THE EFFECT OF OKRA AND DRAGON FRUIT EXTRACT'S RATIO ON ANTIOXIDANT ACTIVITY IN ELSARAGA DRINKS (Okra and Dragon Fruit Extract's Jelly) FOR CANCER SUFFERERS

Pramitha Ayu Suhartami

Clinical Nutrition Study Program

Health Department

ABSTRACT

The antioxidants found in fruits and vegetables are very necessary for the body. One of the functions is to inhibit free radicals and prevent cancer. Green okra (Abelmoschus esculentus L) and red dragon fruit (Hylocereus polyrhizus) as raw materials for jelly drinks are innovative processing products and an alternative beverage for cancer sufferers. The two ingredients will be processed into extract and then mixed with other ingredients to produce a jelly drink. The experimental design used was a completely randomized design (RAL). Determination of the formulation for making jelly drinks with a ratio of green okra extract: red dragon fruit extract, namely P1 (100: 0), P2 (90: 10), P3 (80: 20), P4 (70: 30), P5 (60: 40) , P6 (50: 50) with 4 repetitions. Based on the results of the study, jelly drinks with a proportion of 80% green okra extract and 20% red dragon fruit extract produced the best jelly drink products from the organoleptic test results with an average value of preference for color 6.7 (tended to be preferred), taste 6.3 (tended to be preferred), aroma 6.8 (likely to be preferred), texture 6.4 (likely to be preferred). The test results for the antioxidant activity of jelly drinks with the best treatment were 23.91%. The proximate test results of jelly drinks with the best treatment had protein content of 2.28%, fat 0.38%, and carbohydrate 21.52%. The physical test results for the viscosity of the jelly drink gel with the best treatment were 0.21 cm/s. For one time consumption, it is recommended to consume 1 cup (100ml) of okra juice jelly and dragon fruit with an energy content of 134.02 kcal, 1.68 grams of protein, 0.23 grams of fat and 33.54 grams of carbohydrates. It is recommended to consume jelly drinks as an alternative for cancer patients with a 1 cup serving with a recommended weight of 100 grams per day.

Keyword : Antioxidant, Cancer, Free radical, Green okra extract and red dragon fruit jelly drinks