reducing urine hyperacidity and gout!

Gout is one of the side effects resulted from urine hyperacidity. Gout is also a result of excessive aliment, high-fat diet, and unbalanced diet in modern world. Dr. Wu mentioned that many reports show catechins helps to suppress the formation of urine hyperacidity, improving the concentration of hyperacidity in urine and preventing the occurrence of gout. *Reference#6 Anticancer Research/Food Chem?* 

### Reason#7 for drinking tea?

### Eliminate body fat and maintain good figure!

Dr. Wu stated that tea could help with thermal effect in human body, suppressing the antipancreatin in pancreas; also, reduce the absorption of fat. Furthermore, it could help improve sympathetic nerve and thermal consumption. Best of all, drinking tea well help reinforce the resolution of fat. In other words, it helps to dissolve body fat and helps to provide individuals who wish to lose weight an opportunity!

Reference#7 Life Science/ Ann NY Acad Sd 2001 Apr.

### Preventing sunburn and resisting UV!

The reports from Japan and Russia evidence that catechins in Green tea are effective in resisting sunburn. In addition to preventing skin cancer, Green tea helps to combat UV injury. However, keep in mind that ice tea may help crunch thirst but hot tea is more effective in preventing sunburn and skin cancer.

Reference#8 Cancer Epidemiology/BMC dermatology



Time to sit a spell & boil the billy