



Meal Planning Methods ; Concern For Diabetic Patients

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Abstract:-

Diet plays a big role in controlling the diabetes. The diet could also be used alone alternatively together with insulin doses or with oral hypoglycemic drugs. Diabetics always need to take care of their diet and about the food they eat. Care has got to be taken because all foods contain not only carbohydrate, but also some energy value. Protein and fat available within the food are converted to glucose within the body. A menu plan is your guide for when, what, and the way much to eat to urge the nutrition you would like while keeping your blood glucose levels in your firing range . A good menu plan will take under consideration your goals, tastes, and lifestyle, also as any medicines you're taking. You'll want to plan for regular, balanced meals to avoid high or low blood sugar levels. Eating about an equivalent amount of carbs at each meal can help. Carbs, protein, fat, and fiber in food all affect your blood sugar in different ways. Carbs can raise your blood sugar faster and higher than protein or fat. Fiber can help you manage your blood sugar, so carbs that have fiber in them, like sweet potatoes, won't raise your blood sugar as fast as carbs with little or no fiber, such as soda.

Keywords-carbohydrate, meal plan, hypoglycemic drugs

Goals of nutritional therapy

- Maintain blood glucose levels to as near normal as safely possible to prevent or reduce the risk for complication of diabetes.
- Achieve a lipid profile and blood pressure that reduces the risk for cardiovascular disease.
- Modify lifestyle as appropriate for the prevention and treatment of obesity, dyslipidemia, cardiovascular disease, and neuropathy.
- Address individual nutrition needs, taking into account personal and cultural preferences and willingness to change.
- Improve health through healthy food choices and physical activity.

Meal planning methods for diabetic mellitus

There are four common methods of meal planning used for people with diabetes.

1. PLATE METHOD

The plate method is useful tool for people who have been diagnosed with diabetes and are just learning how to manage their meal plan or who just want a simple plan to follow.



Using the plate method

Half the plate should be covered with vegetables, preferably two kinds

One quarter of the plate should contain a protein source such as a piece of fish, cheese, pulses or soya.

One quarter of the plate should be the starch, such as chapatti, rice or bread.

A vegetable, fruit and a dairy product complete the meal.

The plate does not tell a person exactly how much to have of each food group. A simple way to explain the amount of food a person should have from each group is to use your hands to assess the portions.

Estimating portion size with hands

For each meals

- A starch serving is equal to a closed fist
- A fruit serving is equal to a closed fist
- Vegetables should be enough to fill two open wounds
- Meat or protein alternative is equal to the palm of the hand the depth of the little finger
- Fat should not be more than the tip of the thumb

People of different sizes obviously have different size of hands. Therefore the amount may vary slightly from person to person, but it is a good approximation.

2. SIGNAL SYSTEM

The signal system is a useful aid to educate large number of people. The signal system is based on a traffic light concept.

Red zone: These foods are rich in fat and in refined carbohydrate sugar; they have a high glycaemic index or are low in fibre. They should be eaten in very limited quantities

Yellow zone: These foods should be eaten in moderation since they may have a high glycaemic index, are low in fibre content, or have moderate amounts of fat.

Green zone: These foods are healthy choices because they have a low glycaemic index, are high in fibre and low in fat. However, foods within the green zone should still only be eaten within the recommended amounts.

Food can move from the green to the red zone counting on the tactic of processing and cooking. Therefore, it is important to take note of healthy and unhealthy food choices while planning a diet for people with diabetic.

The following examples takes the same serving of rice and describe its fat content according to the cooking method used.

- Steamed long grain or parboiled rice is a healthy option since it is low in fat and has a low glyceic index
- The same serving prepared rice as pulao rice would have a moderate amount of fat around 10-15 g.

- Fried or biryani rice is a very rich and unhealthy choice it would have fat content of 60-80g per serving.

3. CARBOHYDRATE COUNTING

Carbohydrate should account for 55%-60% of total calories taken on a daily basis. One gram of carbohydrate is equivalent to 4 calories. If the person with diabetes is on a 1200 calorie diet, approximately 720 calories should come from carbohydrates (180 g of carbohydrates) spread over the day.

Carbohydrate counting can be taught three levels the basic to complex, where people use established insulin to carb ration to tailor their insulin dose to the meal they plan to eat.

Level I: People are given lists of food that are categorised in groups that contain the same amount of carbohydrate. Each choice is calculated to be approximately 15 g of carbohydrates, for instance 1/3 cup rice or small chapatti would count as 1 carbohydrate choice. It is then worked out with the person according to his/her nutritional needs and lifestyle as to how many carb or total grams of carb they should eat at meals or snacks.

Level II: It requires frequent bloods glucose monitoring at different times of the day that correlate to carb intake. Patients blood glucose records and diet history can be used to adjust carb intake, medication or insulin doses to the level of exercise.

Level III: Blood glucose needs to be checked regularly. Insulin doses before meals and snacks are based on a pre determined carb to insulin ratio. This means for each carb choice eaten, a specific amount of insulin is given. The amount of insulin given will cover the amount of carb eaten; bringing blood glucose levels 2 hours post- prandial to target levels.

4. FOOD PYRAMID METHOD

The food pyramid is a visual that helps to explain the kinds and amount of food that should be eaten. The base of the pyramid consists of the foods that should be eaten more frequently. As one goes up the side of the pyramid, the person should eat fewer serving of the food indicated, eating the least amounts of food at the top of the pyramid. The foods at the top of the pyramid tend to be calorie dense and should be eaten sparingly.



CONCLUSION

The approach of nutrition therapy has changed over the years from dictating meals plans to negotiating a meal plan that is individualized to the person with diabetes and meets his/her goals for blood glucose, lipid and blood pressure control. The nurse plays pivotal role in educating, developing and implementing an action plan for the person with diabetes to meet his/her nutritional goals.

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