

## Diabetic; Eating Right

**Diabetes is a growing and massive silent epidemic that has potential to cripple health services in all parts of the World” World Health Organization**

Diabetes is a potentially devastating disease that prevents the body from producing enough insulin. Globally, it affects more than 246 million people of which 400,000 are children.

Every year 7 million people develop diabetes and this figure is expected to rise to 380 million by 2025. Insulin is a hormone necessary to convert sugar, starches and other foods into energy we need for daily life. Diabetes can lead to blindness, amputation, Heart disease – even death. Fortunately, in many cases it can be managed.

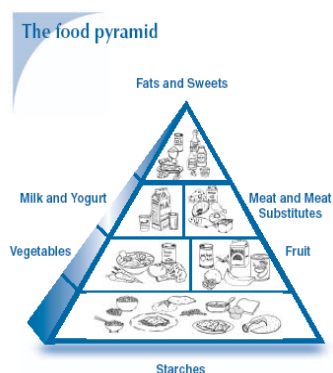
### Facts about this rising epidemic

- Every 10 seconds a person dies from diabetes - related causes in the world. It is estimated that diabetes kills as many as 3.5 million people every year. It actually kills many people as HIV & Aids.
- Today, over 246 million people have diabetes world wide and this number is projected to rise to 380 million by 2025 if nothing is done to halt this trend. The trend stood at 1% in 1999, 2.5% in 2005 and it is expected to be 4.5 % in 2025.
- Diabetes is not just a disease of developed countries. Seven out of the top 10 countries are developing countries (North Africa, South America, South East Asia and Middle East)
- Type 1 diabetes which affects children is now on the rise with an annual increase of 3% per year. At the same time type II diabetes which mainly affects adults is now on the increase in children and young adults.
- Most of the people affected by diabetes are within the very productive age of between 34 and 64 years old. These are individuals actively involved in Nation building.
- Diabetes is the leading cause of stroke, heart attack, blindness, leg amputation and kidney failure.
- Many poor people are predisposed to diabetes yet they have low access to appropriate care. It is therefore important to strengthen prevention as this is cheaper compared to treatment.

- All patients with type 1 diabetes require insulin to survive; it is an expensive drug for majority of them to afford.
- The burden of Diabetes is not only financial. The pain, anxiety and reduced quality of life are equally devastating.
- Diabetes is not just a health issue. It impacts negatively on the national economy and leads to poverty. The challenge to confront diabetes will require the concerted efforts of the government, civil society and the private sector.
- Preventive care does not have to involve costly treatment or medication. It is about lifestyle modification because over 85% of diabetes is preventable

## **Control Blood Sugar & Prevent Diabetes Complications**

### **The Food Pyramid**



- The food guide pyramid places emphasis in fruits, vegetables and grains.
- It's easy to use the pyramid to choose a healthy diet that meets your particular needs.
- Let's take a look at the nutrient benefit of each of the food groups and examples of the same.
- Eat a variety of food to get the vitamins and minerals you need.
- Eat more from the groups at the bottom of the pyramid, and less from the groups at the top

### **Starches**

- Starches are bread, grains, cereal, pasta, or starchy vegetables like corn and potatoes. They give your body energy, vitamins, minerals, and fiber.
- Whole grain starches are healthier because they have more vitamins, minerals, and fiber.
- Eat some starches at each meal, people might tell you not to eat starches, but that is not correct. Eating starches is healthy and important for everyone, including people with diabetes.
- Examples of starches include;

- Bread
- Potatoes
- Chapatti
- Rice



- Beans
- Yams



### **What are healthy ways to eat starches?**

- Buy whole grain breads and cereals.
- Eat fewer fried and high fat starches such as regular potato chips, French fries, pastries, or biscuits.

- Use low-fat or fat-free yogurt or fat-free sour cream instead of regular sour cream on a baked potato.
- Use the low fat or fat-free substitutes such as salt-free butter on bread, rolls, or toast.
- Eat cereal with fat-free (skim) or low-fat (1%) milk.

## **Vegetables**

Vegetables give you vitamins, minerals, and fiber, with very few calories.

Examples of vegetables include;

- Lettuce/cabbage
- Peppers
- Broccoli
- Carrots
- Chilies
- Vegetable juice
- Green beans
- Green vegetables e.g. sukuma wiki

## **What are the healthy ways to eat vegetables?**



- Eat raw and cooked vegetables prepared with a little oil dressing.
- Try low-fat or fat-free salad dressing on raw vegetables or salads.
- Steam vegetables using a small amount of water or low-fat broth.
- Use a little vinegar or some lemon or lime juice.
- Add a small piece of lean ham or smoked turkey instead of fat to vegetables when cooking.
- Sprinkle with herbs and spices. These flavorings add almost no fat or calories.
- If you do use a small amount of oil use olive oil, or any vegetable oil instead of fat from meat, butter, or shortening.

## **Fruit**

Fruit gives you energy, vitamins, minerals, and fiber.

Examples of fruit include;

- Apples
- Bananas
- Mango
- Fruit juice
- Oranges
- Papaya



## **What are healthy ways to eat fruit?**

- Eat fruits raw or cooked, as juice with no sugar added, canned in their own juice, or dried.
- Buy smaller pieces of fruit.
- Eat pieces of fruit rather than drinking fruit juice; pieces of fruit are more filling.
- Drink fruit juice in small amounts.
- Save high-sugar and high-fat fruit desserts for special occasions.

## **Milk and Yogurt**

Milk and yogurt give you energy, protein, fat, calcium, vitamin A, and other vitamins and minerals.



## What are healthy ways to have milk and yogurt?

- Drink fat-free (skim or nonfat) or low-fat (1%) milk.
- Eat low-fat or fat-free fruit yogurt sweetened with a low-calorie sweetener.
- Use low-fat plain yogurt as a substitute for sour cream.

## Meat and meat substitutes

- Meat and meat substitutes help your body build tissue and muscles while giving your body energy, vitamins and minerals; eat small amounts each day.

- Examples of meat and meat substitutes include

- Chicken
- Fish
- Beef
- Eggs
- Peanut butter



- Nuts
- Cheese
- Pulses
- Lentils



## What are the healthy ways to eat meat or meat substitutes?

- Buy lean cuts of beef, pork, ham, and lamb; trim extra fat.
- Remove chicken or turkey skin before preparation.
- Cook meat or meat substitutes in low-fat ways:
  - Broil
  - Grill
  - Stir-fry
  - Roast
  - Steam
  - Stew
- To add more flavor, use vinegars, lemon juice, soy sauce, herbs and spices.
- Boil eggs or prepare with a small amount of fat.
- Limit the amounts of nuts, peanut butter, and fried chicken that you eat; they are high in fat.
- Choose low-fat or fat-free cheese.

## Fats and sweets

Limit the fats and sweets you eat. They are high in calories, but not much nutrition.

- Some contain saturated fats and cholesterol that increase your risk of heart disease.
- Limiting these foods will help you lose weight and keep your blood glucose and blood fats under control.

Examples of fats include;

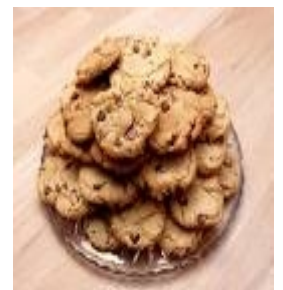
- Salad dressing
- Butter
- Avocado

Examples of sweets include;

- regular soda
- cake



- Oil
- Margarine



- pie
- ice cream
- cookies

## How can I satisfy my sweet tooth?

- It's okay to have sweets once in a while.
- Try having sugar-free sweets, diet soda, fat-free/diabetic ice cream
- Other tips:



calories.

- Share desserts in restaurants.
- Order small or child-size servings of ice cream or desserts.
- Divide homemade desserts into small servings and wrap each individually. Freeze extra servings.
- Don't keep dishes of candy in the house or at work.
- Remember, fat-free and low sugar foods still have

**Talk with your nutritionist/dietician about how to fit sweets into your meal plan.**

## Diabetes & Exercise

During physical activity, whole-body oxygen consumption may increase by as much as 20-fold and even greater increases may occur in the working muscles. To meet its energy needs under these circumstances, skeletal muscle uses, at a greatly increased rate, its own stores of glycogen and triglycerides, as well as free fatty acids (FFA's) derived from the breakdown of fat tissue triglycerides and glucose released from the liver.

To preserve central nervous system function, blood glucose levels are remarkably well maintained during physical activity. Hypoglycemia {low blood sugar} during physical activity rarely occurs in non-diabetic individuals. The metabolic adjustments that preserve normal blood glucose levels during physical activity are in large part hormonally mediated. These hormonal adaptations are essentially lost in insulin-deficient patients with type 1 diabetes. As a consequence, when such individuals have too little insulin in their circulation, an excessive release of counter insulin hormones during physical activity may increase already high levels of glucose and ketone bodies and can even precipitate diabetic ketoacidosis.

Conversely, the presence of high levels of insulin, due to exogenous insulin administration, can attenuate or even prevent the increased mobilization of glucose and other substrates induced by physical activity, and hypoglycemia may ensue. Similar concerns exist in patients with type 2 diabetes on insulin or oral tablets; however, in general, hypoglycemia during physical activity tends to be less of a problem in this population. Indeed, in patients with type 2 diabetes, physical activity may improve insulin sensitivity and assist in diminishing elevated blood glucose levels into the normal range.

Thus it is important that diabetics and those at risk of diabetes take up regular exercise 3 – times a week as it is becoming increasingly clear that physical activity may be a valuable therapeutic tool.

### **Reducing the Risks**

There are some indications that the likelihood of a particular individual becoming obese may be reduced if the following modifiable risk factors are given attention:

- Adequate nutrition during pregnancy
- Introducing a variety of tastes to infants after breast feeding
- Developing a taste for fruit and vegetable consumption early in life
- Encouraging physical activity during childhood
- Maintaining diets low in energy density

**It has been shown that simple lifestyle interventions can reduce the risk of developing type 2 diabetes by as much as 60%. These include :**

- **Increased physical activity**
- **A healthy diet**
- **Weight loss**

**It is estimated that at least half of all cases of diabetes would be eliminated if weight gain in adults could be prevented**

## **CREAMED POTATO SOUP**

**This tasty *diabetic potato soup* recipe may be eaten hot or chilled**



This soup is incredibly easy to make and you will find the taste well worth the slight effort taken

### **INGREDIENTS**

- ✓ 4 medium potatoes
- ✓ 1 small onion
- ✓ 4 green (spring) onions
- ✓ 1 clove garlic, minced
- ✓ 2 (10 1/2 oz.) cans no-salt added chicken broth, undiluted
- ✓ 1 cup skim milk
- ✓ 1/2 tsp. salt
- ✓ 1/8 tsp nutmeg

### **METHOD**

1. Peel the potatoes and cut them into eighths.
2. Peel the onion and cut into eighths.
3. Chop the green (spring) onions coarsely.

4. Combine potatoes, onion, green onions, garlic, and broth in a heavy 3 quart saucepan.
5. Cover and simmer 20 minutes or until potatoes are tender.
6. Process potato mixture in batches in container of an electric blender or food processor until smooth.
7. Combine pureed mixture with milk and remaining ingredients, stirring until well blended
8. Reheat potato soup to serving temperature or cover and refrigerate until chilled.  
It is best served while hot with fresh brown bread

**Creamed Potato Soup Serving** 3/4 cup. *Exchange: 1 starch, 85 calories*