ABSTRACT

Test for Nutritional Source Potential of Kepok Banana for colon micro flora

Banana contain resistant starch (RS) which is carbohydrate that passed the digestive process in the small intestine and enters the colon, and utilized as a substrat for fermentation of colon micro flora. In the present of RS some of bacterial flora grow better. Mus musculus male mice strain Swiss Webster (Balb/c), weighting from 23 to 30 gram was divided into three groups. First group (P1) is a control group, given the standard food of Biochemistry Laboratory, University of Airlangga. The second group (P2) was given a substitution with 50% of yellow kepok banana flour, while the third group (P3) was given 100% kepok banana flour substitution. The treatment was carried out for ten days and at the 11th day the animals was sacrificed, the colon was collected and followed by counting of attached colon micro flora. The data was Analyzed using one way of ANOVA and continued with Univariate Analysis of Variance. The result shows, there was no significant different between the first group, the control group (P1) and the second group (P2), p value = 0.846 which is greater than α value of 0.05. Comparing the control group (P1) with the third group (P3) was found a highly significant different, p = 0.000. Significant different was also found between the second and the third group, p = 0.001.

Key words : Banana, Resistant starch, Colon micro flora