

OP 14:

Glycaemic Index is altered with combined food items

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Objectives: To determine the glycemic index (GI) of different combined foods.

Methods: 20 healthy volunteers with the mean age, weight, height and body mass index 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 overnight fasting, 75g digestible carbohydrate containing glucose and each test food were administered and blood glucose was measured half hourly for two hours. The GI values were calculated and analyzed by Randomized Complete Block Design using SAS analytical package.

Results: The mean GI values of parboiled rice ('Mottaikarupan') either with green leaf curry (*Amaranthus*) or gravy (soya meat) 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 curries were 57.51 (± 5.52), 63.25 (± 8.86) and 59.25 (± 5.49) respectively. The mean GI values of 'atta' pittu (whole wheat grain flour) with above curries were 44.40 (± 14.27), 50.80 (± 9.35) and 46.29 (± 8.90) % respectively. The GI values of cooked parboiled rice or kurakan pittu or atta pittu with green leaf curry differed significantly ($P < 0.05$) from other combined foods. The GI values cooked parboiled rice or kurakan pittu or atta pittu with gravy or green leaf curry & gravy didn't differ significantly ($P > 0.05$) among them.

Conclusions: 'Kurakan' pittu is inferior to 'atta' pittu and parboiled rice. Including curries to basic foods altered the GI index. Therefore, when dietary advices are given to diabetic patients, not only the basic foods have to be considered but also the curries to be consumed. The chemistry behind them needs evaluation.