

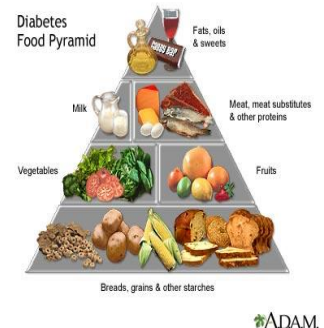
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DIABETIC DIET : BASIC PRINCIPLES

With minor alterations, food prepared for all other family can be taken by diabetic patients. Balanced diet excluding pure sugars, (glucose, sugar, sweets etc.), providing adequate energy with sufficient proteins, Vitamins and minerals is good for diabetic patient.

Main principles of diabetic diet are:

- 1) Avoid pure sugar in any form (sweets, beverages, sweet dairy products) etc
- 2) Maintain food timing, don't delay / skip your meals
- 3) Avoiding fasting and feasting, gorging and nibbling
- 4) Out of total food intake, 55 % should be from carbohydrates (cereals, roots and tubers)
- 5) Limit fat intake by less than 30 % of your diet
- 6) Take adequate proteins (1 gm/kg body weight), Restrict proteins if you are passing excess proteins in urine
- 7) Maintain ideal body weight
- 8) Include fibers in your diet (green salad, beans, limited fruits)
- 9) Avoid too much or too less calories (energy)

FOOD QUANTITY:

To maintain the ideal body weight .approx. Food intake (caloric intake) should be fixed by your Physician/Dietitian. Usually normal weight person requires about 30 calories/kg/day. Caloric content of certain food items is given at the end. This is known as **concept of calory consciousness** keeping the quantity fix, but increasing the frequency of food (eg 3 snacks and 2 meals) is a good habit for diabetic patients. It helps in maintaining steady control of diabetes and avoids food related rise in blood glucose level.

FOOD COMPOSITION:

Usual food contains carbohydrates, proteins and fats. Diabetic patient should have 55-60% of their diet in form of carbohydrates, which can be obtained from common cereals (rice, wheat, Jawar etc.) pulses, roots and tubers. Proteins are important for growth and repair in the body structure. Like a normal person, diabetic patient is also advised protein intake of 1 gm/Kg/day.

However, patients with kidney involvements should restrict their protein intake to 0.6gm/Kg/day. Extra energy, consumed in any form, is stored as fats.

Fats are related to higher incidence of blood pressure and coronary heart disease. Fatty food should be restricted to less than 30% of the food intake.

Sunflower, groundnut oil, olive oil etc. are preferred over vanaspathi ghee, butter cream and yellow of egg. Chicken and fish are better than red meat in regards to their fat content.

REGULARITY IN DIET is very important for diabetic patient. **Undue delay or missing a meal result in to dangerous hypoglycemia** (a state of low blood glucose level). Tablets for diabetes or insulin should be taken ½ hour before breakfast or meals.

Exercise and diet: Exercise helps in improving blood glucose control, reduces insulin requirement and also helps in prevention of cardiovascular disorders. Moderate exercise within capacity of the individual is recommended for all diabetic patients. However patient on insulin should take some extra food before any strenuous exercise.

Pure sugars in any form should not be consumed: hence food items like sweets, tiffins, ice-creams, Soft-drinks, honey, sweet fruit(like ripe mango, banana, chickoo etc.,)should be avoided. Instead of sugar, Aspartame (sugar free) or saccharin sweetex can be consumed.

Fruits: fruits contain two types of sugars, Glucose and Fructose. Insulin is required for digestion of glucose but not for fructose. Hence low caloric fruits which do not contain much glucose like watermelons, guava, apple, papita etc, can be taken by diabetic patients. While sweet fruits like ripe mango, banana, chickoo etc. should be restricted. Another advantage with fruits is their high fibre content, which also helps in blood glucose control. Fruit juices should be avoided of high glucose contents.

Bitters: Bitter gourd (karela), green leaves, bitter leaves, fenugreek (methi) seeds etc. achieves 10-20% lowering of blood of blood glucose levels.

Roots and tubers (potatoes, bitterroots etc.) because of high caloric content, it is wiser not to take only potatoes/ beetroot as cooked vegetables, but there is no harm in taking potatoes mixed with other vegetables eg. Brinjals, cauliflower, cabbage, fenugreek etc.

Free foods (to be taken liberally): thin soups, thin buttermilk, cucumber, tomato, lemon water, diluted lassi, tea and coffee without sugars etc.

Food to be restricted: Sweets, sugar, honey, ice-creams, soft-drinks, fried foods, butter, cheese, ghee, malais etc.

CONCLUSION :

Balanced diet helps in maintenance of ideal body weight, control of blood glucose level and in prevention of cardiovascular disease.

Read the following list of caloric content of different food items, assess your caloric intake, collect your meal plan (diet menu) from the dietitian and try to follow it generously.

CALORIC CONTENT FOR 100 GMS FOOD ITEMS

Oils	900	Ice-creams	180	Wheat flour	340
Butter	740	chicken	110	Rice(milled)	345
Apple	50	meat	200	Jowar	350
Orange	35	upma	230	Bengal gram	370
Grapes	70	Milk (buffalo)	117	onion	60
Banana	115	groundnuts	570	Milk(cow)	70
Plain dosa	360	Potatoes	85	Butter milk	15
Idly	130	Carrots,Onions	20	Curds(cowmilk)	60
Uthapa	330	papaya	32	Egg(2)	170