North Indian Food Practice and Dietary Fibre

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WHO (1990) recommends an intake of 16-24 gms/day of dietary fibre (expressed as non-starch polysaccharides) (NSP) (1). The population nutrient goals for dietary fibre have been established on the basis of direct experimental evidence concerning the association between dietary fibre and stool bulking (and intestinal transit time), i.e., on the basis of intestinal function. The lower and upper population nutrient goals for NSP may also be expressed as 2.2 and 3.2 g/MJ. The 16 and 24g levels of NSP are consistent with estimates of about 27 g and 40 g of total fibre, which includes other fibre components.

Analysis of food practices in North India reveals that the average North Indian vegetarian diet consisting of whole wheat chapatis, lentils, green vegetables and some seasonal fresh fruit provides approximately 18-20g of fibre per day, the average total caloric intake being 1800-2000 Kcal/day.

Foods commonly available in North India and rich in fibre are as follows:-

Millet preparations - Cooked as cereal or home made snacks have a fibre content of 3g/100 g,

Red beans (Rajmah)-fibre content is 4.8g/100 g.

Sprout from pulses, gram or beans, has fibre to the extent of 5g/100 g.

Amongst vegetable cluster beans (guar gum), curry leaves drumstick or lotus stem has a high fibre content.

Guava and pomegranate are amongst the fruits with the highest fibre content.

Certain items commonly used as condiments enrich the food preparation with fibre. Some examples are: green chillies, cardamom, cumin seeds, coriander.

The indigenous system of medicine in the north employs some plant preparations that are rich in fibre and probably their hypoglycaemic effectiveness is due to their content. Examples are: Fenugreek (methi), Bael, Neem, Psyllium.

In the choice of fibre, soluble fibre contained in gums, gels, mucilages and pectin has more effect on glucose or cholesterol metabolism and also prolongs the rate of gastric emptying and intestinal transit time. Conversely, cereal fibre is largely not water soluble and unable to significantly affect absorption.

Overall consensus in diet planning for diabetics indicates that the most beneficial metabolic profile is produced by a high-carbohydrate low-fat diet. The worst metabolic profile results from low-carbohydrate and high-fat diets. These high-carbohydrate diabetic diets are effective only when relatively large amounts of unrefined carbohydrate and fibre are included such as legumes, unprocessed vegetables or fruits.

REFERENCES

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