# Chemical Stability and Consumer Acceptance during Storage of a Cold Instant Soy Coffee Beverage

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## SUMMARY

Considering the current consumer trend for healthier alternatives in food products and the possibility to combine in a functional beverage the health benefits of two important brazilian commodities, we elaborated an instant soy-coffee based beverage. The present work was addressed to study the chemical stability, microbiological safety and consumer acceptability, of this instant soy-coffee beverage stored during 32 weeks at 25 °C. For this purpose, the instant beverage powder containing 10% of soymilk powder, 2% of instant coffee and 13% of sugar was packed in flexible aluminum bags, heat sealed and stored at 25 °C. The study design was planed so that samples with different storage times could be analyzed at the same occasion. Every 8 weeks along the 32 weeks of storage, three packages of the instant beverage were transferred from the storage place to a freezer at –18 °C and kept until the end of the study. All samples were considered safe according to Brazilian Regulatory Policies, and no significant changes were observed on the chemical composition during storage. Protein content ranged from 20.22 to 18.88 g/100 g, oil content from 12.28 to 11.49 g/100 g, ash from 3.10 to 3.02 g/100 g, caffeine from 0.39 to 0.38 g/100 g, and total chlorogenic acids from 0.32 to 0.26 g/100 g for the samples with 0 and 32 weeks of storage, respectively. Trigonelline content was 0.08 g/100 g for all samples. Similarly, no changes were detected by sensory analysis. The hedonic mean scores varied from 5.5 for sample with 0 weeks of storage to 4.9 for sample stored for 32 weeks. However, a tendency for a decrease in the concentration of some of the evaluated compounds as well in the hedonic scores was observed and should be investigated in studies evaluating longer storage time.