Tea Facts

This was for a MLM company that used it as a scientific support document to show distributors that their claims for their product were believable.

# The Fact Sheet Of Tea

Tea is the most widely consumed beverage in the world next to water, and can be found in almost 80% of all U.S. households. It is the only beverage commonly served hot or iced, anytime, anywhere, for any occasion. On any given day, over 154 million Americans are drinking tea.

## **Annual Consumption:**

(U.S.)

In 2010, Americans consumed well over 65 billion servings of tea, or over 3.00 billion gallons. About 80% of all tea consumed was Black Tea, 19.5% was Green Tea, and a small remaining amount was Oolong and White Tea.

## **Daily Consumption:**

(U.S.) On any given day, about one half of the American population drinks tea. On a regional basis, the South and Northeast have the greatest concentration of tea drinkers.

**Iced Tea Consumption:** Approximately 85% of tea consumed in America is iced. **Ready-To-Drink Iced** 

### Teas:

Over the last ten years, Ready-To-Drink Tea has grown by more than 15 times. In 2010, Ready-To-Drink sales were conservatively estimated at \$3.30 billion.

#### Tea Bags, Loose Tea & Lood Too Miyoou

## Iced Tea Mixes:

In 2010, over 65% of the tea brewed in the United States was prepared using tea bags. Ready-to-Drink and iced tea mix comprises about one fourth of all tea prepared in the U.S., with instant and loose tea accounting for the balance. Instant tea is declining and loose tea is gaining in popularity, especially in Specialty Tea and coffee outlets.

**Current Sales:** 2010 was the 19th consecutive year that consumer purchases of tea increased. Retail supermarket sales alone surpassed the \$2.15 billion dollar mark. Away-from-home consumption has been increasing by at least 10% annually

over the last decade. 2

## **Anticipated Sales:**

#### (U.S.)

The industry anticipates strong, continuous growth over the next five years. This growth will come from all segments driven by convenience, interest in the healthy properties of tea, and by the continued discovery of Specialty Tea.

**Varieties:** Black, Green, Oolong and White teas all come from the same plant, a warm-weather evergreen named *Camellia sinensis*. Differences among the four types of tea result from the various degrees of processing and the level of oxidization. Black tea is oxidized for up to 4 hours and Oolong teas are oxidized for 2-3 hours. As a result, the tea leaves undergo natural chemical reactions, which result in taste and color changes, and allow for distinguishing characteristics. Green & White teas are not oxidized after processing and they most closely resemble the look and chemical composition of the fresh tealeaf. Oolong tea is midway between Black and Green teas in strength and color.

**Grown In:** Much of the world's tea is grown in mountainous areas 3,000 – 7,000 feet above sea level, situated between the Tropic of Cancer and the Tropic of Capricorn in mineral rich soil. Leading tea-producing countries include Argentina, China, India, Indonesia, Kenya Malawi, Sri Lanka, and Tanzania.

**History:** Tea is nearly 5,000 years old. It was discovered in 2737 BC by Chinese Emperor Shen-Nung, known as the "Divine Healer," when as legend goes, some tea leaves accidentally blew into the Emperor's pot of boiling water. In the 1600's, tea became highly popular throughout Europe and the American colonies. Tea played a dramatic part in the establishment of the United States of America. In 1767 the British Government put a tax on the tea used by American colonists. Protesting this "taxation without representation," the colonists decided to stop buying tea and refused to allow tea ships to be unloaded. One December night in 1723, men dressed as Native Americans boarded British ships in Boston Harbor and threw more than 300 chests of tea into the sea. This now famous Boston Tea Party, in protest of the British tea tax, was said to be one of the acts leading to the Revolutionary War.

3 Anna, Duchess of Bedford, is credited with creating *Afternoon Tea* in 1840, when she began taking tea with a light snack around 4:00 p.m. to ward off "that sinking feeling."

High Tea originated with the rural and working class British, who would return to their homes at about 6:00 p.m. for a meal of potted meats, fish, cheese, salads, sweets, and a pot of strong tea. The U.S. played an important role in the history of tea, inventing the tea bag and iced tea, both in 1904. Recently, the U.S. has led the rest of the world in marketing convenient Ready-To-Drink forms of tea in bottles.

### Environmental Qualities:

Tea is an all-natural and environmentally sound product from a renewable source. The tea plant is naturally resistant to most insects; oxidation of the tea leaf is a natural process; and, many tea packers use recycled paper for packaging.

**Health Qualities:** Tea is a refreshing beverage that contains no sodium, fat, carbonation, or sugar. It is virtually calorie-free. Tea helps maintain proper fluid balance and may contribute to overall good health.

Tea contains flavonoids, naturally occurring compounds that are believed to have antioxidant properties. Antioxidants work to neutralize free radicals, which scientists believe, over time, damage elements in the body, such as genetic material and lipids, and contribute to chronic disease.

Every day, new findings from the international scientific community lend credibility to tea's healthy properties. Recent research has explored the potential health attributes of tea through studies in humans, animal models and through *in vitro* laboratory research. For the most part, studies conducted on green and black tea, which are both from the *Camellia sinensis* plant, have yielded similar results. Recent research suggests that tea and tea flavonoids may play important roles in various areas of health and may operate through a number of different mechanisms still being explored.

As research continues, here are some exciting recent

findings: 4

#### **Heart Health:**

The current body of research suggests that drinking tea can offer significant heart health benefits ranging from reducing heart attack risk to lowering Low Density Lipoprotein (LDL) cholesterol, or "bad" cholesterol, with benefits seen with just one cup and upwards of six cups a day. A Harvard study found that those who drank a cup or more of black tea per day had a 44% reduced risk of heart attack.1 In a large population based study, adults who drank just over two cups of green tea per day reduced their risk of death from cardiovascular disease by 22-23%.2 Additionally, a US Department of Agriculture study found that participants who drank five cups of black tea per day along with a diet moderately low in fat and cholesterol reduced their LDL cholesterol by about 11% after three weeks.3

#### **Certain Cancers:**

Benefits to gastrointestinal health reaped by tea-drinking seem to be cumulative and dependent upon the amount of tea consumed per day as well as the number of tea drinking years. One study found that women who consumed the equivalent of 2.5 cups of tea per day had a 60% reduction in rectal cancer risk, compared with women who drank less than 1.2 cups of tea daily.4 An additional study found tea drinkers to have an approximate 42% reduced risk of colon cancer compared to non-tea drinkers. Men who drank more than 1.5 cups of tea per day were found to have a 70% lower colon cancer risk.5 One study showed that participants who drank iced black tea and citrus peel had a 42% reduced risk of skin cancer6 and hot black tea consumption was associated with a significantly lower risk of the most common form of skin cancer, squamous cell carcinoma.7

#### **Neurological Decline:**

A recently published long-term study of nearly 30,000 adults found that drinking three or more cups of tea per day was associated with a 69% reduced risk of developing Parkinson's disease.8 According to research presented at the 2007 Scientific Symposium on Tea and Health, theanine, an amino acid that is for the most part uniquely found in tea (green and black), may help prevent age related memory decline. This human-based data is supported by recent animal studies utilizing theanine.9 Another recent animal study shows that green tea may have protective effects against Alzheimer's disease.10 5

**Caffeine Content:** Tea is naturally low in caffeine. A cup of Black Tea, for example, contains about 40 milligrams of caffeine.

**Cost Per Serving:** Prepared in the home, tea costs about three cents per serving, cup or glass. Tea continues to remain one of the most economical beverages available.

Tea: The smart choice for today and the millennium.

<sup>1</sup> Sesso HD, Gaziano JM, Buring JE, Hennekens CH. Coffee and tea intake and the risk of myocardial infarction. Am J Epidemiol 1999;149:162-7.

<sup>2</sup> Kuriyama S, Shimazu T, Ohmori K, Kikuchi N, Nakaya N, Nishino Y, Tsubono Y, Tsuji I. Green tea consumption and mortality due to cardiovascular disease, cancer, and all causes in Japan: the Ohsaki study. JAMA. 2006 Sep 13;296(10):1255-65.

<sup>3</sup> Davies MJ, Judd JT, Baer DJ, Clevidence BA, Paul DR, Edwards AJ, Wiseman SA, Muesing RA, Chen SC. Black tea consumption reduces total and LDL cholesterol in mildly hypercholesterolemic adults. J Nutr. 2003 Oct;133(10):3298S-3302S.

<sup>4</sup> Dora I, Arab L, Martinchik A, Sdvizhkov A, Urbanovich L, Weisgerber U. Black tea consumption and risk of rectal cancer in Moscow population. Ann Epidemiol. 2003 Jul; 13(6): 405-11.

<sup>5</sup> Su LJ, Arab L. Tea consumption and the reduced risk of colon cancer -- results from a national prospective cohort study. Public Health Nutr. 2002 Jun; 5(3): 419-25.

<sup>6</sup> Hakim IA, Harris RB. Joint effects of citrus peel use and black tea intake on the risk of squamous cell carcinoma of the skin. BMC Dermatol. 2001; 1(1): 3. Epub 2001 Aug 01.

<sup>7</sup> Hakim IA, Harris RB, Weisgerber UM. Tea intake and squamous cell carcinoma of the skin: influence of type of tea beverages. Cancer Epidemiol Biomarkers Prev. 2000 Jul; 9(7): 727-31.

<sup>8</sup> Hu G, Bidel S, et al. Coffee and tea consumption and the risk of Parkinson's disease. Mov Disord. 2007 Aug 21: [Epub ahead of print]

<sup>9</sup> Egashira N, Ishigami N, et al. Theanine prevents memory impairment induced by repeated cerebral ischemia in rates. Phytother Res. 2007 Aug 17; [Epub ahead of print]

<sup>10</sup> Rezai-Zadeh K, Shytle D, Sun N, Mori T, Hou H, Jeanniton D, Ehrhart J, Townsend K, Zeng J, Morgan D, Hardy J, Town T, Tan J. Green tea epigallocatechin-3-gallate (EGCG) modulates amyloid precursor protein cleavage and reduces cerebral amyloidosis in Alzheimer transgenic mice. J Neurosci. 2005 Sep 21;25(38):8807-14.