

ABSTRACT

Development of Herbal Tea Incorporated with Asiatic Pennywort Extract for Elderly

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World population right now is an increasing median age. Meaning, it is a shift in the distribution of a country's population towards old ages. People are more concern in healthy products such as organic product and antioxidant products. Asiatic Pennywort has known as medical plant that used for treating bruises and reducing swelling. From the previous research lately, it reported that Asiatic Pennywort has properties to improve memory recognition and promote healthy skin. Asiatic Pennywort is herbal plant that available in the market, it has been developed to enhance the amount of antioxidant. This study was aimed to study the changes in consumer acceptance after repeated consumption of with Asiatic Pennywort tea by using survey with 100 elderly people for study attitude, behavior and opinion of elderly people towards tea products. There are 100% of Thai people ever consume herbs and herbal tea, they consume as beverage. Half of consumer surveys are no chronic health conditions. Safety, certification from FDA and Nutrition of product are the most factors that can effect to purchasing decision. They are not care about trend and brand of the products when they consume. The consumers are agree (73%) in nutrition value that presented on label as it's claimed on the package. Result from this study shown that roasted and kneading process is highest mean score from consumer's preference in overall liking 7.1 ± 1.5 ($P \leq 0.05$). This process get highest total phenolic compound 30.53 ± 4.9 ($\mu\text{g/ml}$ GAE dried weight). The best temperature and time for brewing is 85°C at 5 minutes because it can extract the highest amount of antioxidant 57.56 ± 2.4 ($\mu\text{g/ml}$ GAE dried weight). Ratio between Asiatic pennyworth and goji berry is 1:2. Ethanol extraction and gelatin nanoparticle was used that nanoparticle tea can get more antioxidant activity than normal tea leave for 7 times in total phenolic content. Final product testing has consumer acceptance for 76 percent, from who accept this product will buy if they are launched for 63.4 percent. This product has mean score of overall liking at 6.6 ± 1.7 ($P \leq 0.05$). There is no negative result in overall like after finish repeated exposure method.

Keyword: Asiatic Pennyworth, Herbal tea, Repeated exposure