

OP6. Including curries to basic foods alter the Glycemic Indices

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Introduction

Glycemic index ranks carbohydrate-rich foods by how much they raise blood glucose levels compared to a standard food (glucose).

Objectives

Calculating the glycaemic index of different combination of foods.

Methodology

General meeting was organized and discussed about the research project and 20 volunteers with the mean age, weight, height and body mass 21.05 (± 0.92) years, 53.90 (± 9.36) kg, 153.92 (± 9.15) m and 20.55 (± 2.22) kgm^{-2} respectively were selected with their written consent. After over night fasting, 75g of digestible carbohydrate containing glucose and

each test food were administered and GI values were calculated and analyzed by Randomized Complete Block Design (RCBD) using SAS analytical package.

Results & discussion

The mean GI values of parboiled rice ('Mottaikarupan') either with green leaf curry (Amaranthus) or gravy or green leaf curry & gravy were 47.47 (± 11.21), 56.30 (± 9.31) and 54.67 (± 10.03) % respectively. The mean GI values of 'kurakan' pittu (Eleusine coracana) with above combinations of curries were 57.51 (± 5.52), 63.25 (± 8.86) and 59.25 (± 5.49) respectively. The mean GI values of 'atta' flour pittu (whole wheat grain flour) with above combinations of curries were 44.40 (± 14.27), 50.80 (± 9.35) and 46.29 (± 8.90) % respectively. 'Kurakan' pittu is inferior to 'atta' pittu and parboiled rice. When green leaf curry was mixed with rice and 'pittu', the GI values were decreased. When these foods were eaten with gravy, GI values were increased. The GI values were increased when the foods were consumed with gravy alone or green leaf curry & gravy. Thus, when consuming the basic foods with different curries, GI values would be altered.

Conclusion

Including curries to basic foods altered the GI index. Therefore, when dietary advices are given to diabetic and coronary heart disease patients, not only the basic foods have to be considered but also the curries to be consumed.