

**MEAL  
PLANNING  
FOR  
DIABETES**

Copyright © 1994 by

The Caribbean Food and Nutrition Institute

Published 1977

Revised 1987

Revised 1989

Reprinted 1995

Caribbean Food and Nutrition Institute

University of the West Indies Campus

P.O. Box 140, Kingston 7, Jamaica

**ISBN 976-626-016-8**

# **Meal Planning For Diabetes**

**Fourth Edition**

The technical content of this Edition has been modified to conform with current principles of diabetes management. The following persons were responsible:

Manuelita Zephirin  
Knox Hagley

**CARIBBEAN FOOD AND NUTRITION INSTITUTE**

1994

ISBN 976-626-016-8

# Contents

ACKNOWLEDGEMENT	iii
FOREWORD	v
INTRODUCTION	vi
Signs and Symptoms of Diabetes	vii
UNDERSTANDING YOUR DIABETES	1-8
Why Diet Is Important	2
How Your Body Uses Food	2
How Food Is Changed Into Glucose	3
Why Exercise Is Important	7-8
THE DIET	9-14
The Diet For Persons With Diabetes Is Not Different From A Normal Diet	9
What Are Calories?	9
Obesity — A Health Hazard	11
SETTING UP YOUR MEAL PLAN	15-36
How To Measure Your Food	19-23
Foods You Should Not Have	24
Foods You May Have	26
Foods You Can Eat Plenty Of	27
Seasoning Your Food	28
SPECIAL SITUATIONS	29-36
Eating Out	29
When You Are Ill	32
What To Do If Your Diabetes Gets Out Of Control	34
APPLYING YOUR MEAL PLAN	37-45
The Six Food Groups	37
Using The Food Substitution Lists	40
A Sample Meal Plan And Menu	43-44
FOOD PORTIONS AND SUBSTITUTES LISTS	46-64
THINGS TO REMEMBER	65-68

# Acknowledgement

The Caribbean Food and Nutrition Institute acknowledges the invaluable support of the Caribbean Association of Nutritionists and Dietitians (CANDi) in the preparation of the first edition of "Meal Planning for Diabetics", published in 1977. CANDi's major contributions were the development of food portions and substitution lists and the preparation and review of the textual content. Both activities were undertaken in cooperation with Miss Manuelita Zephirin, CFNI Public Health Nutritionist. Acknowledgement is due primarily to Mrs. Loretta Lopez, Mrs. Patricia Manchew and Mrs. Alison White of CANDi.

For the critical review and appraisal of the first edition, the efforts of the following persons are appreciated:

Dr. Ann Ashworth  
Dr. Jacqueline Bogues  
Mrs. Versada Campbell  
Miss Helen Fox

Mrs. Kathleen Rainford  
Dr. Rolf Richards  
Mrs. Judith Hutchinson and  
colleagues from Canada.

The design, layout and editing of the first edition was undertaken by Andrea Okwesa, CFNI Media Officer/Editor, in collaboration with Carol Bacon and Winsome Williams.

The following persons were responsible for preparation and production of the 1987 edition:

Dr. Nancy Schwartz  
Mrs. Andrea Okwesa

Miss Clare Forrester  
Mrs. Lucy Browne-Hutton.

Acknowledgement is also due to the Caribbean Programme Coordinator, Barbados, for funding support (1989), and to the Canadian Diabetes Association for the use of some illustrations from the "Good Health Eating" Flipchart (1984).

This document was reprinted in 1994 with further technical input from the following members of CANDi:

Mrs. Cynthia Conyette  
Mrs. Alison White

Mrs. Doreen West  
Miss Manuelita Zephirin

and the Nutrition and Dietetic Division, Ministry of Health, Jamaica.

# Foreword

The first edition of "Meal Planning for Diabetics" was published in 1977 to meet the need for a publication which would help persons with diabetes select from the wide variety available in the Caribbean, those foods that would best meet their particular nutritional needs. The approach employed was based upon the "Six Food Groups" commonly used in nutrition education in the English-speaking Caribbean.

The booklet came to be regarded as an invaluable resource to physicians, nutritionists, dietitians and other health professionals in the Caribbean who are involved in the dietary management of diabetes. After receiving appropriate guidance from their diet counsellor, persons with diabetes and their family members have also found it useful in the home setting.

The second, revised edition is based on the first edition but it incorporates recent concepts and findings which have emerged during the past decade. It is intended to be part of a technical package designed for use in nutrition counselling throughout the Region.

The goal of this new edition is to increase knowledge of nutritional care of diabetes mellitus. Persons with diabetes and their families are encouraged to adopt dietary habits that are consistent with healthy lifestyles, i.e. eat a variety of foods, maintain a healthy weight, choose a diet low in fat, eat more vegetables, fruits and grain products, try not to eat sugar, use less salt, restrict use of alcohol and do exercise. The meal plan must be individualized and related to lifestyle, eating habits and type of diabetes. Learning needs of the patient must be considered.

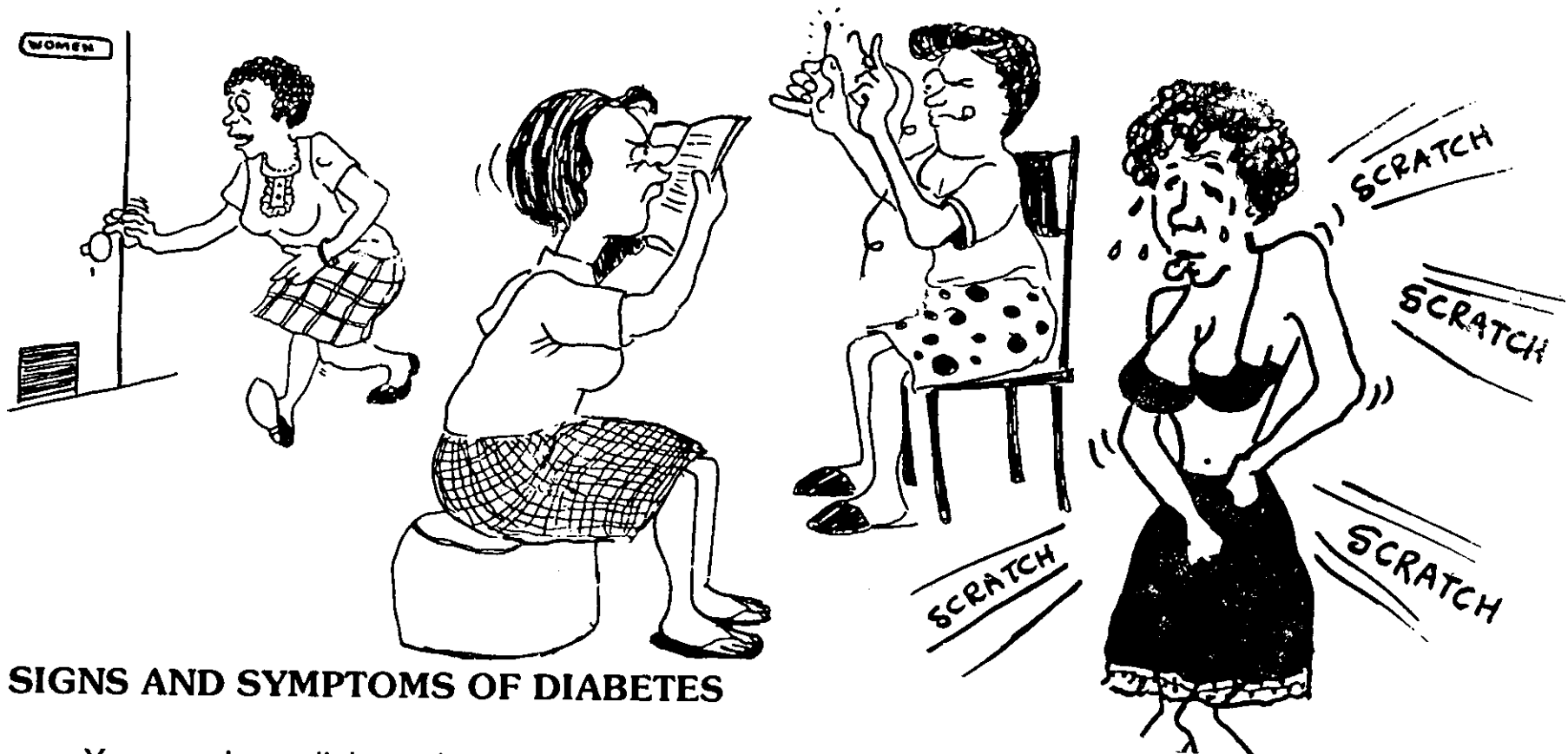
# Introduction

Diabetes is one of the most common health problems of adults in the English-speaking Caribbean. About one out of every eight West Indians over age 40 has diabetes. It is more common in women than men.

Diabetes is not a contagious disease which one "catches". Diabetes runs in families, but although the tendency to develop this condition (disorder) is inherited, overweight quite often plays a major part in its development.

There are different types of diabetes. They all affect the body in the same way, but they behave differently. Dietary measures and exercise are necessary for the proper management of all types of diabetes.





## **SIGNS AND SYMPTOMS OF DIABETES**

You may have diabetes but not know that you have it. Some of the signs that you look for are related to the higher than normal blood sugar levels in your body. They include frequent urination, increased thirst, increased hunger, vision problems, loss of energy, weakness, drowsiness, itching skin or poor healing of cuts.

Some persons never have any of these symptoms. They may be diagnosed as having diabetes in a routine medical check-up or an examination for some other illness.

You must take your diabetes seriously because many people become disabled and often die from diabetes and the other diseases which it can cause.

# Understanding Your Diabetes

Your doctor has diagnosed your diabetes after giving you various tests which have shown that there is too much sugar present in your blood. Sugar may also be present in your urine. Now that you have diabetes, you need to understand what it is and what you can do about it. Once you know this, you will feel less confused and a lot better about yourself and life.

Now that your condition has been diagnosed, you have been placed on one of three types of treatment:

1. Diet and exercise
2. Diet, exercise and tablets
3. Diet, exercise and insulin injections.

You will notice that "diet" is a part of all three types of treatment. It is a very important part. "Diet" is originally a Greek word meaning "a way of life", so your diabetic diet is really your "diabetic way of life". Controlling your diabetes mostly means controlling what, when and how you eat and drink each day. You must watch what and how you eat whether or not you need to take insulin or tablets. Exercise is also important for controlling the blood sugar and for your general health.

A person with diabetes can enjoy a mixed diet. The exact amounts of food to be eaten are decided by the doctor, nutritionist or dietitian, according to your age, height, weight and activities.

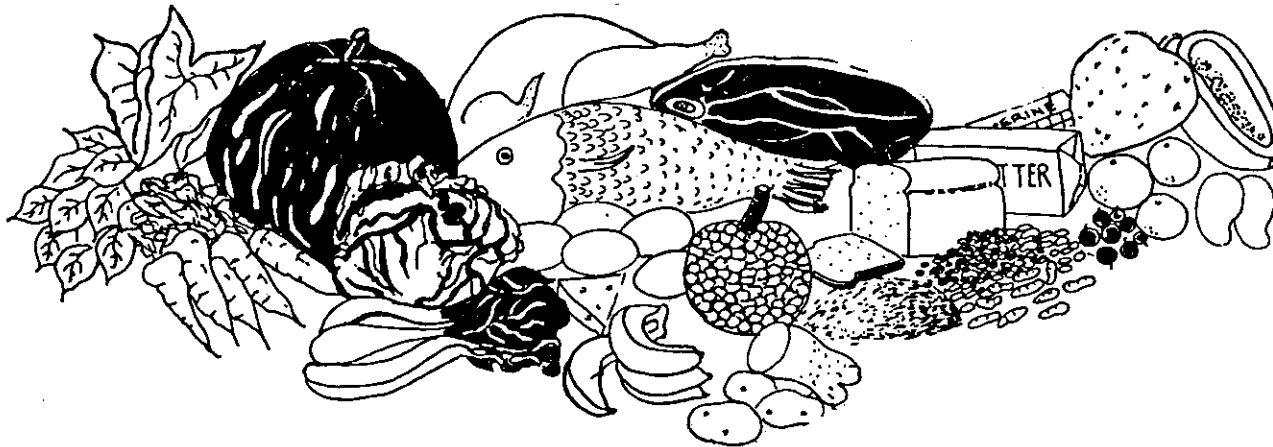
## WHY DIET IS IMPORTANT

When your doctor tells you that you have diabetes it simply means that your body is not able to handle food in the normal way.

## HOW THE BODY USES FOOD

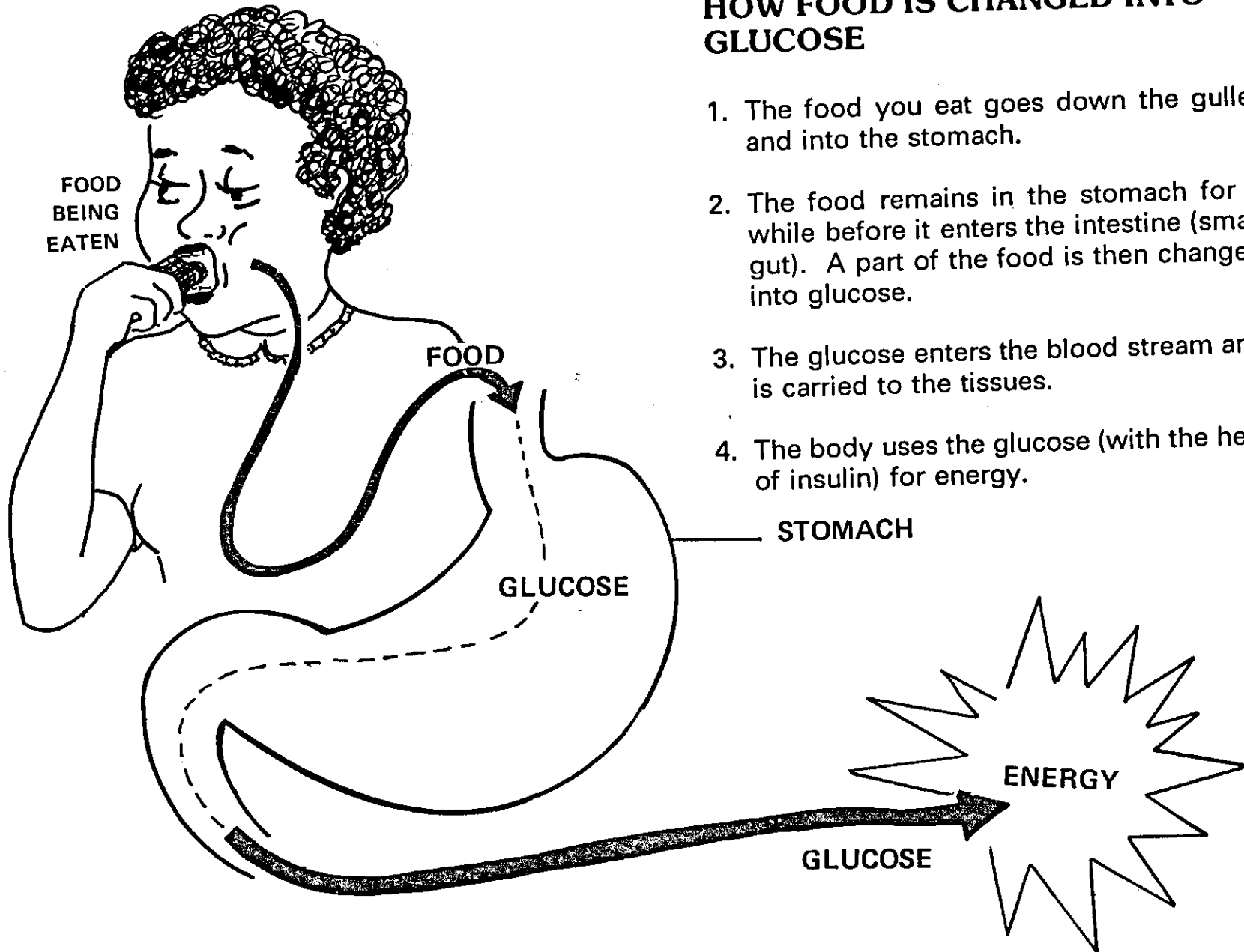
After you eat a meal, the food is digested and a part of it is changed into "glucose" (a sugar) before being absorbed into the blood stream. The level of glucose (sugar) in the blood stream then rises. Glucose is the fuel used by the body to produce energy which is needed for your body to function. This energy is supplied mainly by the carbohydrate in your diet. There are two different types of carbohydrates in the food you eat:

1. **Simple carbohydrates** — such as found in honey, jam, jelly, marmalade, molasses, sugar, soft drinks and syrup. They are easy to digest, and the sugar they contain reaches the blood stream very quickly — in five minutes or less. These foods must therefore be avoided by people with diabetes.
2. **Complex carbohydrates** are found in starchy foods like cereals and tubers (e.g. yam and sweet potato), legumes (e.g. dried peas and beans). These are not digested as quickly as simple carbohydrates and take about twenty minutes for the glucose to reach the blood stream.

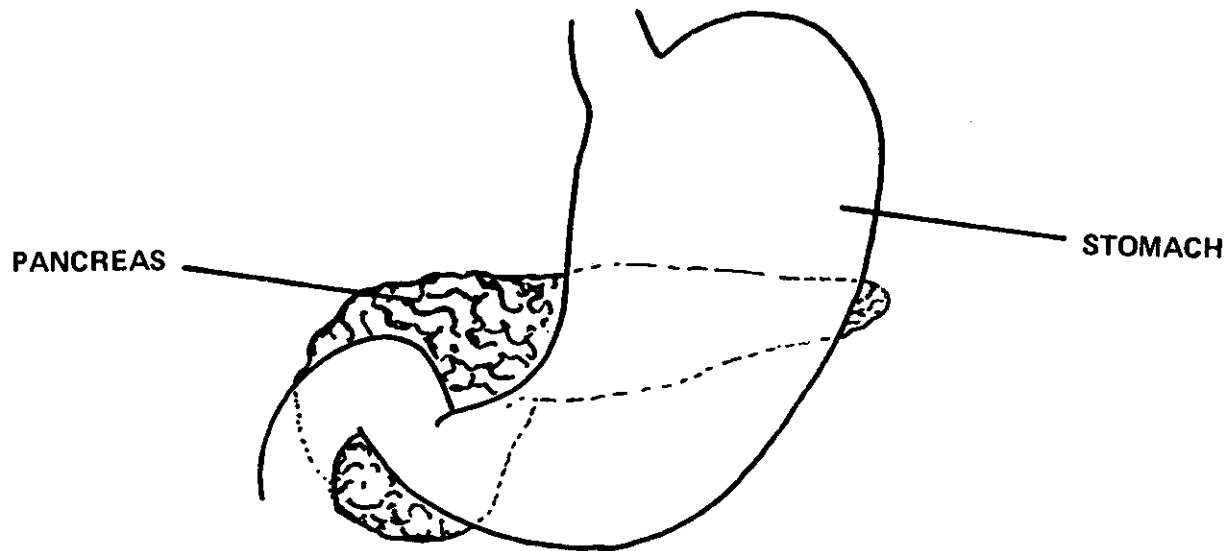


## HOW FOOD IS CHANGED INTO GLUCOSE

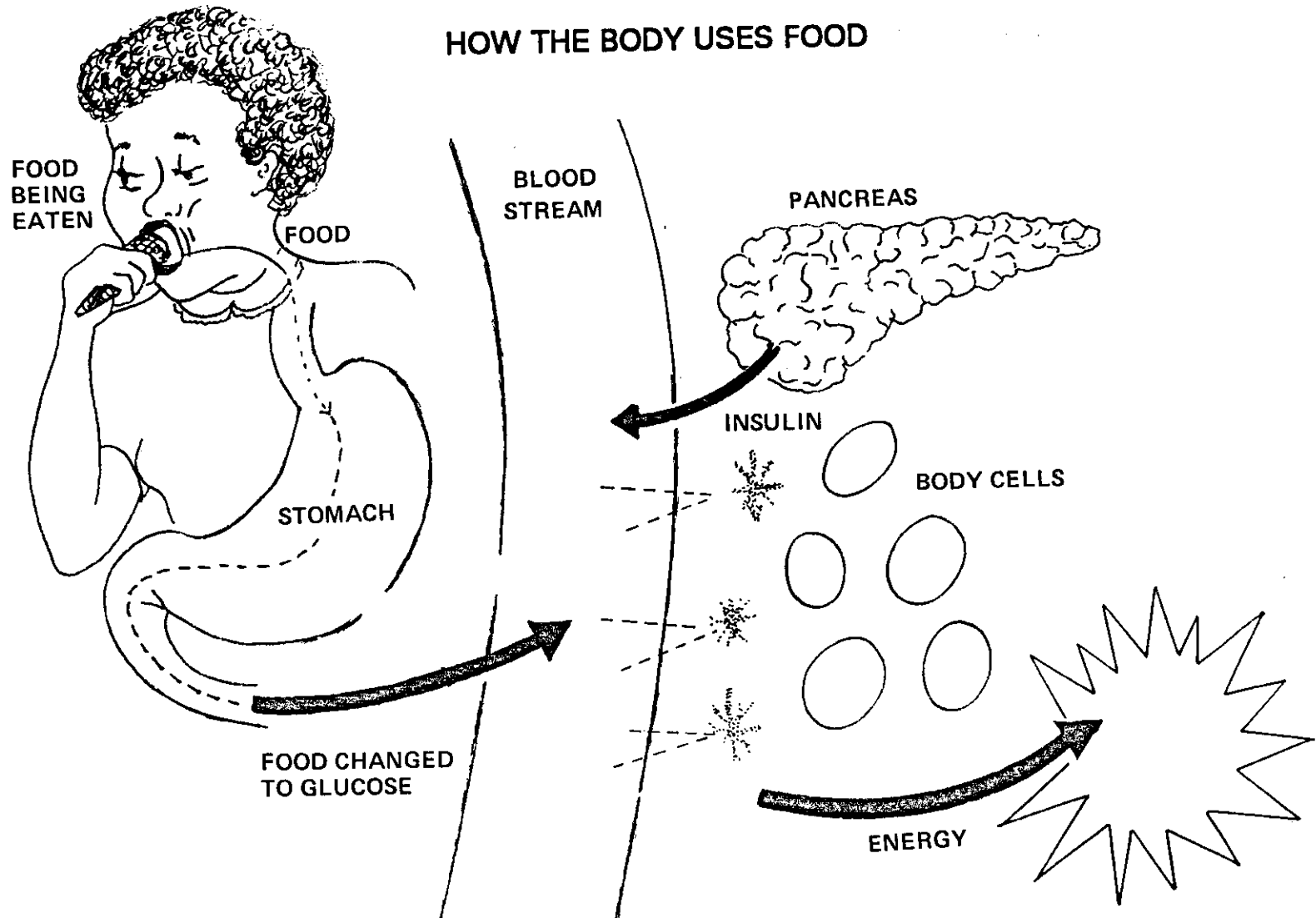
1. The food you eat goes down the gullet and into the stomach.
2. The food remains in the stomach for a while before it enters the intestine (small gut). A part of the food is then changed into glucose.
3. The glucose enters the blood stream and is carried to the tissues.
4. The body uses the glucose (with the help of insulin) for energy.



The body always needs a certain amount of sugar (glucose) in the blood to obtain its energy. When there is too much or too little sugar, problems begin. In the person who does not have diabetes, there is always the right amount of sugar in the blood to provide energy. The blood sugar is kept at the right level by a hormone called insulin. Insulin is produced by a gland called the pancreas, which lies just behind the stomach.

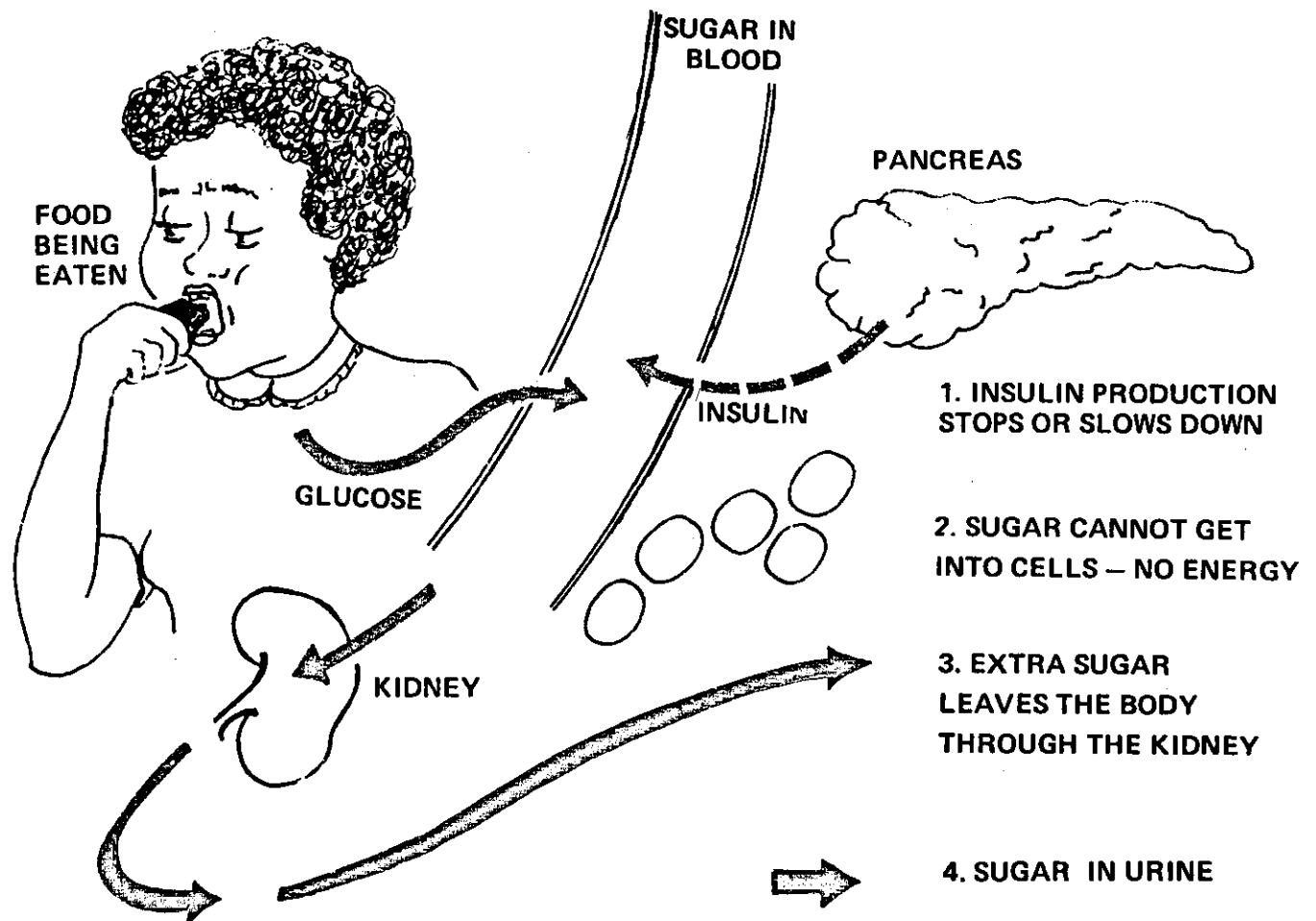


When you eat food, a message goes to the pancreas to produce insulin which is needed to carry the sugar into all the cells of the body. The insulin gets the sugar out of the blood and into the cells of tissues, such as muscles, to give energy.



In the person who has diabetes, there is either inadequate production of insulin or interference with the action of insulin and so entry of glucose into the cells is reduced. The sugar collects in the blood until it gets too high. When the level of sugar in the blood gets too high, the sugar passes through the kidneys into the urine. So sugar will show up in the urine of the person with diabetes as sugar in the blood is high.

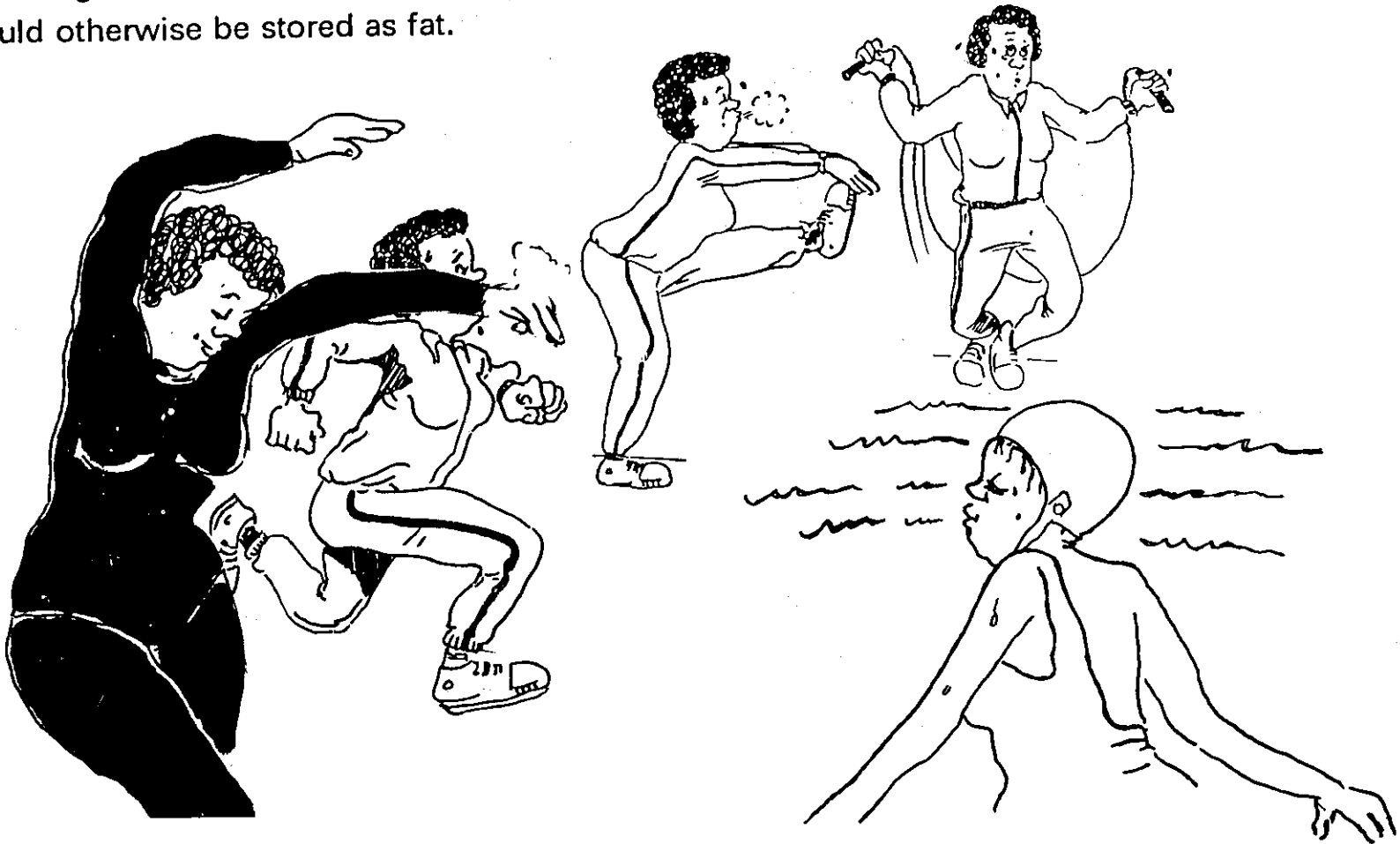
### How The Person With Diabetes Uses Food



## WHY EXERCISE IS IMPORTANT

Your treatment plan will be aimed at balancing diet and exercise. They will help keep your diabetes under control. Tablets and insulin may also be necessary.

Controlling your diabetes includes making exercise part of your daily life. Exercise helps your body use insulin and lowers the amount of sugar in the blood. It also helps open up blood vessels in the legs and heart, and makes you feel good. It helps burn up any extra food you may eat which would otherwise be stored as fat.

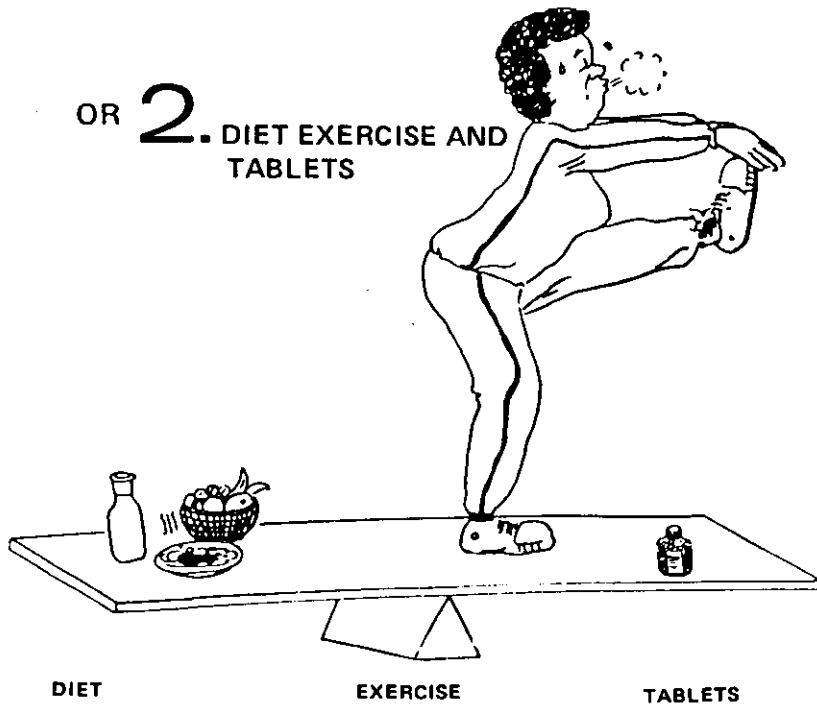




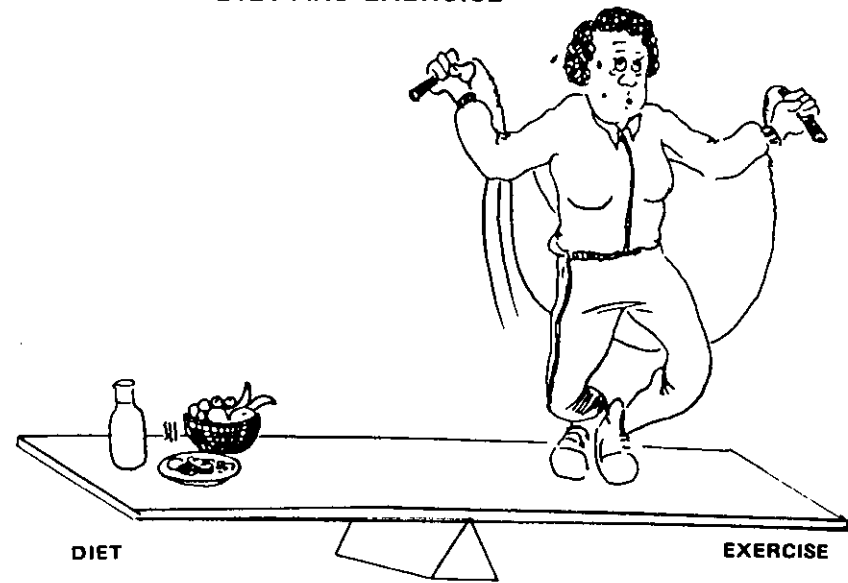
# HOW TO MANAGE YOUR DIABETES

Dietary measures and exercise are important in the control of diabetes. The type and severity of the condition will determine the method of treatment. Your doctor will decide which treatment is best for you.

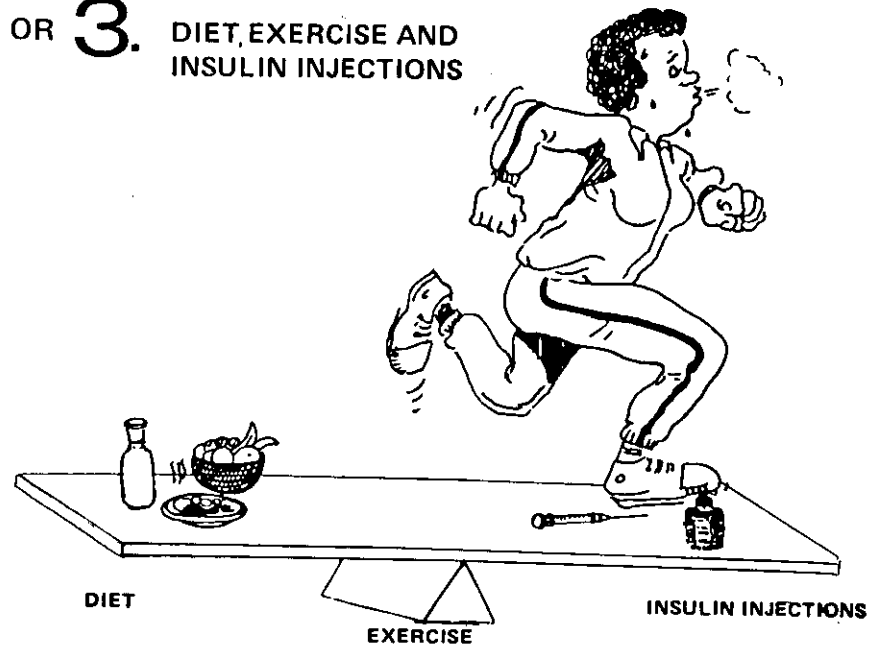
OR **2.** DIET EXERCISE AND TABLETS



**1.** DIET AND EXERCISE



OR **3.** DIET, EXERCISE AND INSULIN INJECTIONS



# The Diet

## **THE DIET FOR PERSONS WITH DIABETES IS NOT DIFFERENT FROM A NORMAL DIET**

The exact amounts of foods to be eaten will be decided by the doctor, nutritionist or dietitian, according to your age, height, weight and activities.

If you are overweight your doctor or dietitian will prescribe less calories than you need each day so that you lose weight.

## **WHAT ARE CALORIES**

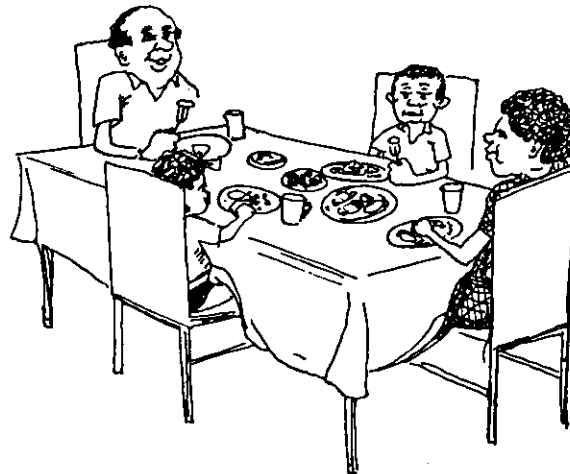
Calories measure the amount of energy we get from food and the amount of food we use for energy. Diets are usually planned to give a certain number of calories per day: 1000, 1200, 1500, 1800, are the ones most commonly used.

You will be advised on how much food will provide the right amount of calories that you need.

If you are on insulin, it is very important that the same amount of calories are eaten every day. The times that meals are taken are also particularly important.

If you are controlled by diet alone, or diet in combination with tablets, eating your meals at exactly the same time each day is still important. What is important is making sure that you do not go too long without eating and then, as a result, being so hungry that you overeat. Overeating leads to overweight and overweight interferes with the action of insulin. Eat small meals every three or four hours.

Your diet will be planned with you. Each person with diabetes has individual needs. No two diets have to be alike. Everyone in your family (especially overweight persons), will benefit from eating the foods in this meal plan. Your meal plan is healthy for all members of the family and may even set a good example.



**A DIET FOR THE WHOLE FAMILY**

## **OBESITY — A HEALTH HAZARD**

### **Diabetes Control Means Weight Control**

A “very fat and fleshy” person is described as being obese. Obesity is caused mainly by eating too much food and exercising too little. Obesity makes it more difficult to control your diabetes and requires more insulin to handle the food you eat.



If you are obese or overweight, your doctor will want you to lose weight, as this will help control your diabetes. The doctor, dietitian or nutritionist will advise on how much weight you should lose and how much you should eat to lose that amount of weight. This means that you will have to eat less, and cut back certain foods like fatty foods (e.g. butter, margarine, ghee, fatty meats).

**REMEMBER TO CHECK YOUR WEIGHT**

Your diet will allow only small amounts of fatty foods which contain a lot of energy. Fatty foods should be eaten only in small amounts since they may also cause "hardening of the arteries" which can lead to conditions like heart attack, strokes and gangrene.

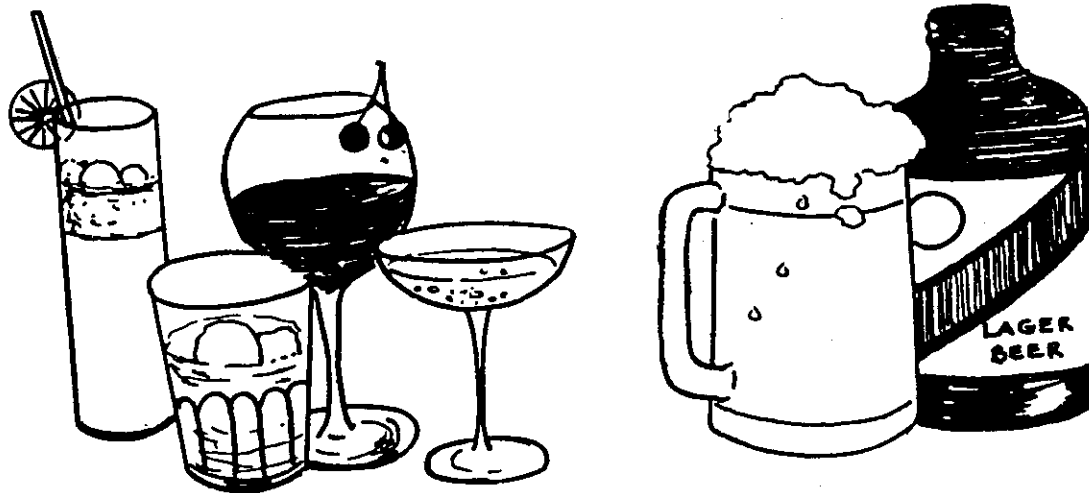
You may not always see the fat in food, such as the fat in meat. Many of the foods we eat such as nuts, salad dressings, peanut butter, baked items, cheese or some processed meats (e.g. salami, bacon, frankfurters) do contain a lot of fat even though you can't see it.



## What About Alcohol?

**Always consult your doctor before using alcohol.** Your diet may not allow you to drink alcohol as it is high in calories. If your doctor says that an occasional drink is alright, by all means go ahead, but make sure you understand exactly how often you should drink and how much.

Alcohol can affect your blood sugar level. If alcohol is mixed with something containing sugar, then this mixture further raises the blood sugar level. If alcohol is taken on an empty stomach or after a lot of exercise, it may lower the blood sugar level. This could be serious especially if you are on insulin. Use alcohol with extra care and only with the guidance of your doctor.



Fatty foods and alcohol are not the only kinds of food which you should limit. Extra pounds of fat on the body mean that over a period of time you ate more calories than you needed and so the rest was stored as fat. Those extra calories might have come from anything you ate too much of — meat, cheese, baked items, extra bread or ground provisions — it doesn't really matter. Your body never throws energy away — it just stores it up!

## **Tips For Losing Weight**

To lose weight you must take in less energy each day than you burn.

1. **Avoid fried foods.** Bake, boil or broil food instead.
2. **Eat lean meats,** such as chicken (without skin) or fish.
3. **Avoid fatty meats,** such as luncheon meats, bacon, sausages.
4. **Buy canned fish packed in water.** If fish is packed in oil, rinse with water before eating.
5. **Cut off all fat,** both before and after cooking.
6. **During broiling or roasting meats,** place on a rack so that the fat drips off.
7. **Skim off fat from soups and stews** before adding vegetables.
8. **Take exercise regularly.** Exercise may be what you need to lose weight or control your diabetes better.

# Setting Up Your Meal Plan

Once the diet has been prescribed, then the dietitian or diet counselor can guide you in following it.

**The first step will be to set up a meal plan.** The meal plan is a guide that tells you how much to eat and when to eat it. To help you plan meals that will fit in with your way of life and pattern of eating, the diet counsellor will take a "diet history".

You might be asked questions such as:

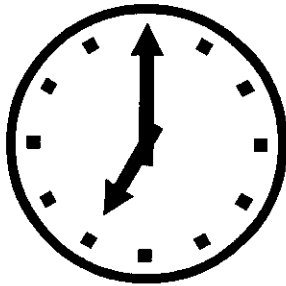
- What foods do you like best?
- What are your favourite beverages?
- Are there any foods you do not eat?
- Who cooks most of your food?
- Do you have a fridge, a stove or an oven?
- Do you eat any meals away from home?
- About how much money do you spend on food each week?
- Is there anything you would like considered in planning your diet (food taboos, religious rules, difficulty in chewing, etc.)?
- What foods do you usually eat in a day?

**You must answer these questions honestly. If you do not tell the truth, the diet counsellor will not be able to help you plan the kind of diet that you will follow easily.**

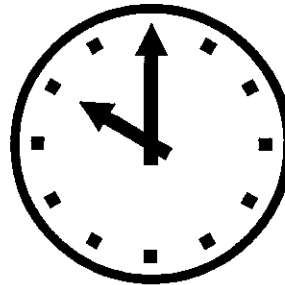


This is what the diet counsellor will tell you to do:

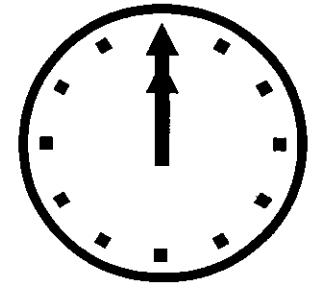
1. **Eat meals and snacks at about the same time every day.** This is particularly important when you are on insulin.



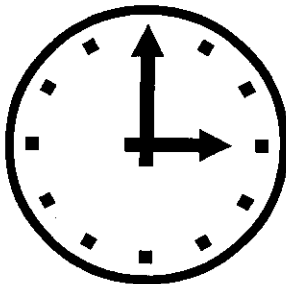
morning



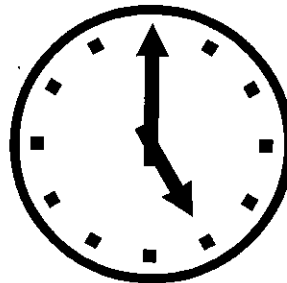
mid-morning



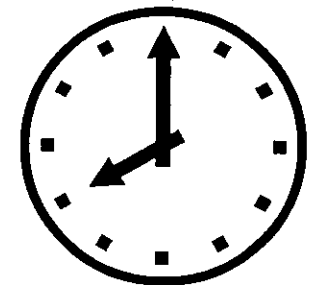
mid-day



mid-afternoon



evening



bedtime

***Eat Meals and Snacks at Regular Times Throughout the Day***

2. **Do not skip meals. TAKING FOOD/MEALS/SNACKS LATE OR MISSING OUT FOOD AT MEALS AND SNACKS MAKE BLOOD SUGAR LOW.**



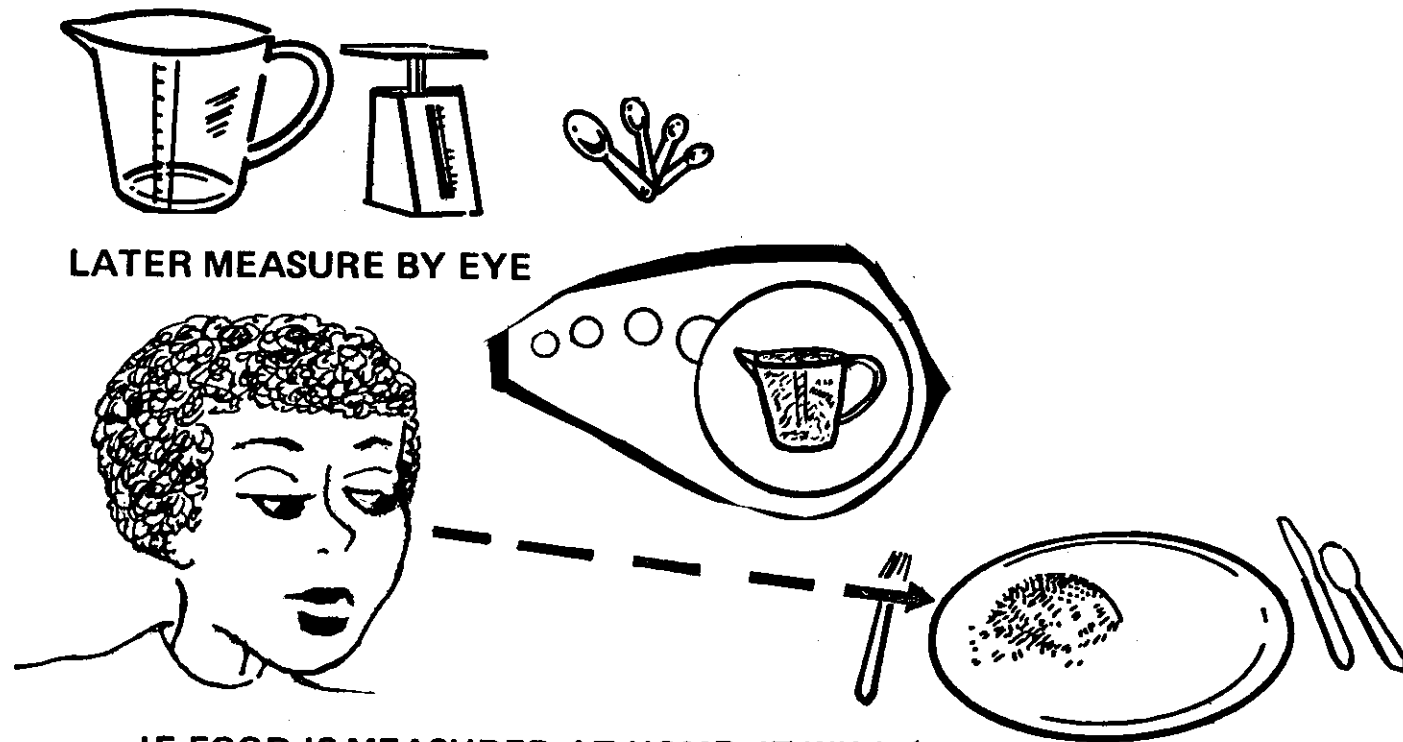
**Sample Snack Foods**

3. **Take meals and snacks as advised.** Snacks help balance the continuing action of insulin between meals, preventing the blood sugar from falling. If you take snacks which are not a part of your daily meal plan, you will have to eat less at your midday or evening meal or take foods which have few or no calories (such as cucumber, tomato, tea, coffee or clear, fat-free broth). A bedtime snack is usually part of the diet if you are on insulin.

***Eat Meals and Snacks as Advised***

4. Measure your food with standard measuring equipment (scale, measuring cups, measuring spoons and ruler) until you can accurately measure by eye. Check from time to time to make certain that measurements are accurate. Measure your food after it is cooked. All measurements should be level.

**MEASURE FOODS AT FIRST USING SCALE, MEASURING CUPS, MEASURING SPOONS AND A RULER TO JUDGE PORTION SIZE. MEASURE OR WEIGH PERIODICALLY AS A REMINDER**

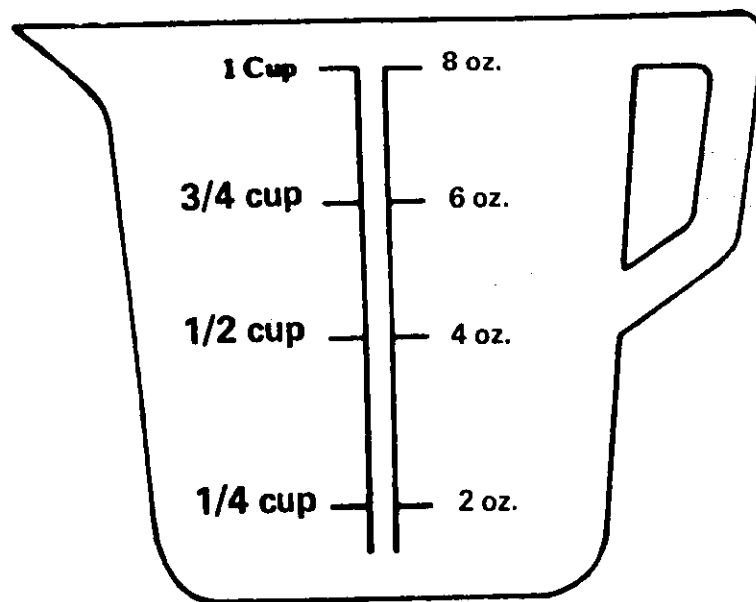


**IF FOOD IS MEASURED AT HOME, IT WILL BE EASIER TO ESTIMATE FOOD PORTIONS WHEN EATING OUT**

## HOW TO MEASURE YOUR FOOD

### 1. By measuring cup

Use a standard measuring cup like this:



The following drawings show how much is:



1 cup  
240 ml



3/4 cup  
180 ml



1/2 cup  
120 ml



1/3 cup  
80 ml

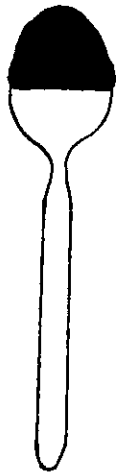


1/4 cup  
60 ml

## 2. By Spoon

We use two sizes of spoons to show you how to measure your foods:

All measures must be level. Sometimes your spoon may have to be only:



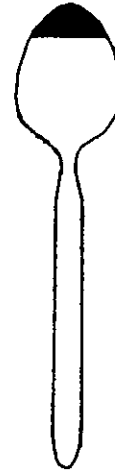
**1/2 full**

or



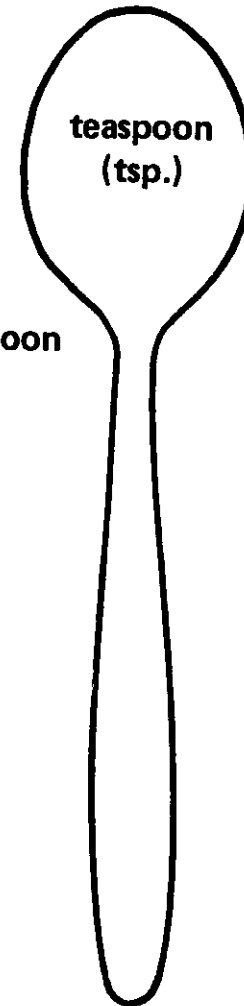
**1/3 full**

or



**1/4 full**

A small spoon

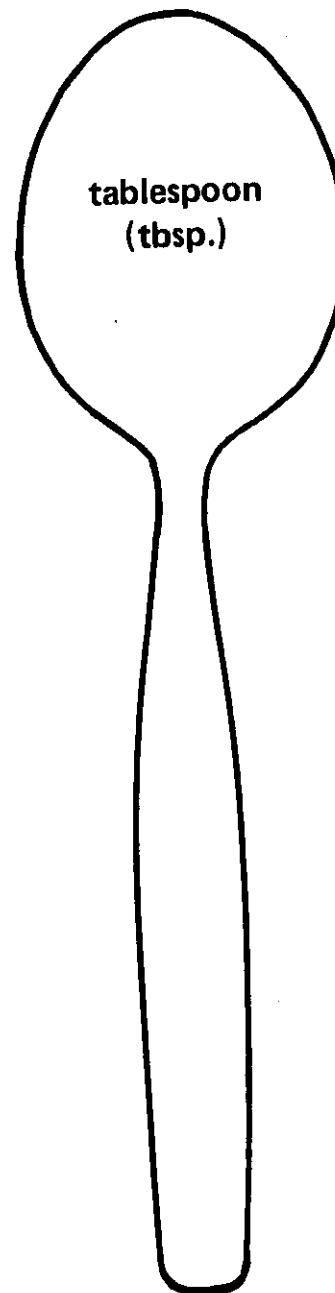
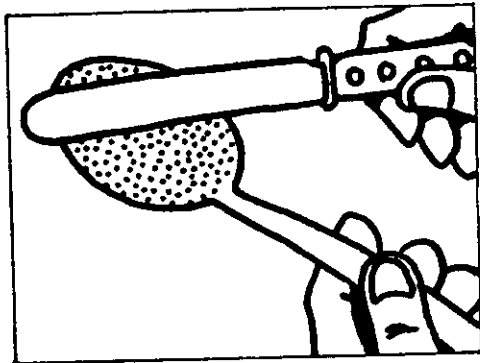


depending on how much of a certain food you are allowed.

To check if your spoons are about the same size as the drawings, put your spoons down on the drawings. The food should just fill the spoon without any falling out when you hold it steady.

To make sure your spoon is not too full, take the back of a knife and scrape it over the top of the spoon.

This will give you a level spoonful.

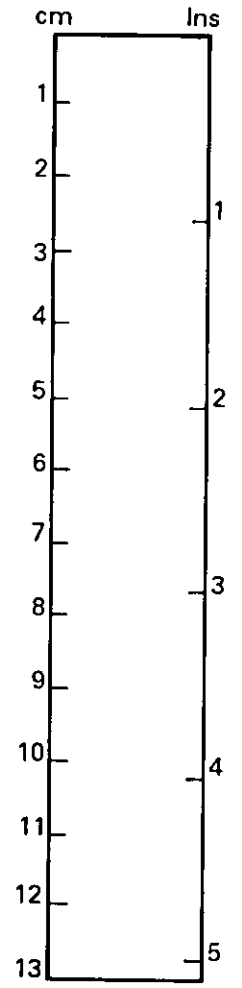
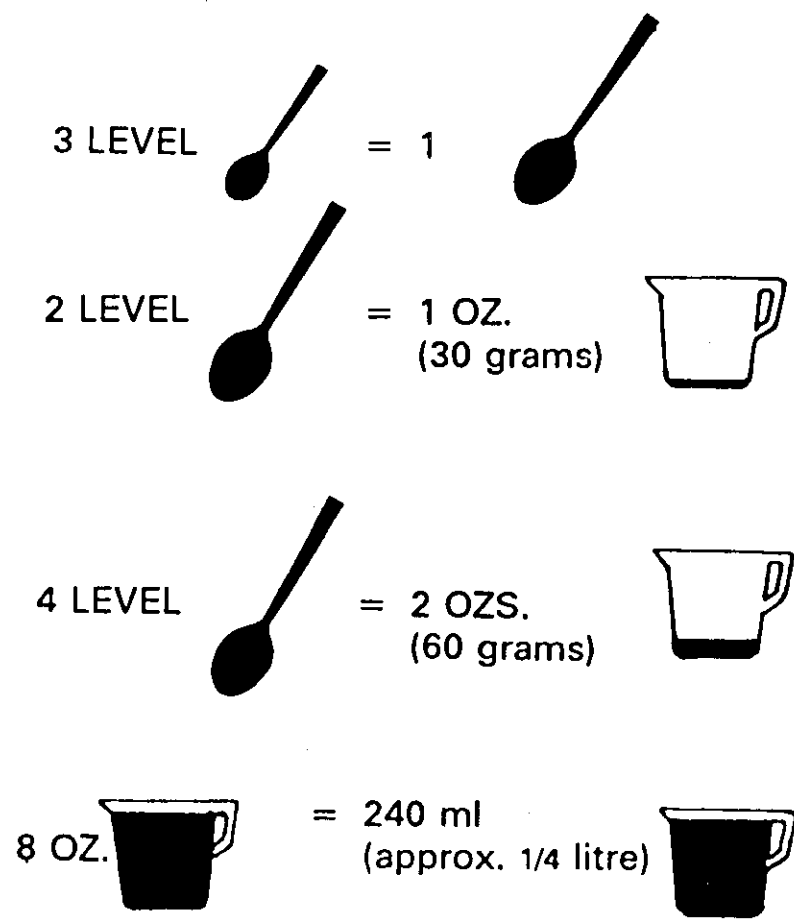


**A larger spoon**

### 3. By Portions

Measure your food until you can picture on your plate or in your glass the amounts of the portions. It is not necessary to continue measuring but it is a good idea to check yourself occasionally to see how accurate you are at estimating with your eyes.

### 4. Standard Equivalent Measures



The word "dietetic" does not necessarily mean "for use by people with diabetes". Also, many of the foods which are labelled "diabetic", "sugar-free", or "sugarless" still contain quite a few calories because of the other ingredients they contain, such as flour, eggs, milk or chocolate. Diabetic chocolates or sweets are good examples. Foods sweetened with sorbitol and mannitol have the same calories as sugar so should not be eaten. Read labels carefully: **Remember that calories come, not only from sugar, but also from other foods.**



If "special" foods are not used, the diabetic diet is not an extra expense. Many people with diabetes feel that they cannot "afford" to follow a diabetic diet. But you can use the same foods that your family eats.

If you have a special money problem, the diet counsellor can help you with ways to plan meals around what foods you have available.

**Avoid sweet foods such as sugar, honey, sweets, jelly or jam, marmalade, syrup, pies, cakes, cookies, pastries, condensed milk, fried foods, creamed foods, alcohol and soft drinks.**

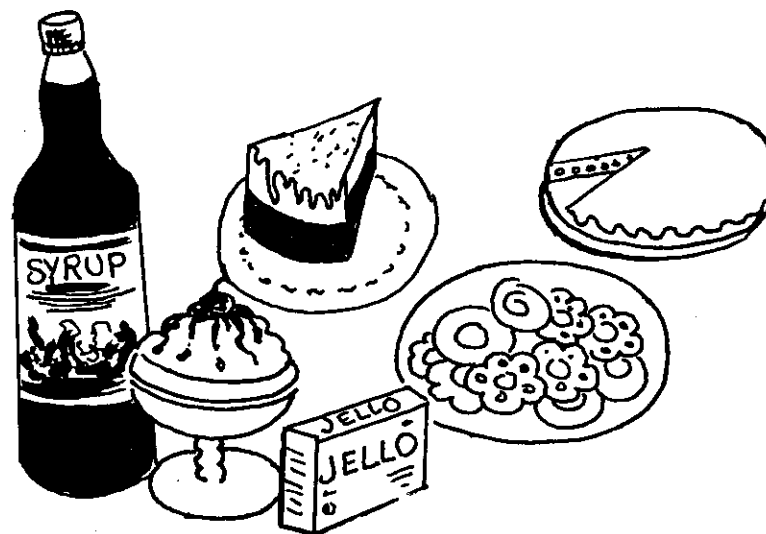
**REMEMBER — DILUTING SWEETENED DRINKS DOES NOT REDUCE THEIR SUGAR CONTENT**



## FOODS YOU SHOULD LIMIT

### DESSERTS

- Cakes
- Ice cream\*
- Jello\*\*
- Pastries
- Pies
- Sweet biscuits
- Stewed fruits with sugar added



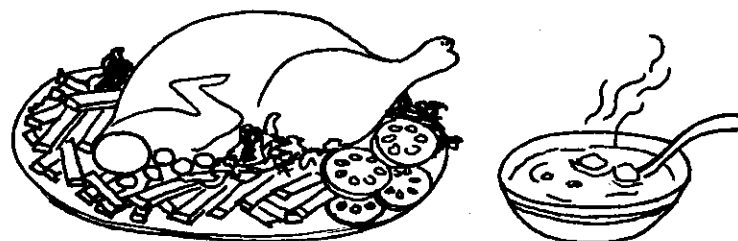
\*1/2 cup plain ice cream may be substituted for 1 bread substitute and 2 fat substitutes

\*\*1/2 cup jello may be substituted for 1 bread substitute

---

### GRAVIES, SOUPS, FRIED FOODS

- Thickened gravies and thick soups\*
- Fried foods\*\*



\*If thick soups (one pot meals) are eaten, remember you must make the necessary substitutions from the substitute lists

\*\* Foods can be fried only if you use the fat substitute for that meal to fry them in.

## ALCOHOL, "SPIRITS"

Beer  
Brandy  
Gin  
Liqueurs  
Rum  
Sherry  
Stout  
Vodka  
Whisky  
Wine  
Cider



10 oz. beer	= 140 calories
4 oz. wine	= 112 calories
4 oz. sherry	= 184 calories
1 1/2 oz. jigger whisky, gin, rum, etc.	= 110 calories
Cocktail	= 140-200 calories.

Alcoholic beverages should not be taken without your doctor's permission.

## FOODS YOU MAY HAVE WITHOUT MEASURING

Use food which can help to make the diet plan more interesting. These include:

- Coffee
- Tea
- Sanka
- Postum
- Herbs
- Lemon
- Vinegar
- Salt
- Pepper
- Unsweetened gelatin
- Unsweetened pickles
- Non-caloric sweeteners
- Dry mustard
- Seasonings
- Bouillon (fat free)
- Clear broth
- Spices (e.g. curry)

These are calorie free foods which do not need to be measured. Artificial sweeteners are convenient but not necessary in the diet. However, in search for something to satisfy a "sweet taste" sugar substitutes have become a part of the diet for many persons with diabetes. If you are used to taking sugar in your tea or coffee, there are artificial sweeteners on the market such as Saccharin and Aspartame (commonly known as "Equal" or "NutraSweet"). If you must have a sweetener, these can be used.

## FOODS YOU CAN EAT PLENTY OF

These foods contain few calories. When vegetables are raw, you can eat as much of them as you like. When vegetables are cooked, use no more than one cup per portion. **DO NOT ADD EXTRA FAT OR OIL.**

### LOW CALORIE FOODS

Baghi  
Bamboo shoots  
Callaloo bush (dasheen leaves,  
Amaranthus)  
Carailli  
Cauliflower  
Celery  
Chives/green seasoning  
Christophene/Chocho  
Clear broth, Oxo, Marmite,  
Bovril\*  
Clear tea or coffee  
Cucumber  
Gelatine (plain and unsweetened)  
Kale

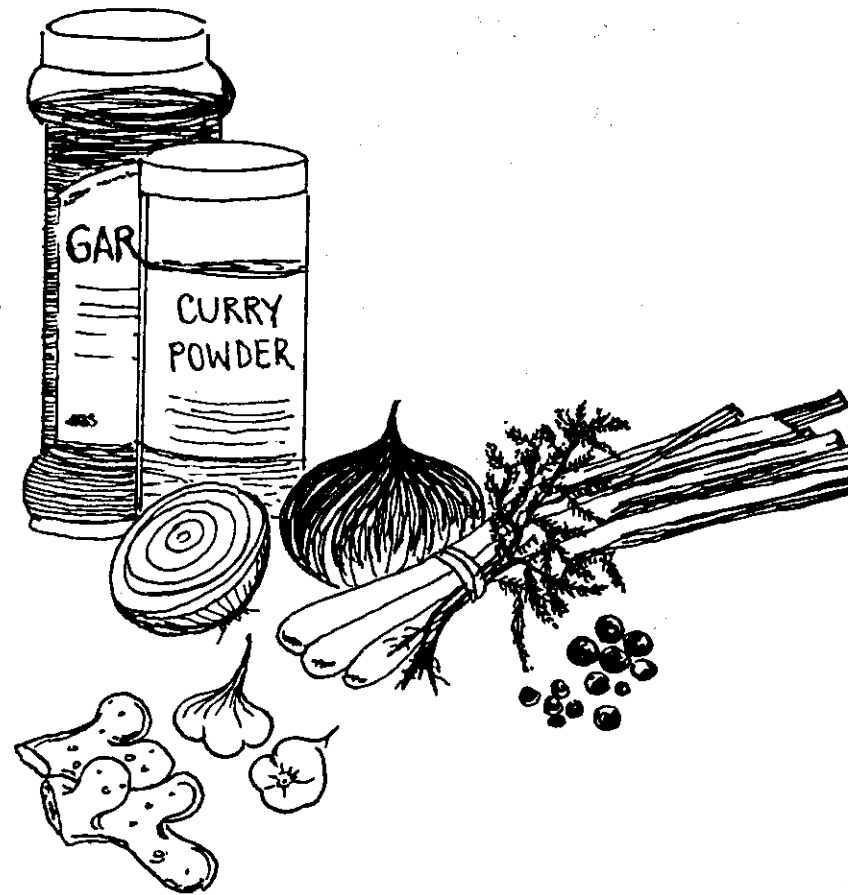
Lemon juice (unsweetened)  
Lime juice (unsweetened)  
Lettuce  
Melongene/Egg plant/Aubergine/Baigan  
Mustard greens  
Okra  
Pak choy/Patchoi  
Pawpaw (green)  
Soda water (unsweetened carbonated water)  
Spinach  
Sugar-free soft drinks  
Squash (vegetable)  
Tomato  
Tomato juice\*  
Water cress/Crishes/Cressles

\*These foods contribute significant amounts of sodium and should be restricted for those on low sodium diets.

## SEASONING YOUR FOOD

If you like to add seasonings to your food there are many ingredients you can use. Some are:

Cinnamon  
Curry powder  
Escallion  
Flavouring Essence (Vanilla, Almond)  
Garlic  
Ginger  
Marjoram  
Meat sauces — worcesteshire sauce, soya sauce\*  
Mint  
Mustard  
Nutmeg  
Onion for seasoning  
Parsley  
Pepper  
Pickles\*: mixed — sour, unsweetened  
Salt\*\*  
Thyme



\*These seasonings contribute significant amounts of sodium and should be restricted for those on low sodium diets.

\*\*Limit your salt intake to help control your blood pressure

# Special Situations

## EATING OUT

When invited to a friend's house, choose what you can have from what is offered and explain why you might have refused certain items.

To eat out, all you need to do is to memorize your meal plan and know the kind and amounts of foods you are allowed.

Taking a packed lunch to work or school may sometimes be necessary.

Many different sandwich meats and fillings can be taken from the amounts allowed on your meal plan. Fresh vegetables, such as lettuce, tomato or cucumber can be added. Soups and milk can be carried in a flask ("thermos"). Small plastic containers also make it possible to carry foods such as cheese and fruit.

If you know your meal plan, eating out need not be a problem. Measuring carefully and often at home makes it easier to judge the size of portions of food when you eat out.

Here are a few tips to remember when you eat at a restaurant:

1. Cut fat from meat. Remove skin from chicken.
2. Order dishes without gravy, sauces or salad dressings. You may have to make a special request when you place your order.
3. Choose clear soup or broth instead of cream soups.
4. Choose fresh fruit for dessert.



**FOODS YOU MAY ORDER****FOODS YOU SHOULD AVOID ORDERING*****APPETIZERS***

Unsweetened fruit juices, vegetable juices, clear broth or consomme, fresh fruit

Canned fruit in syrup, cream soups, fried foods.

***SALADS***

Vegetables without dressing. Use lime juice or vinegar instead.

Salad dressing already mixed.

***VEGETABLES — GREEN AND YELLOW; OTHER VEGETABLES; GROUND PROVISIONS***

Steamed, boiled or baked.

Vegetables in a cream sauce, fried or baked with breadcrumbs or flour.

***BREAD***

Any kind but eat only the quantities allowed on your meal plan.

Sweet bread, coffee cake or Danish pastry.  
Garlic bread.

***BREAKFAST CEREALS — COOKED OR READY-TO-EAT***

Any kind except sugar-coated but only the quantities allowed on your meal plan.

Sugar-coated or with extra butter, cream, etc.



FOODS YOU MAY ORDER	FOODS YOU SHOULD AVOID ORDERING
<b><i>MEAT, FISH OR CHICKEN</i></b>	
<p>Roasted, baked, broiled or boiled. Trim off extra fat. Remove skin from chicken.</p>	<p>Fried, stewed, braised, breaded, or with gravy.</p>
<b><i>EGGS</i></b>	
<p>Soft, hard cooked or poached.</p>	<p>Fried or scrambled unless you substitute from your fat allowance.</p>

## **WHEN YOU ARE ILL**

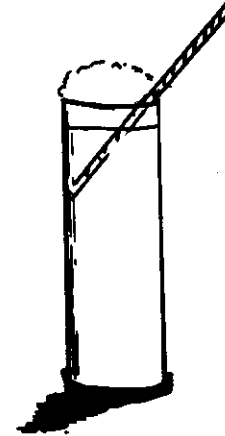
There will be days when food doesn't appeal to you or you "just don't feel like eating". But your food is so necessary to control your blood sugar that you must eat! On sick days you can keep with your diet by choosing foods which are easier to eat. Your meal plan will help you to understand how you may include eggnog, jello, soups, beverages and other easy to digest foods in your diet. Use these foods *IN PLACE OF* the hard to digest foods on your diet.

1. Fruit juices with 1 tsp. sugar. At times like this you may use sugar (1 tsp. sugar contains 20 calories).
2. Milk — may be taken in drinks, for example, eggnog.

### ***RECIPE FOR EGGNOG***

Milk — skim	—	1 cup
Egg	—	1
Sugar	—	1 tsp.

Vanilla or nutmeg for flavouring.  
Blend ingredients together.



3. Porridge — may also be taken with milk + 1 tsp. sugar.
4. Crackers or soda biscuits.
5. Ginger Ale, Coca Cola, 7-Up (contains 150 calories per bottle — same as 3 portions fruit).
6. Jello (1 serving Jello — 1/2 cup contains 70 calories; same as 1 slice of bread)
7. Clear broth, clear soup, cream soup.
8. Tea/coffee.

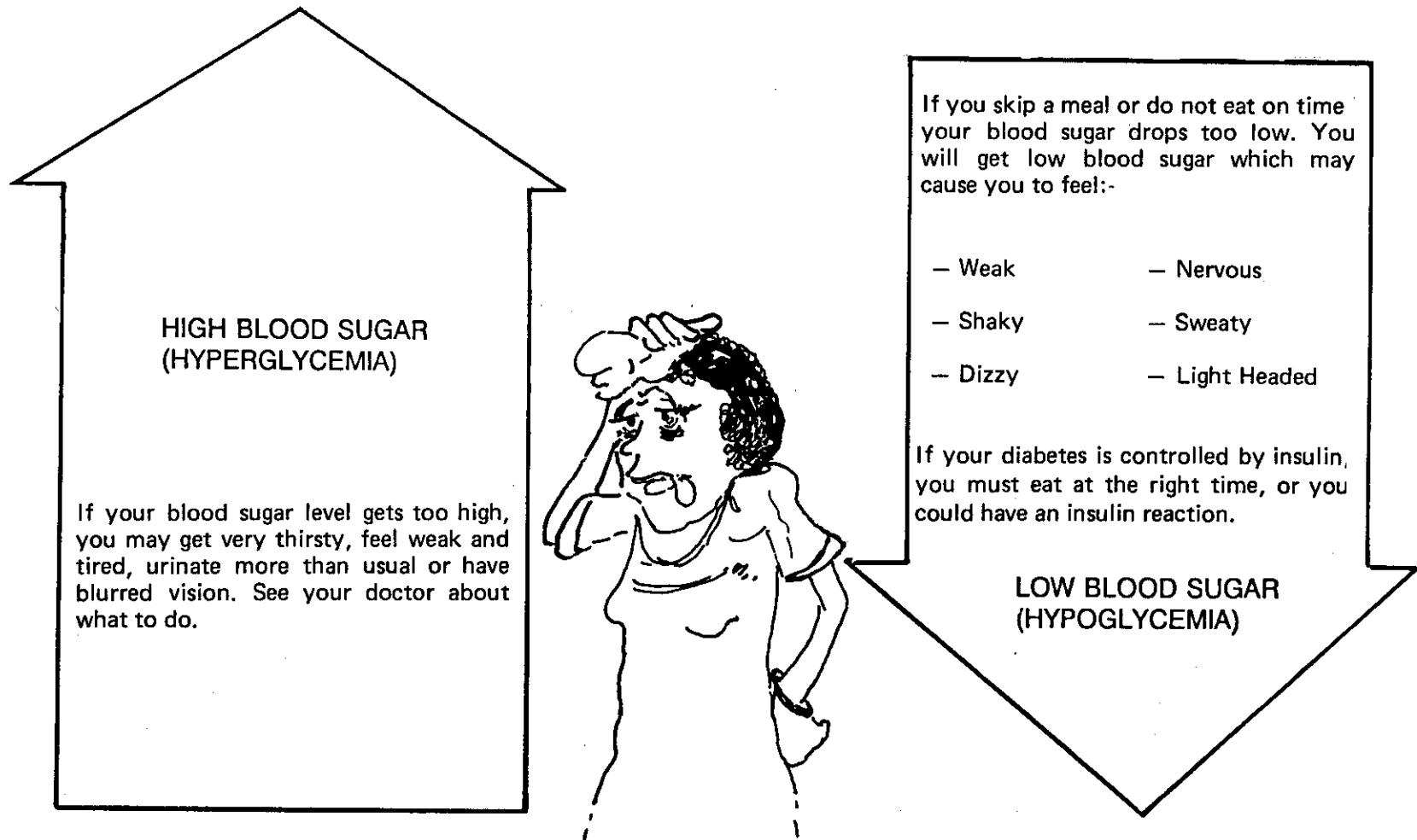
**N.B.:** Be sure to make the appropriate portion substitutions.

**If you're ill, here's what you should do:**

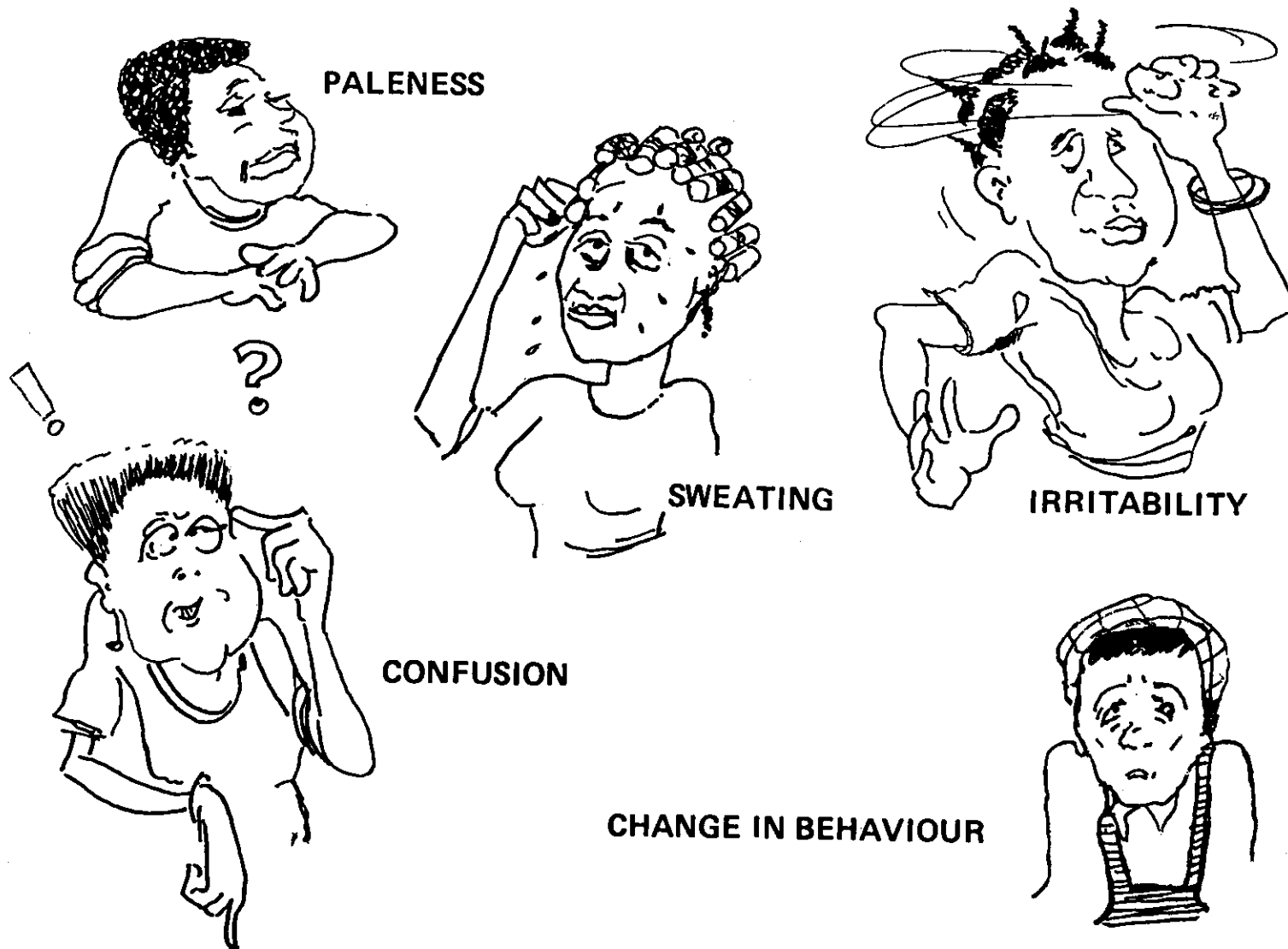
- Get in touch with your doctor right away
- Continue to take your insulin or tablets
- Test your blood and urine more frequently
- Get more rest than usual
- Drink more fluids

## WHAT TO DO IF YOUR DIABETES GETS OUT OF CONTROL

If you do not manage your diet properly, take enough rest and exercise or take your tablets or insulin as directed, your diabetes may get out of control. When diabetes gets out of control, you will have a "reaction" — your blood sugar level may get either too high or too low.

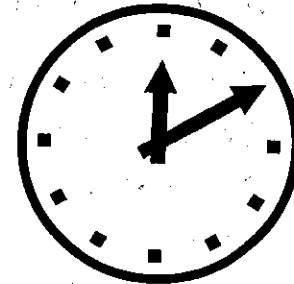
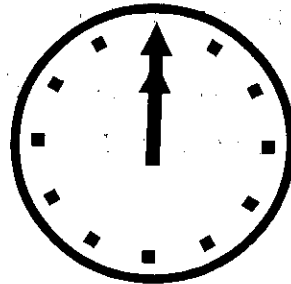


## What Might Other People See If You Have An Insulin Reaction?



*Tell your friends what to do should they observe any of the above.*

## What To Do For An Insulin Reaction?



Take sugar as soon as you experience these symptoms. You should feel better in 5-10 minutes.

How much should you take?

- 2 sugar cubes or 1 tsp sugar
- 1/2 cup (125 ml) juice
- 4 hard candies/sweets
- 2 tsp (10 ml) honey or syrup
- 1/3 to 1/2 bottle regular soft drink

Take sugar promptly. Take sugar instead of other food (e.g. biscuits, fruit) to raise blood sugar quickly. Carry hard candy with you at all times.

Taking sugar in the amount suggested for an insulin reaction will not put diabetes out of control or harm the body.

# Applying Your Meal Plan

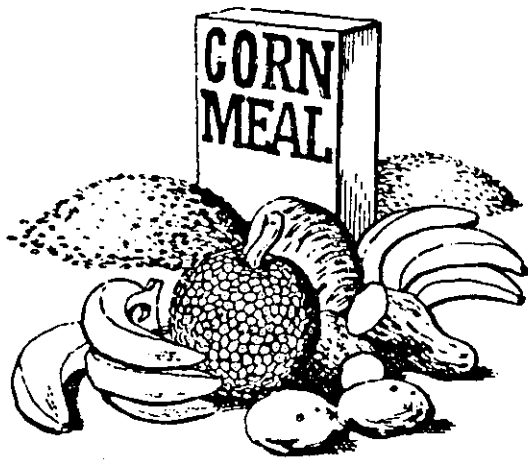
## THE SIX FOOD GROUPS

An easily applied system of meal planning is through the use of the "Six Food Groups" based on the nutrients they contain and their contribution to the diet.

The Six Food Groups used in the Caribbean are:

1. Staples (cereals and starchy fruit, roots and tubers)
2. Legumes (dried peas and beans and nuts)
3. Vegetables
4. Fruits
5. Foods from animals
6. Fats and substitutes



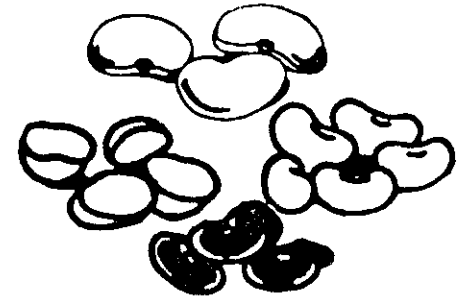


### 1. STAPLE FOODS

- Bread, rice and cereals such as flour, cornmeal, oatmeal, cream of wheat, macaroni, spaghetti, noodles.
- Starchy fruits, roots and tubers — ground provisions such as plantain, breadfruit, yam, Irish potato, cassava, green banana, dasheen, sweet potato, tannia, eddoe/coco.

### 2. LEGUMES

Such as red peas, gungo/pigeon peas, black-eye peas, cow peas, and other dried peas and beans, broad beans, channa, peanuts, cashew nuts, sesame seeds.



### 3. DARK GREEN LEAFY, YELLOW AND OTHER LOW CALORIE VEGETABLES

Such as callaloo, kale, spinach, pak choy/patchoi string beans, squash, tomato, pumpkin, carrot.

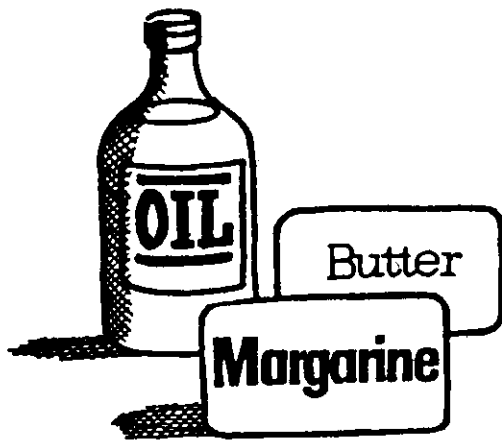
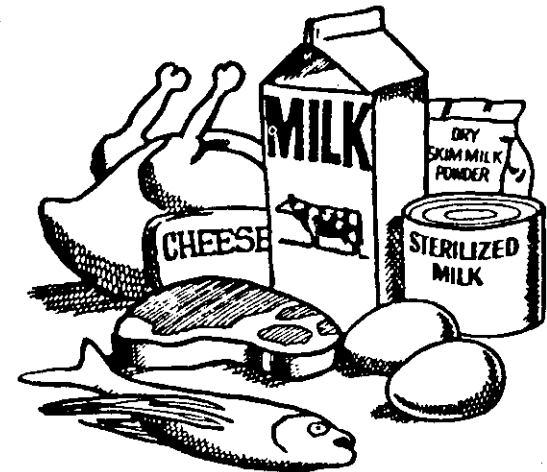
#### 4. FRUIT

Such as mango, guava, orange, grapefruit, West Indian cherry, ripe pawpaw, ripe banana, golden apple, plum, pineapple.



#### 5. FOODS FROM ANIMALS

Such as meat, poultry, fish, eggs, milk and cheese.



#### 6. FATS

Such as margarine, butter, ghee, cooking oil, salt pork, streaky bacon.



For the purpose of planning meals, the foods in each group are listed according to portions, each having similar food value. These lists of foods are called "substitution" lists. The term "substitution" is used because a portion of a food within a list can be substituted for another food within the same list. Some foods in these lists are measured after they are cooked, indicated where applicable.

## **USING THE FOOD SUBSTITUTION LISTS**

Using the Food Substitution Lists can help to control your food intake. These handy lists can make the diet simple to follow and pleasant to use. Each of the six lists contains a variety of foods which have similar food value. Each food has its own portion size given.

For example: 1 small mango, 1 small or 1/2 medium ripe banana, 1/2 cup orange juice.

All portions are equal in food value when taken in these measured amounts. Therefore, they can be "substituted". **Remember, each list of foods is separate. You should not substitute food from one list for a food on another list.**

For example:

**List 1**

Bread — 1 slice

Biscuits (water type) 6 thin

Cornmeal — 1/2 cup cooked

**List 4**

Grapefruit — 1/2 medium

Guava — 1 medium
























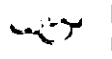





























































Sapodilla — 1 medium

You should not substitute foods that are in different lists.


Your meal plan will also tell you how many substitutions to choose from a list at each meal. The number of substitutions you are allowed will vary with the number of calories you are allowed. The following chart "Your Daily Meal Plan" (using Food Portions and Substitutes) has a space at the top for your daily calorie allowance. In the left hand column the diet counsellor will write how many portions (substitutions) you are allowed from each list.


---


# YOUR DAILY MEAL PLAN: \_\_\_\_\_ CALORIES

LIST 1 Staple Foods	 cooked		 2 pieces	 cooked			1 medium	
	 1 slice			 cooked			1 medium	
LIST 2 Legumes	 cooked				 16	 cooked		
	 cooked		 cooked				 baked beans	
LIST 3 Dark Green Leafy	 As desired				 As desired		 As desired	
Yellow & Other Vegetables	 As desired				 As desired		 As desired	
LIST 4 Fruits	 1 small		 1/2	 1 small		 1 small		
	 1/2 small		 1 medium		 20	 1 slice		
LIST 5 Foods from Animals	 1 small		 1 small piece		 1 medium			
	 4 small cubes		 2 small		 1 cube			
LIST 6 Fats and Substitutes	 1/8		 1/8					
	 1/8		 1 cube		 1 small rasher			

How much to use?

 1/2 cup

 1/4 cup

 1/8 cup

 1/4 cup

 Teaspoon

 Tablespoon

## A SAMPLE MEAL PLAN AND MENU

You are now familiar with the six food lists. Each list gives you a wide variety of foods from which you can choose. Your meal plan tells you how much to choose from each list. With this information you are now ready to plan your own meals.

Here is an example of a meal plan and a menu made from that plan.

### 1800 CALORIE DIET

SAMPLE MEAL PLAN	FOOD PORTIONS & SUBSTITUTES LISTS		SAMPLE MENU
			<i>Morning Meal</i>
Egg or substitute	List 5	1 portion	2 small sardines
Dark green leafy vegetables	List 3A	As desired	3 slices tomato
Bread or substitute	List 1(a)	4 portions	1 cup cornmeal porridge and 2 slices bread
Butter or other fat	List 6	1 portion	1 tsp butter/margarine
Milk (very low Fat)	List 5	1/2 cup liquid 1 portion	1/2 cup liquid/coffee or 2 tbsp skim powder or 1/4 cup evaporated
			<i>Mid-Morning Snack</i>
Fruit	List 4	1 portion	1 slice pawpaw with lime
			<i>Noon Meal</i>
Meat or substitute	List 5	2 portions	2 ozs. beef stew (8 small cubes[60g])
Oil for cooking	List 6	1 portion	1 tsp oil (for cooking beef)
Ground provision	List 1B	2 portions	1 4-oz slice sweet potato (120g)
Rice or substitute	List 1A	1 portion	1/2 cup cooked rice

SAMPLE MEAL PLAN	FOOD PORTIONS & SUBSTITUTES LISTS		SAMPLE MENU
<i>Noon Meal (cont'd)</i>			<i>Noon Meal (cont'd)</i>
Dark green leafy vegetables	List 3A	As desired	Chopped cabbage, sweet pepper and water cress salad with vinegar dressing
Yellow or other vegetables	List 3B	1 portion	1/2 cup pumpkin
Legumes	List 2	2 portions	1/2 cup cooked pigeon peas
Fruit	List 4	1 portion	1/2 cup guava drink (unsweetened)
<i>Mid-Afternoon Snack</i>			<i>Mid-Afternoon Snack</i>
Milk (very low fat)	List 5	1 portion	1/2 cup liquid or 2 tbsp skim powder
Bread or substitute	List 1A	1 portion	3 small cream crackers
<i>Evening Meal</i>			<i>Evening Meal</i>
Meat or substitute	List 5	2 portions	2 oz. (60 g) baked fish with 1 medium onion
Bread or substitute	List 1A	2 portions	Small piece plantain and 1 roll
Margarine/butter/fat	List 6	1 portion	1 tsp. butter
Dark green leafy vegetables	List 3A	As desired	Lettuce and tomato salad
Yellow or other vegetables	List 3B	2 portions	3/4 cup string beans + 1/2 cup carrots
Coffee or tea			Coffee or tea
Fruit	List 1	1 portion	1 slice fresh pineapple
<i>Bedtime Snack</i>			<i>Bedtime Snack</i>
Bread or substitute	List 1A	1 portion	6 thin biscuits (water type e.g. crix)
Milk (very low fat)	List 5	1 portion	1/2 cup liquid milk

This example shows that even on low calorie diets you may often be allowed more than one portion from a list. On an 1800 calorie diet the total day's intake from the food groups would be as follows:

Staples	—	11 portions
Legumes	—	2 portions
Dark green leafy and yellow vegetables	—	3 portions
Low calorie vegetables	—	as desired
Fruits	—	3 portions
Food from animals	—	8 portions (includes 3 milk portions)
Fats and substitutes	—	3 portions

**Low calorie vegetables** are those which provide little or no energy — for example, “greens”, such as christophene (cho-cho) and cucumber.

# Food Portions and Substitutes Lists

By substituting one food for another on the same list you can make your diet more interesting and enjoy a healthier way of eating. Each food in any one list provides approximately the same food value as any other food on that same list. For example, if your diet sheet says 2 slices bread at breakfast, you may choose instead, 1 slice bread and 1/2 cup medium thick porridge.

**REMEMBER**— No one list can supply all the nourishing substances needed for a healthful diet. It takes *ALL SIX OF THEM WORKING TOGETHER AS A TEAM* to supply your nutritional needs for good health.

**LIST 1: STAPLE FOODS**

**A. BREAD, RICE AND CEREAL SUBSTITUTES**

Portions to give about 70 calories, 15 grams carbohydrates,  
2 grams protein.



	<b>Measure</b>
Bread/toast, shop, sliced .....	½ slice (10 cm x 10 cm x 2 cm)
Bread/toast, shop, sliced .....	1 slice (10 cm x 8½ cm x 1 cm)
Bread/toast, homemade .....	1 thin slice
Bread, hard dough .....	1 thin slice
"Hops" bread .....	½ large
Bammy .....	¼ small (15 cm diameter, 1½ cm thick)
Hamburger bun .....	½ medium
Hot dog roll .....	1 small
Biscuits, small, round, water type .....	6 only (3 cm diameter)
Biscuits, cream cracker type .....	3 only (5 cm diameter or square)
Biscuits, saltines .....	6 only (5 cm squares)
Roti, Sadha type .....	¼ (20½ cm diameter) made from 1 cup flour
Roti, Dhalpuri (very thin) .....	¼ (23 cm diameter) made from 1 cup flour
Ryvita/Vita Wheat .....	2 – 2½ biscuits



## LIST 1: STAPLE FOODS

### A. Bread, Rice and Cereal Substitutes (cont'd)

	<b>Measure</b>
Bake/Johnny Cake (baked only) .....	¼ bake (made from 1 cup flour)
.....	1 small (round)
Rice, cooked .....	½ cup
Rice and Peas, cooked .....	½ cup
Noodles, boiled .....	½ cup
Macaroni, boiled .....	½ cup
Spaghetti, boiled .....	½ cup
Cornmeal porridge, medium consistency .....	½ cup (cooked with water)
Oatmeal porridge, medium consistency .....	½ cup (cooked with water)
Cream of Wheat porridge, medium consistency .....	½ cup (cooked with water)
Arrowroot, medium consistency .....	½ cup (cooked with water)
Sago, medium consistency .....	½ cup (cooked with water)
Arrowroot/Cornflour/Cornstarch .....	2 tbsp
Flour (dry, uncooked): wheat/plantain/yam, etc. ....	2 tbsp
Dumpling made from 2 tbsp flour/cornmeal .....	1 only
Corn-on-cob (15 cm long) .....	½ only
Canned Corn, whole kernel .....	½ cup
Cornflakes .....	¾ cup
Weetabix .....	1 only
Bran cereals such as Bran Buds, All Bran .....	⅓ cup

## LIST 1: STAPLE FOODS

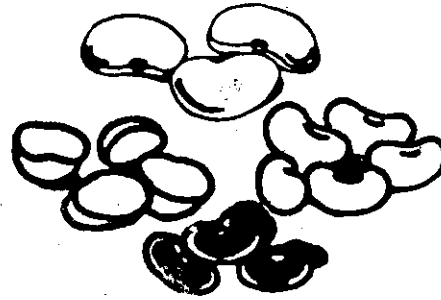
### B. Starchy Fruits, Roots and Tubers

Portions to give about 70 calories, 15 grams carbohydrate, 2 grams protein.

	Measure
Breadfruit . . . . .	2 pieces (5 cm x 2½ cm wedge) or 60 g
Cassava . . . . .	1 piece (5 cm x 3½ cm) or 60 g
Dasheen . . . . .	1 slice (5 cm x 6½ cm x 1½ cm) or 60 g
Eddoe/Coco . . . . .	1 medium or 60 g
Green Banana/green fig . . . . .	1 medium
Irish Potato, boiled or baked . . . . .	1 medium or 90 g
Irish Potato, mashed . . . . .	½ cup
Peewah . . . . .	2 medium
Plantain (ripe) . . . . .	1 piece (5 cm)
Sweet Potato . . . . .	1 slice (5 cm x 6½ cm x 1½ cm) or 60 g
Tannia . . . . .	1 small or 60 g
Topee Tambu . . . . .	6
Yam/Yampie . . . . .	1 slice (5 cm x 6½ cm x 1½ cm) or 60 g

**LIST 2: LEGUMES/NUTS**

Portions to give about 73 calories,  
14 grams carbohydrates, 4 grams protein.



	<b>Measure</b>
Almonds (shelled) .....	10
Channa/Chickpea .....	¼ cup
Chataigne/breadnut .....	2-3 seeds
Dahl, medium consistency .....	½ cup
Dried peas and beans (1 tbsp. dry) cooked .....	¼ cup
Green peas, canned .....	½ cup
Green Pigeon/Gungo Peas, broad beans .....	¼ cup
Stewed Peas .....	¼ cup
Baked Beans (canned without molasses and pork) .....	2 tbsp
Peanuts (salted or unsalted, roasted and shelled) .....	16
Cashew nuts (salted or unsalted, roasted and shelled) .....	7

### **LIST 3: DARK GREEN LEAFY, YELLOW AND OTHER STARCHY VEGETABLES**

#### **A. Green Leafy and Other Low Calorie Vegetables**

Vegetables such as those listed in this group may be used as desired if raw, as they do not have much energy. When cooked use only 1 cup. **Do not add fat, oil, or salad dressing in cooking or in serving, unless calculated as part of the fat allowance.** You may use these vegetables at each meal in **addition** to your other vegetable allowance.



Baghi

Bamboo shoots

Cabbage

Callaloo bush (Dasheen leaves, Aramanthus)

Caraili

Cauliflower

Celery

Chives/green seasoning

Christophene/Chocho

Cress/Criches/Cressles

Cucumber

Kale

Lettuce

Melongene/Egg Plant/Aubergine/Baigan

Mustard greens

Okra

Pak Choy/Patchoi/Chinese Cabbage

Pawpaw, green

Spinach

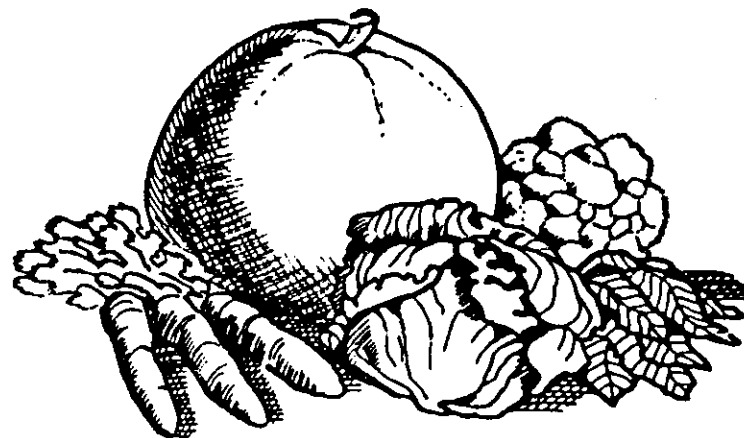
Squash (cucumber type)

Tomato

**LIST 3: DARK GREEN LEAFY, YELLOW AND OTHER STARCHY VEGETABLES**

**B. Yellow and Other Vegetables**

Portions to give about 36 calories, 7 grams carbohydrate, 2 grams protein.



	<b>Measure</b>
Beetroot .....	½ cup
Bodi .....	¾ cup
Carrot .....	½ cup
Chow Mein (Chinese vegetables) .....	½ cup
Mixed vegetables, canned .....	⅓ cup
Onions .....	1 medium or 2 small or ½ cup
Pumpkin .....	½ cup
String beans, salad beans (immature pod) .....	¾ cup
Turnip .....	½ cup

## LIST 4: FRUITS

### A. Citrus Fruits and Juices

Portions to give about 40 calories,  
10 grams carbohydrates.



	<b>Measure</b>
Grapefruit .....	½ (9 cm diameter)
Grapefruit juice, fresh .....	½ cup
Grapefruit juice, canned, unsweetened .....	½ cup
Orange/Ortanique .....	1 small (5 cm diameter), 1 medium; ½ large
Orange juice, fresh .....	½ cup
Orange juice, canned, unsweetened .....	½ cup
Portugal/Tangerine/Potigal .....	1 medium

## LIST 4: FRUITS

### B. Other Fresh Fruits

	Measure
Banana, ripe .....	½ medium (15 cm banana) or 1 small
Cashew, fruit .....	1 large
Cherries (West Indian) .....	20
Coconut water .....	¾ cup
Dunks/Jujube/Coolie Plum .....	12
Figs, ripe (small banana) .....	1 small
Figs, Silk (small) .....	1 only
Figs, Sucrier (small) .....	2
Guava .....	1 medium
Guineps/Ackee*/Chennette .....	10
Mammie Apple .....	½ cup
Mango, ripe .....	1 small
Pawpaw/Papaya .....	½ cup cubed or ½ small (solo)
Pineapple, raw .....	1 slice (1½-2 cm) thick

---

\*Not Jamaican Ackee

## LIST 4: FRUITS

### B. Other Fresh Fruits

	<b>Measure</b>
Pineapple, juice, unsweetened .....	½ cup
Pineapple and Orange juice, mixed, unsweetened .....	½ cup
Plums .....	10 small or 6 medium
Pommecythere/Golden Apple/June plum/Jew plum .....	1 medium (7½ cm x 5 cm)
Pommegranate .....	1 small
Pommerac/Otaheite Apple .....	1 medium
Sapodilla/Naseberry .....	1 medium
Soursop, pulp .....	½—¾ cup
Soursop, juice (unsweetened) .....	½ cup
Star Apple/Caimit .....	1 medium/small
Sugar Apple/Sweet Sop .....	1 small
Watermelon .....	1 cup cubed

### C. Imported Fresh Fruits

Apple .....	½ medium or 1 small
Grapes .....	14 medium
Pear .....	1 small



## LIST 4: FRUITS

### D. Canned Fruits

All canned fruits must be **drained well and rinsed** to remove syrup.

	<b>Measure</b>
Apricot . . . . .	2 halves
Fruit cocktail . . . . .	1/3 cup
Grapefruit segments . . . . .	5
Pears . . . . .	2 halves
Peaches . . . . .	2 halves
Pineapple . . . . .	1 ring or 1/3 cup pieces

### E. Dried Fruits

Dates . . . . .	2 only
Figs, dried . . . . .	1 only
Prunes . . . . .	2 medium only
Raisins, Currants . . . . .	1 1/2 tbsp

## LIST 5: FOODS FROM ANIMALS

Portions to give about 73 calories, 7 grams protein, 5 grams fat. All meats must be measured **after cooking**. If you do not wish to use foods from animals you may substitute legumes.



### A. LEAN MEATS

Portions give approximately 55 calories, 7 grams protein, 3 grams fat.

#### 1. Meats (very lean) and Poultry (with skin removed)

	Measure
Chicken .....	1 small drumstick
Chicken breast sliced .....	2 slices (3½ cm x 7½ cm)
Chicken wing .....	1 small
Chicken necks .....	2 small
Chicken backs .....	½
Ham, lean, thin slice* .....	5 cm x 7½ cm
Rabbit, thin slices, game meat .....	4 small cubes or 30 g cooked
Liver .....	3½ cm x 5 cm x 1½ cm, match box size

\*If two or more portions are eaten, these foods would contribute significant quantities of sodium and should be restricted for those on low sodium diets.

**1. Meats (very lean) and Poultry (with skin removed)**

	<b>Measure</b>
Kidney (stewed) .....	1 tbsp
Heart, ox, slices .....	5 cm x 7½ cm
Heart, sheep/calf .....	½ small

**2. Fish**

Fresh Fish .....	1 small piece (6½ cm x 5 cm x 1½ cm)
Flying Fish .....	1
Salted Fish* .....	1 small piece (6½ cm x 7½ cm) or ¼ cup flaked
Shrimps, Prawns .....	5 medium
Oysters .....	3 medium

**3. Cheese**

Cottage	2 tbsp
Grated Parmesan	2 tbsp

\*If two or more portions are eaten, these foods would contribute significant quantities of sodium and should be restricted for those on low sodium diets.

## B. MEDIUM FAT

Portions give approximately 75 calories, 7 grams protein, 5 grams fat.

### 1. Meats and Poultry

	Measure
Goat (boneless) .....	1 tbsp or 4 small cubes (30 g)
Beef (trimmed) regular, sliced thin (1/8" thin) .....	6½ cm x 7½ cm (30 g)
Beef, stew (boneless) .....	4 small cubes/1 tbsp (30 g)
Pork chops (fat trimmed) .....	½ small

### 2. Fish (Canned and Drained)

Tuna fish, salmon, mackerel* .....	¼ cup
Sardines (oil drained) .....	1 large or 2 small

### 3. Eggs

Egg (whole) .....	1 medium
-------------------	----------

\*If two or more portions are eaten, these foods would contribute significant quantities of sodium and should be restricted for those on low sodium diets.

### C. HIGH FAT

	<b>Measure</b>
Mutton or lamb (trimmed) .....	1 tbsp or 4 small cubes (30 g)
Chicken wing .....	1 small
Pork, regular, sliced (trimmed) .....	6½ cm x 7½ cm or 30 g (1 ounce)
Pork spare ribs .....	30 g (1 ounce)
Beef ribs .....	30 g (1 ounce)
Minced meat (regular) .....	2 tbsp
Sausages* .....	1 small or ½ large
Luncheon meat* .....	1 slice 6 cm, diameter, ½ cm thick
Bologna .....	1 slice
Salt meat (fat trimmed)* .....	5 cm x 7½ cm
Salami .....	2 thin slices
Oxtail (fat trimmed) .....	1 piece 5 cm x 1½ cm
Corned beef* .....	30 g (1 ounce)
Pig tail* .....	1 small piece
Pig trotters* .....	2 pieces 5 cm x 2½ cm
Lamb chop (trimmed)* .....	1 small
Lamb, sliced thin .....	6½ cm x 7½ cm

\*If two or more portions are eaten, these foods would contribute significant quantities of sodium and should be restricted for those on low sodium diets.

### C. HIGH FAT

#### 4. Cheese

##### Measure

Cheddar and American type\* ..... 2½ cm cube (30 g)

### D. MILK

Portions contain about 6 grams carbohydrate and 4 grams protein. The calories vary, depending on the kind of milk you choose. The amount of fat in milk is measured in percent (%) of butterfat. The calories will vary depending on what type of milk you choose. Milk is divided into three groups based on the amount of fat and calories: Skim very low-fat milk, low-fat milk and whole milk.

#### 1. SKIM AND VERY LOW-FAT MILK

Portions give about 6 grams carbohydrate, 4 grams protein, trace of fat, 40 calories.

##### Measure

Milk, liquid, skim ..... ½ cup

Milk, powdered skim (before adding liquid) ..... 2 tbsp

Yogurt (plain low fat) ..... 60 g (2 ounces)

\*If two or more portions are eaten, these foods would contribute significant quantities of sodium and should be restricted for those on low sodium diets.

## 2. LOW FAT MILK

Portions give about 6 grams carbohydrate, 4 grams protein, 2 grams fat, 58 calories

	<b>Measure</b>
2% Milk .....	½ cup
Yogurt made with 2% milk .....	60 g (2 ounces)

## 3. WHOLE MILK

Whole milk group has much more fat than the skim and low fat groups. Try to limit choices from this group.

Portions to give about 6 grams carbohydrate, 4 grams protein, 4 grams fat, 76 calories.

	<b>Measure</b>
Milk, fresh cow's .....	½ cup
Milk, evaporated whole (before adding liquid) .....	¼ cup
Milk, powdered whole (before adding liquid) .....	2 tbsp
Yogurt, plain (whole milk) .....	60 g (2 ounces)

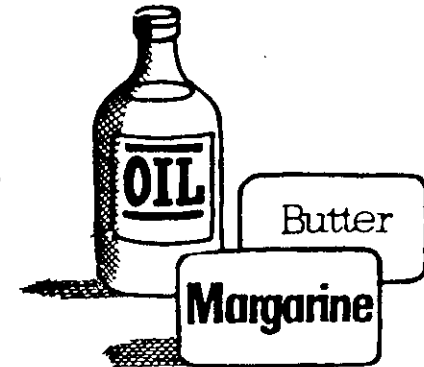
dit ps to

## LIST 6. FATS AND SUBSTITUTES

The foods in this list contain mostly fat. All fats are high calories and should be carefully measured. Everyone should modify fat intakes by eating unsaturated fats instead of saturated fats. Portions to give about 45 calories, 5 grams of fat.

### A. UNSATURATED FATS

	Measure
Margarine .....	1 tsp
Avocado .....	1/8 (10 cm diameter)
Ackee (Jamaica) .....	2 seeds
Peanut butter .....	1 tsp
Peanuts .....	10 only
Cashew Nuts .....	4 only shelled
Olives, green* .....	5 small
Almonds (dry roasted) .....	6 whole
Oil (corn, cottonseed, safflower, sunflower, olive, soybean, peanut) .....	1 tsp
Salad dressing, mayonnaise type .....	1 tsp
Salad dressing (all varieties)* .....	1 tbsp
Salad dressing (reduced-calorie)** .....	2 tbsp



\*If two or more portions are eaten, these foods would contribute significant quantities of sodium and should be restricted for those on low sodium diets.

\*\*Two tablespoons of low-calorie salad dressing is a free food.



## LIST 6. FATS AND SUBSTITUTES

### B. SATURATED FATS

	<b>Measure</b>
Butter .....	1 tsp
Lard .....	1 tsp
Shortening .....	1 tsp
Ghee .....	1 tsp
Bacon, streaky without rind* .....	small rasher
Bacon fat* .....	1 tsp
Chicken fat .....	1 tsp
Pork salted* .....	2½ cm cube
Cream cheese .....	1 tbsp
Coffee whitener powder .....	4 tsp
Oil (coconut and palm) .....	1 tsp
Coconut (dried, grated) .....	2 tbsp

\*If two or more portions are eaten, these foods would contribute significant quantities of sodium and should be restricted for those on low sodium diets.

# Things to Remember

1. **NO** special diabetic or "dietetic" foods are necessary. "Dietetic" and diabetic chocolates and sweets are **NOT** recommended. These foods are not calorie free. You can eat the same foods as the rest of the family. Your meals can be taken from the family pot, provided sugar is not added and there is no extra fat or flour.
2. Have meals at regular times. Do not miss or delay meals. This is especially important if you are taking insulin.
3. Do not eat snacks in between meals unless your diet allows it. If you are hungry and need "extras", take only those foods listed among the **low calorie foods**.
4. If night shifts have to be worked, the meals should be arranged to suit your hours of work.
5. If you have to carry a packed lunch to work, the substitution lists will give you many foods you can use.

6. Values given for meats and vegetables in the food substitution lists do not include oil or butter. **DO NOT USE EXTRA FAT OR OIL.** Use only the amount allowed on your meal plan for the day. **Try to avoid fried foods.**
7. Milk, flour and bread crumbs used in cooking should be part of the allowance in your diet.
8. Your diet has been planned to help regulate your weight and the sugar in your blood. The kind of diet the doctor or dietitian or nutritionist will advise you on to lose weight will:
  - cause the extra fat stores to be gradually used up
  - be a normal and enjoyable way of eating
  - help you make lasting changes in your eating habits
  - be one that the whole family can use.
9. Toasting bread **DOES NOT** decrease the calories. White bread and brown bread have the same number of calories.
10. Whenever possible, eat raw fruits and vegetables, whole grain (brown) bread and bran cereals to add fibre or roughage to your diet.

**11. ALCOHOL** — Remember, alcohol should not be used without your doctor's permission. If your doctor does allow you this luxury, it must be counted into your meal plan. Alcohol contains quite a few calories.

You should not eat less of certain foods so that you can have a drink. This robs you of many valuable nutrients that are found in food, but not in alcohol.

Discuss this matter with your doctor and, with his consent, the diet counsellor will teach you to make the necessary substitutions.

**12.** To ensure adequate nutrition and control of your diabetes, remember: **EAT ONLY THE AMOUNTS OF FOOD LISTED ON YOUR MEAL PLAN.**

**13. EXERCISE.** For those who want to exercise harder than usual, remember — extra food is needed for extra activity. **Use this plan:**

- For heavy exercise (tennis, track, speed swimming or dancing) — Add 1 portion of fruit (List 4) for every 1/2 hour of non-stop activity.
- For moderate exercise (jogging, gardening, leisure swimming) — Add 1 portion of staple foods (List 1) for every hour of activity or 1½ portions of fruit (List 4).
- For light exercise (a longer walk than usual, a long period of shopping) — Add 1 portion of staples (List 1) or 1 portion of fruit (List 4) for the whole period of activity.
- If you are trying to lose weight check with your dietitian before taking additional foods.

# The Choice is Yours

Now that you know you have diabetes, you must make an effort to keep your diabetes under control at all times. This booklet has shown you how to eat the right amounts of food to control your weight. This is something all persons with diabetes must do to keep their blood sugar at a normal level. For those who are obese, managing your diet may be all that you need. For those on insulin, balancing your diet, insulin and exercise will also help the blood sugar to remain normal. **Remember, proper control will help you lead a full and satisfying life and enjoy a normal life-span.**

**It's up to you!**



**Caribbean Food & Nutrition Institute  
UWI Campus  
P.O. Box 140, Kingston 7  
Jamaica**



**Caribbean Food & Nutrition Institute  
UWI Campus  
St. Augustine  
Trinidad**