

Correct preparation, storage, and administration of Insulin and principle of site rotation:

* Insulin in current use may be stored at room temperature, all others in refrigerator or cool area. Do not freeze.

* Insulin must be at room temperature before administration.

* Roll insulin to mix, double-check label concentration.

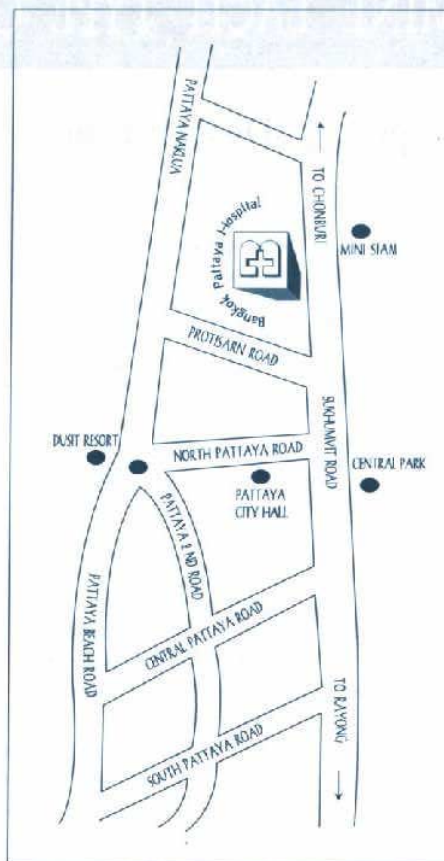
* When mix Insulin, do so in same sequence each day: e.g. always draw up regular or shorter acting insulin first followed by longer-acting preparation (i.e., clear to cloudy).

* Rotate site so that no individual site is used more frequently than once a month; know that switching from separate injections to a mixture of insulin in one injection may alter local response.

* Inject on abdomen area around umbilicus at 90° angle in a rotation motion.

* Press (do not rub) the site after injection.

* Avoid smoking for 30 minutes after injection (cigarette smoking decreases absorption). Active exercise of injected extremity increases rate of absorption.



BANGKOK PATTAYA HOSPITAL

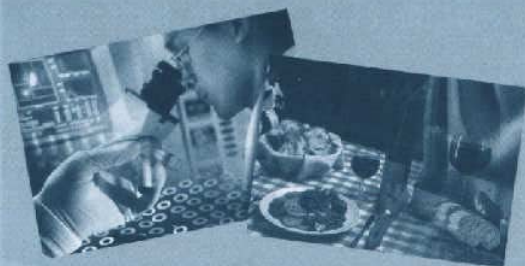
DIABETES

*Diabetes is for life but
it does not mean a life sentence.*



DIABETES MELLITUS

A chronic, systemic disease producing disorders in carbohydrate, protein, and fat metabolism; result from disturbances in the production, action, or use of insulin; eventually produces destructive changes in a wide variety of organs and tissues. The insulin deficiency may be relative or absolute.



Cause:

Cause remains unknown. Considered to be group of syndromes whose development is influenced by genetic factors, viruses, autoimmunity, and environmental factors such as stress, obesity, diet and sedentary lifestyle.

IF YOU HAVE ANY OF THE FOLLOWING SYMPTOMS, ASK YOUR DOCTOR TO TEST YOU FOR DIABETES.

- The need to urinate more than usual (polyuria)
- Constant thirst (polydipsia)
- Unusual weight loss despite increase in appetite
- Feeling weak or tired
- Blurred vision
- Tingling or numbness in hands or feet
- Cuts and bruises that are slow to heal
- Frequent and recurring infections such as urinary tract infection, fungal infections, boils or abscesses.
- Erection impairment in men, and unusual vaginal dryness in women

LET'S EXAMINE EACH TYPE OF DIABETES IN MORE DETAILS

No.	Type	Description	Risk Factor	Treatment
1.	Insulin Dependent Diabetes Mellitus (IDDM) Type 1 Juvenile Onset	<ul style="list-style-type: none"> ◆ Usually develops at any time from infancy to the mid-to late 30's although it can occur later in life. ◆ The pancreas does not produce any insulin at all (hereditary, "environmental" factors, and by damage to the pancreas by a virus or other infection). 	<ul style="list-style-type: none"> ◆ A family history of the disease. ◆ All races, but it's most common among whites. ◆ Age less than 40. Half of people diagnosed with IDDM (type 1) are under 20. 	<ul style="list-style-type: none"> ◆ The only treatment for Type 1 is the administration of insulin. ◆ Insulin is a protein hormone and is destroyed by enzymes in the digestive system, so it cannot be taken by mouth as tablets or medicine. It has to be administered by injection or sometimes by pump. ◆ Diet and exercise are also important in the maintenance of good health efficient blood glucose control.
2.	Non Insulin Dependent Diabetes Mellitus (NIDDM), Type 2 or Mature Onset	<ul style="list-style-type: none"> ◆ This usually occurs in the over-40's, and is often linked with being overweight. The body still produces insulin, but either insufficiently produced, or the body cannot use the insulin properly to control the glucose in the blood produced by carbohydrates in the diet. 	<ul style="list-style-type: none"> ◆ Genetics ◆ Age - over 30 years old. Half of all new cases are aged 55 and older. ◆ Being over weight or obese ◆ High-fat diet ◆ Sedentary life style ◆ Women who have had gestational diabetes. ◆ Women who have given birth to babies weighing 9 pounds or more. 	<ul style="list-style-type: none"> ◆ May be by diet only - to regulate the amount and frequency of intake of carbohydrates. ◆ Try to reduce the weight so that whatever insulin is produced may work more effectively. ◆ If this does not reduce sugar levels in the blood sufficiently, oral medication in the form of tablets may be used. These do not contain insulin but are designed to maximise the use of the insulin still being produced by the body.
3.	Gestational Diabetes	<ul style="list-style-type: none"> ◆ About 40 percent of women with gestational diabetes go on to develop NIDDM (Type 2) diabetes within 15 years. ◆ All pregnant women should be tested for gestational diabetes between their 24th and 28th weeks of pregnancy. ◆ It usually appears around the 24th week of pregnancy. 	<ul style="list-style-type: none"> ◆ Develops only in pregnant women with no previous history of diabetes. ◆ Genetics ◆ Obesity 	<ul style="list-style-type: none"> ◆ Clears up on its own after delivering their babies.