

**COMPARISON OF CAFFEINE CONCENTRATION IN PREMIX
INSTANT COFFEE**

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ABSTRACT

COMPARISON OF CAFFEINE CONCENTRATION IN PREMIX INSTANT COFFEE

This project was done to determine the caffeine concentration in the premix coffee. The HPLC method was used to determine the caffeine concentration of the premix instant coffee. The main objective of this project was to determine the caffeine concentration of the premix instant coffee of 5 in 1, 6 in 1 and 7 in 1 instant coffee from the market. The highest caffeine concentration in 5 in 1 instant coffee was Gold Choice premix coffee (142.36 ppm) and the lowest caffeine concentration was Ali Cafe premix coffee sample (107.68 ppm). For 6 in 1 premix coffee, the highest concentration was in Agogo premix coffee that contains 171.81 ppm and the lowest caffeine concentration was Vikof premix coffee that contains 116.54 ppm. Caffeine concentration was the highest in Radix 7 in 1 premix coffee that contains 130.30 ppm and the lowest was Sawda 7 in 1 premix coffee that have 86.13 ppm of caffeine. From each types of premix coffee, the 6 in 1 premix instant coffee formulation contains the highest caffeine concentration while the lowest was the 7 in 1 premix.

CHAPTER 1

INTRODUCTION

1.1 Background and problem statement

An instant drink is a beverage derived through various manufacturing processes where the beverage is dehydrated into the form of powder or granules. These can be re-hydrated with hot water to consume these drinks (Romualdo, 1993).

Instant drinks are very popular among the consumer. Instant drinks can come in either powder or granulated form contained in glass jars, sachets or tins. Powder and granules are generally preferred by both producer and consumer because of the ease and time for dissolving in hot water. It is up to the user to control how much is used for example instant coffee which the large amounts will produce stronger, thicker coffee whereas small amounts will produce a light coffee. Too much coffee may spoil the intended flavor and produce what some may describe as an unpleasant "metallic" taste (Romualdo, 1993).

Although it has a long shelf life, instant drinks quickly spoils if it is not kept dry. Instant coffee differs in taste to raw drinks preparations. For example, the