## Tea: It's All in the Leaves

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"We drink enough tea to sink a battleship" is an expression I remember several of my parents' friends saying when I was a kid. Exactly how much tea would be required to send such huge vessels to the bottom of the ocean was a bit of a mystery, but it certainly had to be a lot. I also never knew where the expression originated, but this obvious exaggeration was quite effective in getting the point across that these folks were truly hooked on their favourite beverage. Many of us have probably never thought of the steps involved in tea manufacturing.

A few years ago, I had the pleasure of visiting a tea plantation in the mountainous regions of southern India at Coonoor, just outside Coimbatore. The tea bushes grew on the terraced slopes and the cool mountain air was a refreshing change from the heat of the city. In this peaceful setting, a small group of trained pickers methodically removed the buds and two leaves from the ends of the stems on the tea bushes. Only the fresh young leaves were picked to get the highest quality tea.

Traditionally, most of the teas produced in India are black teas which are allowed to darken through an oxidation process. Green teas, which are more commonly found in oriental countries, are not oxidized. They have a characteristic green colour and much different flavour.

For black tea, freshly picked leaves are spread on large tables or platforms to wither. This simple, yet important step, can be further enhanced by gently blowing air through the beds of leaves. During withering, the moisture content of the leaves is reduced by evaporation and the leaves soften. Moisture loss also concentrates the sap within the leaves and prevents the juices from being lost in the rolling step, which comes next in the process. The most important things that happen during withering are the development of colour, aroma, and quality; plus an increase in caffeine content - which is considered to be one of the true values of tea.

Once the withering is completed, the leaves are crushed and torn in large mechanical units. The shredded leaves are then held in a temperature-controlled room to promote oxidation. Naturally-occurring enzymes break down the chlorophyll in the leaves. As this happens, the colour continues to darken and tannins are released. A mild heating step is used to stop the enzymatic oxidation at the desired point.

At this stage, the tea leaves are still too damp to be packaged and sold. The shredded leaves are then passed through a curling machine to change their shape and further enrich the tea's flavour. Large forced-air dryers are used to remove excess moisture from the curled tea. Small dust particles of the tea are removed by winnowing - a

process of blowing air through the bed of dried tea leaves. The dust particles easily become airborne and are later collected. The dried leaves are then packaged for sale.

Tea from this area of India is sold to tea merchants in Europe and the former Soviet Union. A modern computerized tea auction centre now enables the Coonoor Tea Trade Association improved access to world tea markets. In the past, buyers from the world's major tea companies would visit the area on a limited basis at the time of the major tea harvests. Satellite communications have now overcome these problems of isolation.

As an avid tea-drinker, I am amazed at the variety of teas and tisanes (herbal teas) that are available. Two of my personal favourites are rooibos tea and Earl Grey tea. Rooibos tea, which is actually a tisane, is made from the leaves of the "red bush" (hence the name in Afrikaans). It is believed to have many health benefits and the tea itself has an appealing rich red colour and pleasant flavour.

Earl Grey tea is a favourite of many around the world. This is one thing many of us have in common with Jean-Luc Picard of Star Trek fame who also enjoys a cup of "tea, Earl Grey, hot". There are numerous accounts of how this tea originated. One such story attributes the tea as being a gift by a Chinese mandarin to the Second Earl Grey for saving his son from drowning. In truth, the Earl was never in China. Regardless of the story and its embellishments, most sources agree that the tea was indeed named after Earl Charles Grey who was Prime Minister of Britain from 1830 to 1834. Earl Grey tea is produced by infusing black tea with oil extracted from the skin of the bergamot orange. While the world has all but forgotten his major accomplishment of abolishing slavery in the British Empire, Earl Grey is remembered in the popular tea bearing his name.

With all the varieties and flavours now available, a hot cup of tea or aromatic herbal tea may be just what you need to help get you through these long, cold days of winter.



Tea picking on the terraced plantation slopes



A fresh tea leaf before withering