

International Conference on Food Technology & Beverages | WEBINAR

Journal of Food Processing & Technology Volume: 12

July 23-24, 2021 | Webinar

Glycemic response of traditional cuisines of west India

Nikita Wadhawan

College of Technology and Engineering, MPUAT, Udaipur, Rajasthan, India

Glycemic index of six cereal based traditional recipes namely *dalia & bati* with *dhal* (wheat) *dalia & dhokla* with *dhal* (maize) and *khichda and muthia* with *chutney* (pearl millet) was determined. Recipes were standardized for 50g carbohydrates per serving size and acceptability. Acceptability scores of the recipes ranged from 7 to 9 revealing that the recipes were either liked moderately or very much. Wheat *dalia* was liked very much by the panel members whereas wheat *bati* with *dhal* by the study group. The cooked weight of the recipes ranged from 150.3 to 341.9 g and cooking time from 8 minutes 9 seconds to 35 minutes 10 seconds. The moisture, protein, fat, energy, carbohydrate, ash and fibre contents ranged from 46.2 to 73.5 g, 3.2 to 6.9 g, 3.8 to 14.3 g, 15.8 to 35.3, g, 0.4 to 3.2 g, 0.7 to 1.5 g and 117 to 279 Kcal per 100 g respectively. 10 healthy and 10 NIDDM subjects having normal BMI, not suffering with any disease and willing to participate were selected for the study. Glucose Tolerance Test (GIT) was conducted for 50g glucose and test recipes at fasting (0) and at 1/2, 1, 1½ and 2 hours after feeding to calculate the glycemic index. Glucose tolerance test revealed that the fasting blood glucose levels among diabetics were higher than the normal range and the non diabetics. Glucose response in diabetics as well as non diabetics reached its peak at 1½ hours for test recipes whereas at one hour for 50 g glucose which indicates delay in glucose absorption of the-test recipes. Glycemic index of pearl millet recipes' namely pearl millet *khichda* (67.9, 64.5) and pearl millet *muthia* with *chutney* (79.2, 77.8) in diabetics as well as non diabetics was low. GI was high for maize *dhokla* with *dhal* (116.3) a steamed and wheat *bati* with *dhal* (112.6) a baked recipe. The GI of pressure cooked recipes i.e. maize *dalia* and wheat *dalia* was 94.1, 75.2 and 84.7, 74.1 respectively in diabetics and non diabetics. **The** results of the study conclude-that glycemic index of the 'recipes varies by the type and amount of cereals, ingredients used and cooking method employed. Pearl millet recipes heaving low glycemic index arc suitable in diabetes management. GI-Studies can be conducted on either diabetic or healthy subjects or both.



Key words: glycemic index, traditional recipes, standardization, acceptability, diabetes

Biography

Nikita Wadhawan has completed his PhD at the age of 25 years from Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan. She has an experience of more than 14 years in the field of food science technology and nutrition. She has published more than 25 papers in reputed journals and has been serving as an editorial board member of repute.

Nikita54@gmail.com