

Diabetic Dietary Guidelines



Diabetes Mellitus is characterized by abnormally high level of sugar (glucose) in the blood. This may be owing to insulin not being produced at all, or not produced at sufficient levels, or is not completely effective.

Maintaining normal blood sugar is critical for good health. Medical nutrition therapy is an essential part of the treatment regimen for individual with Type 2 Diabetes. MNT is defined as nutrition based treatment provided by a Registered Dietitian Nutritionist.

For maintaining good glycaemic control, the key factors are:

1. Meal timings
2. Quantity of food
3. Quality of food
4. Physical activity.

General Guidelines

1. **Watch your serving size** – Being mindful about the amount of food you eat can help you avoid high blood sugar levels. A Dietitian will customise the “PLATE METHOD” based on your dietary assessment, and this will help to plan a balanced diet and prevent a spike in the blood sugars
2. **Eat small frequent meals** – Meal frequency would be customised based on the type of diabetes, blood sugar status and medical management
 - A strict adherence to meal timings is essential
 - Do not skip or delay meals to avoid low or high blood sugars
3. **Diet quality and diversity** – Include a balanced diet choosing foods from all food groups.

Cereals

- Complex carbohydrate cereals should be preferred over simple carbohydrate cereals as complex carbohydrate digests slowly, gives prolonged energy and is high in fibre
- Use whole-wheat flour or fibre-enriched flour in place of wheat flours
- Take a blend of wheat flour and soya bean flour or wheat flour and roasted chana flour in a ratio of 3:1
- Choose whole grain cereals like brown rice, Whole wheat flour, Oats, Millets in recommended quantities
- Avoid white bread, White suji, Sago, Refined cereals like Maida, processed cereals like Noodles, Pasta, Spaghetti and all baked products.

Pulses

- Pulses are a good source of protein, and are low GI foods. These have to be included in recommended quantities. They also have good fiber when taken as whole grams.
- Prefer whole grams and Dals like Lentils, Red gram dal, Soya beans, Lima beans, Horse gram dal, Cow peas, Rajma, Moong beans, Chana, Peas.

Milk and milk products

They are a good source of proteins and bio-available calcium, and are low in carbohydrates. Protein has less potential to increase blood sugar levels, and can help a person feel fuller for longer periods.

- Choose low fat or zero fat milk, i.e. skimmed milk – 0.3% fat – (diet or slim milk) or double toned milk – 1.5% fat
- Avoid sweetened / flavoured yogurts and Milk

Fruits and vegetables

- Avoid all fruit juices (both homemade fresh fruit juices or tetra packs)
- Unprocessed fruits and vegetables are to be included
- The consumption of potato to be restricted upto 65 gms and sweet potato upto 40 gms and other roots like beetroot, yam, colocasia should be restricted
- Include plenty of green leafy vegetables. Being a good source of minerals and omega-3 fatty acids, they help enhance insulin secretion and regulate blood sugar levels
- Include vegetables as salad before lunch and dinner, as eating fibre rich food before carbohydrate meals is effective to reduce increase in the glucose levels

Daily use fruits only in specified quantities as per list given below.

Each serving provides 15 g Carbohydrates and 50 Kcal

Fruit	Size/Number of fruit	Quantity of fruit (gms)
Apple	1/2 Medium	115 -1 Medium
Lemon or lime (32)	1 Medium	
Strawberries	4 - 5 Nos.	8 Medium (SS)
Plum	4 Medium	125
Peach	1 Medium	190
Pear	1 Large	185
Jamun Fruit	10 Big	105
Tomato	4 Medium	
Orange (Santhra)	1 Medium	190
Sour cherries		121
Sapota	1 Medium	107
Figs (Fresh)	2 Medium	92
Musk Melon		353
Banana	1 Small	65
Mango	1 Medium slice	150
Grapes (Green)	14 in no	127
Custard apple	1 Small	75
Papaya	1 Large slice	325
Sweet lime	1 Medium	290
Pomegranate	1 Large	134
Sweet cherries	15 Cherries	126
Guava	1 Medium	164
Water Melon	1 Large slice	388
Dry Dates	1 No	22
Jackfruit	3 Pieces (Medium size)	107

Ref: IFCT (Indian Foods Composition Table) 2017 National institute of nutrition ICMR

Poultry, fish and meat

- Choose eggs and unprocessed and lean meats like skinless chicken or fish cooked with little or no oil or steamed, baked or grilled. Avoid red meats like mutton, beef, and liver.

Nuts and dry fruits

- Choose fresh dates, anjeer, raisins in the recommended proportions and timings as advised by the nutritionist
- Limit the use of nuts and oil seeds like til, ground nut, fresh coconut, kaju, badam and walnuts to specified quantities
- It is preferable to use puffed bengal gram (putana) or vegetable chutney instead of coconut, groundnut chutney or pickles

Fats and oils

- Limit visible fats and oils to 3-4 tsp/day
- Oils with MUFA (mono unsaturated fatty acids) and PUFA (polyunsaturated fatty acids) should be used
- Use of 2 or more oils is recommended
- For non-vegetarians, consumption of 100-200 gm of fish/week is advised as a good source of PUFA and for vegetarians, vegetable oils (like sunflower, Safflower, soybean oils), walnuts and flaxseeds are recommended

Avoid

- Consumption of foods high in saturated fats.
(Butter, coconut oil, margarine, ghee and red meat)
- Deep-fried foods, chips, items made with coconut, khus khus, groundnut, kaju paste
- Use of hydrogenated fat as a cooking medium
- Reheating and reusing cooking oils.

Salt consumption

- Overall salt consumption should be less than 1 tea spoon
(5 gms/day)
- Packaged and preserved foods like puffs, pickles, papads, namkeens, salted/sweetened biscuits, chips are to be avoided.

Sugar/sweeteners

- Sugar sweetened beverages, honey, jaggery, fruit juices, jams, soft drinks, bakery items like cakes, pastries are best avoided
- Artificial sweeteners should be consumed in recommended amounts.

4. Fluids

Need to include plenty of fluids, the minimum intake should be 2½ – 3 lit/day.

5. Fad Diets

Modified diets that are not evidence-based are not recommended but if followed by a diabetic, it should be in consultation with an endocrinologist and nutritionist. Certain diets like low / no carbohydrate diets, Intermittent fasting and Ketogenic diets must be customized as per the clinical condition.

6. Fasting

Conditions of complete avoidance from food and/or water during religious fast leads to skipping medications, culminating in to derailed metabolism and worsening of the condition.

7. Dietary supplements

There's no conclusive evidence that taking dietary supplements such as vitamins, minerals, herbs, or spices can help manage diabetes.

8. Physical activity

Daily minimum activity of 30 min/day of exercise or brisk walking reduces the risk of complications related to Diabetes.

