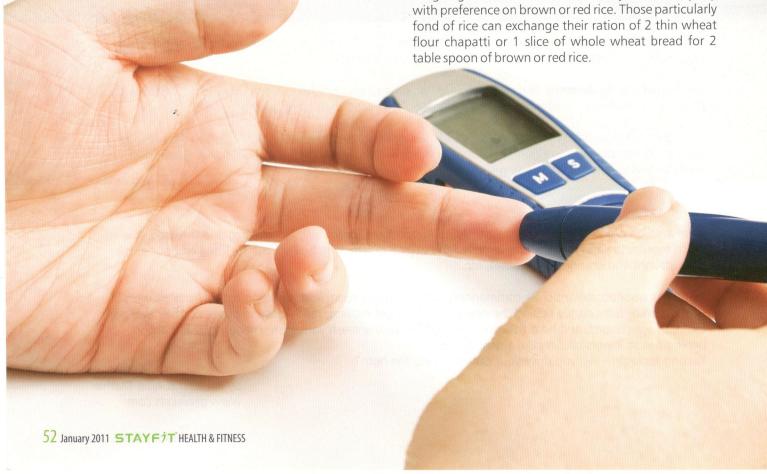
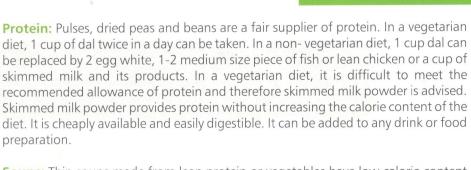


iabetes Mellitus, commonly known as diabetes, is a Greek word which means "Honey in Blood". It is indicative of high sugar level in blood and urine. Management of a long term metabolic disorder like diabetes mellitus requires an effective healthy lifestyle, which includes a balanced diet, exercise and sensible weight control. Diabetes provokes a great thought on diet and making correct changes in eating is the first step towards preventing and controlling diabetes. The meal plan for a diabetic is based on height, weight, age, sex, physical activity and nature of diabetes.

Cereal: While selecting cereals, it is very important to emphasize on whole grain cereals such as whole wheat flour, jowar, bajra, nachni, oats, barley, unpolished rice like brown and red rice, durum wheat pasta, whole wheat bread, multigrain bread and nachni bread. These cereals are high in fibre, provide satiety and also help in controlling blood sugar levels. It has been a notion among many diabetics that brown bread or chapattis made of wheat, bajra or jowar can be eaten in any quantity without harm. This is a wrong idea as all types of cereals and millets provide 100 kcal per 30 Gms of dry flour. An average slice of bread provides 75 kcal, while a thin wheat chapatti provides 50 kcal. Therefore it is important to regulate the number of slices of bread or chapattis eaten at each meal. An occasional helping of rice is allowed for a normal weighing diabetic. A thin diabetic may have it every day







Soups: Thin soups made from lean protein or vegetables have low calorie content and can be taken as one pleases. It is best suited for obese diabetics to have big helpings of thin soups at meal times as it gives them satiety without increasing their calorie intake. On the other hand, a thin diabetic can have a small helping of soup, so that other foods with adequate calories can be taken. Thick soups are best avoided as they usually contain flour, peas, potato and nuts which have high calorie content.

Vegetables: An obese diabetic needs a diet high in fiber which can provide satiety and at the same time gives few calories. Vegetables meet this requirement and hence a good quantity of vegetables should be included in their diet. A thin diabetic can choose fewer vegetables in order to have more nourishing food. Leafy vegetables like spinach and cabbages have few calories and can be eaten freely by all diabetics. Pumpkin, brinjal, lady's finger, French beans can also be eaten freely. Root vegetables like carrot, radish, onion, turnip with the exception of potato and sweet potato, provide few calories and can be taken as desired. Salad made from cucumber, lettuce, onion, radish and tomato can be taken liberally by all diabetics' especially obese diabetics. Vinegar, dried pepper, green pepper, mustard and sour lime can be used as salad dressing. Dressing containing oil and mayo must be avoided.

Fat for cooking: Limit the intake of saturated and trans fats (butter, margarine, shortening, dalda, vanaspati). While buying oil, choose oil rich in polyunsaturated fatty acid and monounsaturated fatty acid. However, moderate your total intake to 3 –4 tsp of oil per day per person. Avoid re-heating of oil as they get converted to trans fats. Adapt methods of cooking which require less oil e.g. steaming, braising, sautéing and stewing, grilling, pressure cooking and roasting instead of frying (shallow/deep frying).

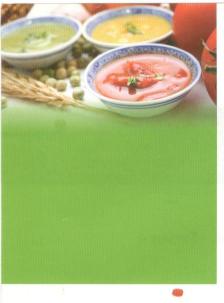
Sugar, Jaggery or Honey: They are pure form of carbohydrate. Some diabetics feel that the only change in diet required is to stop taking sugar. It is better for diabetics to know their daily ration of sugar and must consult a nutritionist for the same. Thin and normal weight diabetics have their allowance of sugar but an obese diabetic must avoid sugar. The ration of sugar must be distributed reasonably throughout the day. All pastries, cakes need to be avoided because of variable sugar and fat content.

Nuts: The daily ration of 1 cup skimmed milk or 1 slice whole wheat bread or 2 thin chapattis can be substituted for 3 walnuts or 5 almonds or 4 pistachios or 5 groundnuts.

Papad, chutney and pickles are allowed in moderation. Pickles made in oil are not permitted.

Beverages like tea, coffee are permitted. Unsweetened drinks such as soda water and barley water need not be restricted.

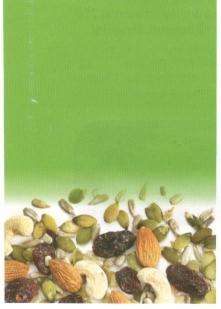
If your food habit conforms to the prescribed meal plan, the blood sugar levels will be the same after the meal every day. If there are wide fluctuations in the blood sugar levels, changes in the diet should be strongly suspected. The common foods which cause these fluctuations are chapattis, bread, rice, potato, pulses, banana, mangoes, nuts, sweets. The quantity of these foods should be strictly regulated.











FOOD & NUTRITION

Dessert

Diabetics who are fond of sweets can try the following desserts to satisfy their taste buds. However keep in mind your daily calorie intake and substitute something from your diet for the desert. This should be done in consultation with your nutritionist so that right substitute for the deserts can be given to prevent wide fluctuation in blood sugar levels.

Recipe 1 China grass pudding – Serves 3 Ingredients

2 Tbsp of china grass 1½ cup water

1 cup skimmed milk

2 tsp skimmed milk powder

3 tsp sucralose

½ cup finely chopped pineapple

1/2 cup finely chopped cherries

Few drops of vanilla essence / raspberry essence

1 tbsp crushed almonds



Cut the china grass into small pieces. Soak it in water for 5 minutes. Heat the mixture of water and china grass; cook it till it melts without any grains, sieve it, remove and keep the mixture aside. In the same pan, heat milk, once lukewarm add skimmed milk powder and mix it well. Add this mixture to the china grass mixture; add few drops of vanilla essence, sucralose, pineapple and cherry pieces. Pour into a mould and cool in the preparation in the refrigerator. Garnish with crushed almonds and serve chilled.

Nutritive Value per serving

Energy: 83 kcal Carbohydrates: 8.3 Gms

Protein: 4 Gms Fat: 0.6 Gms

Recipe 2 Strawberry Orange Sandesh – 6 pieces

1 cup freshly made Low fat Paneer

2 tsp finely chopped strawberry

2 tsp finely chopped orange

3 tsp sugar substitute



Method

Stew the strawberry in 1 tsp sugar substitute. Combine paneer and 2 tsp sugar substitute in a bowl. Mash it and mix it well. Add stewed strawberry and oranges and mix well. Divide into 6 equal portions and shape each portion in a ball. Place a leaf of mint over each sandesh. Refrigerate for at least 45 minutes and serve chilled.

Nutritive value per sandesh

Energy: 50 kcal Carbohydrate: 15 Gms

Protein: 7.5 Gms Fat: 0.3 Gm

Recipe 3 Apple Modak – Serves 4 (1 to each)

Ingredients

For chapatti: 1/2 cup whole wheat flour

1 tsp oil

A pinch of salt

1 tsp roasted till seeds

2 tsp khus khus

Method

Combine the flour, oil, salt, roasted till seeds and khus khus in a bowl and knead into a soft dough adding enough water. Cover and keep it aside. Knead the dough till it is smooth. Divide into 4 equal sized portions and make 4 cms round circles. Cover these wheat circles with muslin cloth.

For apple stuffing: Grate ³/₄ apple. Combine apple, sugar substitute and ¹/₄ cup water in a pan and cook it on a medium flame till soft- stew them. Keep aside to cool. Add 1 tsp cinnamon powder and 4-5 raisins to the mixture and mix well. Divide into 4 equal portions.

Final step: Place chapatti circles on a clean surface and place apple mixture in the circle and close them in a form of modaks. Repeat for the remaining chapatti circles. Arrange these modaks in greased baking try, apply ½ tsp butter over them and bake in a preheated oven at 200 degree Celsius for 10 minutes. Serve Hot.

Nutritive Value per serving

Energy: 100 kcal Carbohydrate: 19Gms

Protein: 1 gm Fat: 3 Gms

