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Review Study

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Too Lite Instant Coffee: Provides an Instant Source of carbohydrates, Protein, Vitamins, Minerals & Antioxidant nutrients.

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ABSTRACT

Too Lite Instant coffee is a Blend of Plantation coffee beans carefully handpicked from the finest Plantation of South India. Too Lite Instant Coffee is the perfect mix of 70% coffee & 30% chicory. Too Lite Instant Coffee is a source of nutrients, including B vitamins, potassium and riboflavin. Too Lite Instant coffee beans are also rich in antioxidant compounds that protect cells against damage. It is available in Signature Aroma. Too Lite's technology ensure the aroma is retained all through the coffee making process. This Instant Coffee is easy to prepare. Roasted with precision to create the finest Coffee with a perfect Aroma and without any artificial additives and additional sugars.

Keywords: Too Lite Instant Coffee; Health Benefits of Too Lite Instant Coffee

INTRODUCTION

Coffee is enjoyed by millions of people around the world every day, it is commonly consumed and beloved for its many properties. People around the world consider coffee as a synonym of joy and a need to start their day [1]. In 2010, coffee production reached over 8.1 million tons worldwide [1]. Furthermore, the health benefits of coffee consumption are a decisive reason for making coffee a beloved daily routine. Nowadays, coffee is referred as a functional food, because of its high content of compounds, which are highly antioxidant [2]. The unique flavor, aroma and color of coffee make it a particularly interesting beverage, with numerous mental and health benefits [3]. The coffee tree belongs to the Rubiaceae family, genus *Coffea*, but more than 80 coffee species have been identified worldwide, only two are economically important. *Coffea Arabica* is known for its superior flavor and aroma, widely consumed reaching 70% of the worldwide coffee consumption. On the other hand, *Coffea canephora* or Robusta coffee is reported as a

species with a bitter flavor and better resistance to natural plant diseases and pests [1]. The harvested coffee fruits arrive to the consumer after a long series of processes. Every process has a unique and special role for producing a splendid quality coffee. There are two main ways, which are commonly used to process coffee: the wet and the dry methods, which have the power to influence the final tasting notes of the coffee. Nevertheless, only by roasting the seeds it is achievable to gain the specific aroma and flavor of coffee [4]. During roasting, the characteristic coffee taste aroma components are formed, along with the typical brown color of the beans. More than 1000 different aroma components of coffee are known, that's why only by following specific roasting methods it is possible to achieve the unique flavor profile of the final coffee according to the preferences of the consumer. Green coffee beans are roasted for 1.5 to 20 minutes are heated between 180°C and 240°C. Darker color, more intense aroma and flavor will be generated by stronger roasting [4]. As a result of the Strecker and Maillard reactions, carbohydrates (reducing

sugars), proteins, and other classes of compounds, with low and high molecular weight compounds like melanoidins are simultaneously produced [5]. In this process light brown seeds are becoming black. It is rather usual during the extraction of water-soluble components such as nicotinic acid, chlorogenic acids, soluble melanoidins, caffeine, and hydrophilic volatile compounds to be extracted and it is more effective at higher pressures and temperatures [6]. Chlorogenic acid, which grants coffee most of its functional properties, is greatly extracted during brewing coffee at home reaching 80% - 100% of the total amount. It leads to a brew with 35 - 100 mg chlorogenic acids/100-mL per cup of Arabica coffee and 35 - 175 mg/100-mL cup of Robusta coffee [8]. Moreover, a total amount of 50 - 100 mg caffeine, 40 - 50 mg trigonelline, and approximately 10 mg nicotinic acid are contained in a cup of coffee [9].

Too Lite Instant Coffee benefits

Coffee has many health benefits, which are not very renowned but they have great effects in overall human health. Coffee consumption leads to an increase in alertness and performance, due to caffeine. Caffeine is a psychoactive substance, which is widely known to provide coffee its bitter characteristics. Its concentration in *C. canephora* is approximately twice that found in *C. arabica* [11]. Caffeine stimulates the central nervous system as an adenosine-receptor antagonist.

Studies in humans provide data, which declare that coffee improves many aspects of brain function - including, mood, vigilance memory, reaction times, energy levels and general mental function [12].

The European Food Safety Authority (EFSA) has come to the result, that there is a relationship between the caffeine, contained in a normal cup of coffee, alertness (concentration) and increased attention.

The effects of caffeine can be very useful in multiple daily circumstances, like better concentration during night shifts, late time driving and with jet lag. The consumption of caffeine can help the problem of sleep inertia (a feeling of tiredness after an abrupt awakening), explaining the need of coffee after wakening [13-15].

Coffee and mental performance

The consumption of coffee has also been associated with effects on reaction time and mood. Furthermore, frequent consumption of caffeine can lead to improved mood over the day, particularly in fatigued individuals. On the other hand, high intakes may lead to an increase in tense arousal including anxiety, jitteriness (i.e. feeling shaky or uneasy) and nervousness. Finally many researches indicate that, coffee brews are natural antidepressants [15,16]. Coffee may help protect against type 2 diabetes, blood cholesterol and gastrointestinal microbiota. Galactomannans and type II arabinogalactans are the types of soluble fiber with the greatest importance [17]. Dietary fiber helps to keep the gut healthy and have a major role in helping to reduce the risk of diseases such as diabetes, coronary heart disease and bowel cancer. Furthermore, fiber passes through the large bowel undigested, where it is fermented by bacteria. The by-products that result from this fermentation are carbon dioxide, methane, hydrogen and short-chain fatty acids (SCFAs) [18]. This process lowers the colonic pH,

preventing the growth of Bifidobacterium species and other beneficial lactic acid bacteria [19]. Resistant starch and dietary fiber also operate as prebiotics (bacteria). Moreover fibers slow down the amount of time it takes for food to pass through the stomach into the small intestine. This reduce the glucose absorption into the bloodstream, and has the advantages of keeping you feeling fuller for longer, helping to control the levels of sugar in the blood, that are significant for the diabetes management [20-23]. Long-term coffee consumption is associated with a lower risk of gout incident [24]. Many of the nutrients in coffee beans make their way into the finished brewed coffee, making coffee a very essential source of vitamins and minerals, which are essential nutrients that body needs in small amounts to work properly. The majority of people should be able to receive all the required nutrients by eating a diverse and balanced diet. Although a single cup of coffee boosts the daily intake of micronutrients as it contains, riboflavin (vitamin B2): 11% of the Reference Daily Intake (RDI), pantothenic acid (vitamin B5): 6% of the RDI, manganese and potassium: 3% of the RDI and magnesium and niacin (vitamin B3): 2% of the RDI [1,13,25]. Out of these elements, only the magnesium content appears to vary considerably between species (1 - 3 mg/100 g for *C. canephora* and 2.5 - 6 mg/100 g for *C. arabica*). Trace minerals in coffee include the elements zinc, strontium, silicon, manganese, iron, copper, barium, boron and aluminium. The trace minerals profile in coffee diversifies according to soil composition, which suggests that there may be a possibility to differentiate coffees grown in different kinds of soil by their mineral profile [9]. Coffee contains essential nutrients Caffeine is found in almost every commercial fat burning supplement, it's one of the few natural substances proven to aid fat burning. A great number of studies indicate that caffeine is able to boost metabolic rate by 3 - 11%. Other studies show that caffeine is able to especially raise fat burning by as much as 10% in obese individuals and 29% in lean people [25].

Researchers have found that people who drink more coffee are less likely to develop hepatocellular cancer (HCC), the most common form of primary liver cancer and the effect was even found in decaffeinated coffee [27,28]. A number of papers have suggested that caffeine, and in particular its main primary metabolite, paraxanthine, can suppress the synthesis of CTGF (connective tissue growth factor) via a cascade of control cycles, thereby slowing down the growth of this type of tissue, which in turn slows down the progression of liver fibrosis, alcoholic cirrhosis and liver cancer. [29].

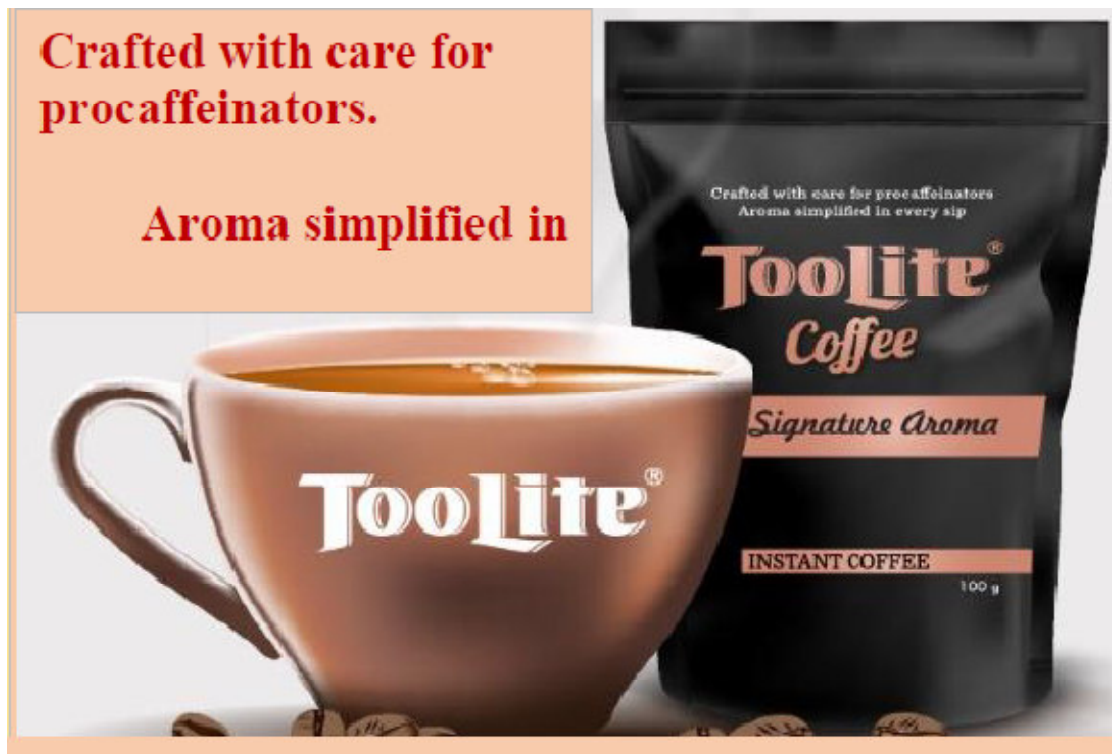
Coffee and liver cancer

Naturally coffee contains multiple compounds that display antioxidant properties, such as melanoidins and chlorogenic acids help to deactivate oxidants [6,30,31]. Numerous studies suggest that coffee consumption increase blood antioxidant levels. Unfortunately, in Western diets coffee may be one of the healthiest habits. It is commonly noticed that people get more antioxidants from coffee than vegetables and fruits combined [12]. It is true that there is a need for further research on the bioactive roles of coffee components, but it is well accepted that different effects on human body are showed by different antioxidants. Other reported effects Coffee is a worldwide phenomenon with a

surprising variety of health benefits. It improves physical performance, can help an individual feel more energized, reduce total body fat percentage, lower the risk of several conditions, such as type 2 diabetes, cancer Alzheimer's and Parkinson's disease. Additionally, coffee is strongly

connected with longevity, as it is rich in antioxidants. For that reason further research about the effects of coffee is recommended to be done, while it is more important than a daily pleasant beverage.

TOOLITE INSTANT COFFEE Signature Aroma



TOOLITE INSTANT COFFEE Nutritional Values per 100gms

Nutritional Values per 100gms					
Energy	kcal	300	Fat	g	Traces
Protein	g	15	Cholesterol		0
Carbohydrates	g	60	Vitamins		Traces
Sugar	g	0	Minerals		Traces

Benefits

It is very Quick & Easy to prepare
 Helps to Improve Physical Performance,
 Mental health & Enhance Brain function
 Helps to Keep it Handy while Travelling & Contain Less Caffeine
 Helps to Boost Energy & Feel Fresh
 Medium to dark roast ideal for every Indian taste pallet
 Delicate intensity with aromatic taste
 Toolite Instant makes both Hot & Cold Coffee

How to brew your TOOLITE INSTANT COFFEE

1. Take about 100-150ml of hot water or milk
2. Add 1 table spoon of Toolite coffee in a cup

Instructions

This pouch has a zip lock kindly press it to retain freshness, after every use. Always use dry spoon. Sustainable packaging that keeps the coffee fresh for 9 months. Once Seal is Open use it within 90days.

Storage

Store in a cool & dry place.
 Store in air tight container.

SUMMARY & CONCLUSION

Too Lite Instant Coffee is the perfect mix of 70% coffee & 30% chicory. Too Lite Instant Coffee is a source of nutrients, including B vitamins, potassium and riboflavin. Too Lite Instant coffee beans are also rich in antioxidant compounds that protect cells against damage. Studies in humans provide data, which declare that coffee improves

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