Assessment of quality of dietary carbohydrate for normal and diabetic subjects

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Dietary management of Diabetes focuses on maintaining the postprandial blood sugar levels close to normal. In patients with Diabetes Mellitus the metabolism of carbohydrates is completely deranged. Effective management of blood sugars in such patients requires careful selection of the quality and quantity of CHO. The glycemic and insulin response to food may vary widely in normal and diabetic subjects. There are many food restrictions and taboos that govern food intake in these subjects. However, some of these are misleading, propagated by incomplete data regarding specific impact of foods on postprandial metabolism. Since 1981, Glycemic Index (GI) was used to assess glycemic quality of foods on equi-carbohydrate basis. But, we do not consume carbohydrate in isolation but rather food as a whole, along with the co-nutrients as proteins, fats, fiber, which influences the glycemic and insulimemic responses of food. The quantity of food consumed varies from person to person and GI value does not reflect the change in the impact. Therefore, the concept of glycemic index food (GI\textsubscript{food}) based on equi-quantity comparison of whole food was used to compare glycemic response to some common CHO rich food. GI\textsubscript{food} and II\textsubscript{food} may help in control and management of postprandial metabolism in individuals with Type 2 Diabetes. GI\textsubscript{food} value, being expressed in gm units, can be included in the Food Exchange table to predict response to common serving sizes of food consumed.

Biography

Kasturi Sen Ray, PhD had done Postdoctoral research in School of Medicine, South Carolina and Turft University, Boston, USA. She is recipient of National Merit Scholarship, represented India in ‘Global Nutrition’, Sweden. She was Rotary International Ambassadorial scholar at University of Sebalus Maret, Indonesia. Invited by SIDA for Global Nutrition IT Fair Bangladesh, she was Guest lecturer for Nelson Mandela School of Medicine and resource person at 18th International Congress of Nutrition, Durban, South Africa. She has 38 International and national publication in peer reviewed Journal, Lead article writer in ‘The Nutritionist: Digest Series of Clinical Nutrition, BioQuest. She has authored 3 books, member of editorial board of J of Vitamins and Minerals. She organized and presented her research work in large no. of National and International Conferences, travelled all over the globe for academic assignments.