Potential Of (*Artocarpusheterophyllus Lam*) Jackfruit as Alternative Remedy for Blood Glucose.

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Abstract

This study was conducted at the RHCC-College of Nursing of Benguet State University, La Trinidad, Benguet to determine the potentials of jackfruit flesh as alternative remedy for blood glucose. Specifically, it aimed the following: (1) to determine the components of Jackfruit flesh as a lowering agent of blood glucose based on phytochemical analysis; and (2) to determine the comparative effects of Jackfruit flesh and Metformin as food supplements and the control on the level of blood glucose on the white mice.

The researcher used Experimental Design. There were three treatments used in the study namely; Jackfruit flesh 0.5 ml concentration, Metformin 0.25 ml concentration with additional 0.25 ml of sterile water, and their normal foods as the control. Six white mice were used for each treatment. The treatments were administered orally once a day every morning for seven (7) days while the blood glucose monitoring were taken every after two days for four (4) days. The data gathered were obtained using a monitoring and observation checklist.

The completely randomized design as utilize to compare the treatment as applied and check for its significance. Thus, the one-way analysis of variance (ANOVA) is the most suited and appropriate statistical tool to test the two treatments and control group.

It was found out that (1) there are different phytochemical components of Jackfruit flesh and Metformin. They both have magnesium that is vital metabolizing sugar; (2) the Jackfruit steadily lowers blood glucose of white mice, whereas Metformin's effect in lowering blood glucose fluctuates drastically in the first intake however normalizes blood glucose level on regular use; and (3) Jackfruit flesh is better in normalizing blood sugar in four (4) days than Metformin. However, Metformin and Jackfruit flesh have highly significant lowering effect towards glucose of the white mice when compared with the control group.

With the results above, it is concluded that (1) both the Jackfruit flesh and Metformin's have phytochemical components that lowers blood glucose; (2) the blood glucose lowering effect of Metformin was more potent in first few days; however, in the long run, jackfruit has surpassed the lowering effect of Metformin; (3) the lowering effect of Jackfruit is steady and unwavering unlike that of Metformin wherein the values fluctuated; whereas the control group did not have a significant effect on the blood glucose level.

It is highly recommended that Jackfruit flesh should be used as an alternative treatment for blood glucose problems and the Food and Drug administration approves it. There is a need for close monitoring of patient due to sudden drop of blood glucose in Metformin. Although there are many kinds of food there is a need to be vigilant in our food intake; especially when we have blood glucose problems. Furthermore, studies should replicate this study to further confirm the results of this study. Other Jackfruit components like root, leaves and barks should also be studied not only for glucose level but also for other related illnesses. Moreover, different levels of concentrations may be also studied to see if they are more effective.

Conclusions

Based on the results of the study, it is concluded that:

1. Both the Jackfruit flesh and Metformin's have phytochemical components that lowers blood glucose.

2. The blood glucose lowering effect of Metformin was more potent in first few days; however, in the long run, jackfruit has surpassed the lowering effect of Metformin
3. The lowering effect of Jackfruit is steady and unwavering unlike that of Metformin wherein the values fluctuated; whereas the control group did not have a significant effect on the blood glucose level.

Recommendations

Based on the conclusions of the study, the researchers are recommending for the following:

1. Jackfruit flesh should be used as an alternative treatment for blood glucose problems and the Food and Drug administration approves it.
2. There is a need for close monitoring of patient due to sudden drop of blood glucose in Metformin.
3. Although there are many kinds of food there is a need to be vigilant in our food intake; especially when we have blood glucose problems.
4. Studies should replicate this study to further confirm the results of this study.
5. Other Jackfruit components like root, leaves and barks should also be studied not only for glucose level but also for other related illnesses.
6. Different levels of concentrations may be also studied to see if they are more effective.

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