

Benha University
Faculty of Science
Department of Zoology



HEALTHY NUTRITION Uni 152

Lecture 2

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Methods of feeding the patient

1. Oral nutrition:

Oral nutrition means eating food naturally, and it is the best method.

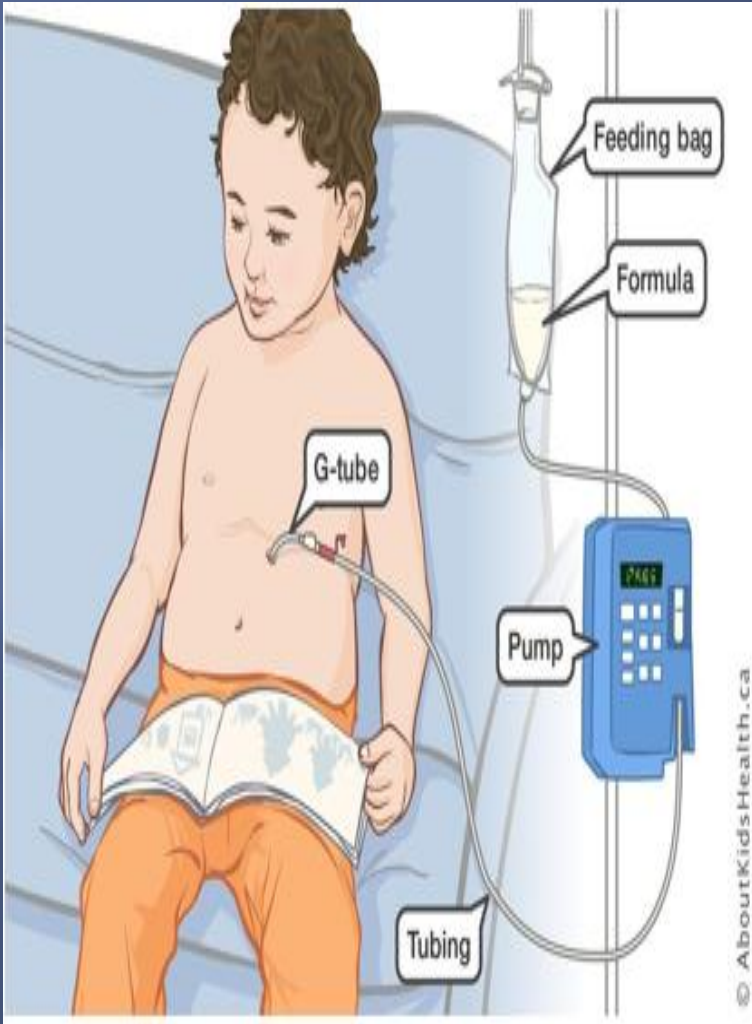
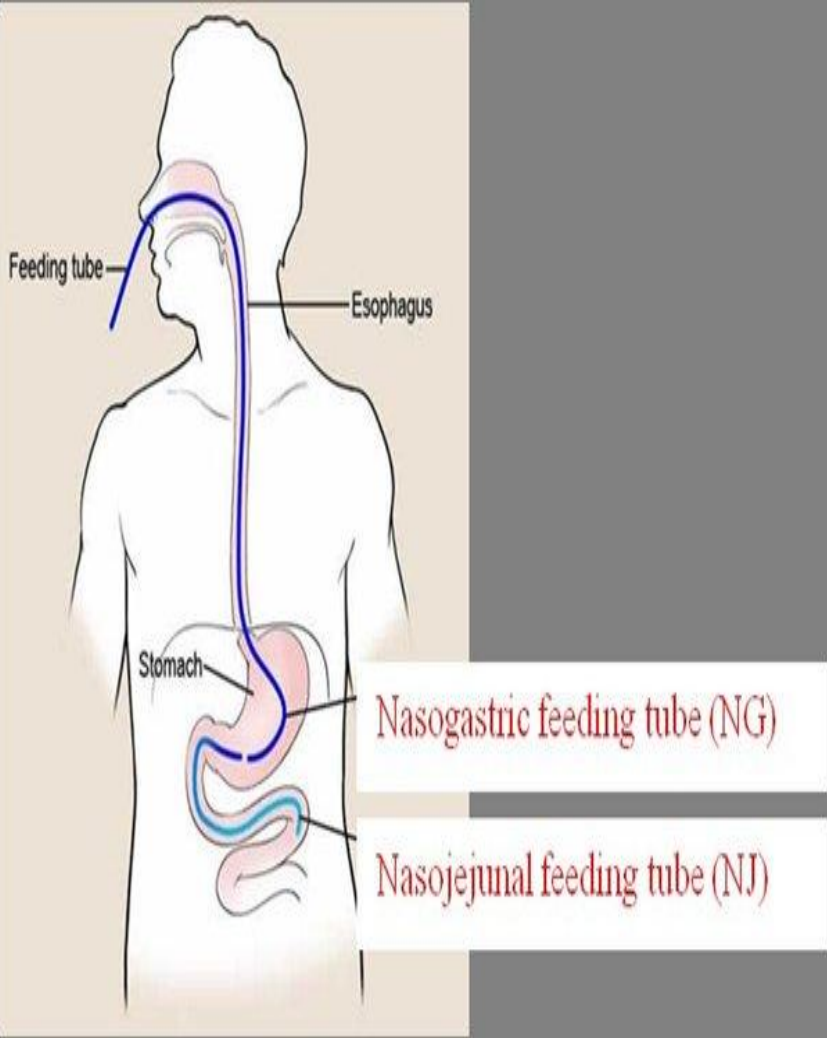
2. Enteral nutrition (tube feeding):

Enteral nutrition is a way of sending nutrition directly into the stomach or small intestine.

types:

1. Nasoenteric Feeding: A tube placed down through the nose into the stomach or small intestine.

2. Enterostomy Feeding: A tube can be placed directly through the skin into the stomach or intestine.



Indications:

- 1.The patient's unwillingness to eat due to nervous and psychological disorders.**
- 2.The patient's unwillingness to eat due to a defect in the mouth and teeth, which makes it difficult to chew food.**
- 3.Malabsorption diseases, as occurs in intestinal infections.**
- 4.Radiotherapy of the abdomen.**
- 5.Metabolic disorders, as occurs in advanced liver diseases.**
- 6.When the patient's health condition shows that he is at risk of nutritional deficiency.**

Contraindications:

- 1.There is a severe defect in the intestines that requires stopping oral feeding.**
- 2.The presence of persistent vomiting.**
- 3.The presence of severe and persistent diarrhea.**

3. Parenteral nutrition:

Parenteral nutrition means delivering sufficient quantities of essential nutrients via a peripheral or central vein.

It is divided into:

1.Total parenteral nutrition (TPN): It is administered through a central vein (superior vena cava) which is located under your collarbone. It is an important method used when the digestive system must be rested for a period of time, and its application is almost limited to hospitals.

2.Partial parenteral nutrition (PPN): It provides partial nutritional replacement through a peripheral vein.



TOTAL PARENTERAL NUTRITION
(TPN)



PERIPHERAL PARENTERAL NUTRITION
(PPN)

Indications:

1. Severe malnutrition.
2. Severely underweight infants.
3. Severe burns.
4. Radiotherapy.
5. Chemotherapy.
6. Coma and nervous shock.
7. Some digestive diseases, such as intestinal obstruction.
8. Before and after surgical operations.

Complications:

1. Mechanical complications: These are risks that result from inserting a needle or catheter into the vein.

1. Metabolic complications: These are risks that result from giving inappropriate amounts of one or more nutrients, which leads to metabolic disorders.

Checkpoint

..... is a type of feeding where a tube can be placed directly through the skin into the stomach or intestines.

- A) Nasoenteric Feeding B) Enterostomy Feeding C) Parenteral feeding

..... is a type of feeding used during intestinal obstruction.

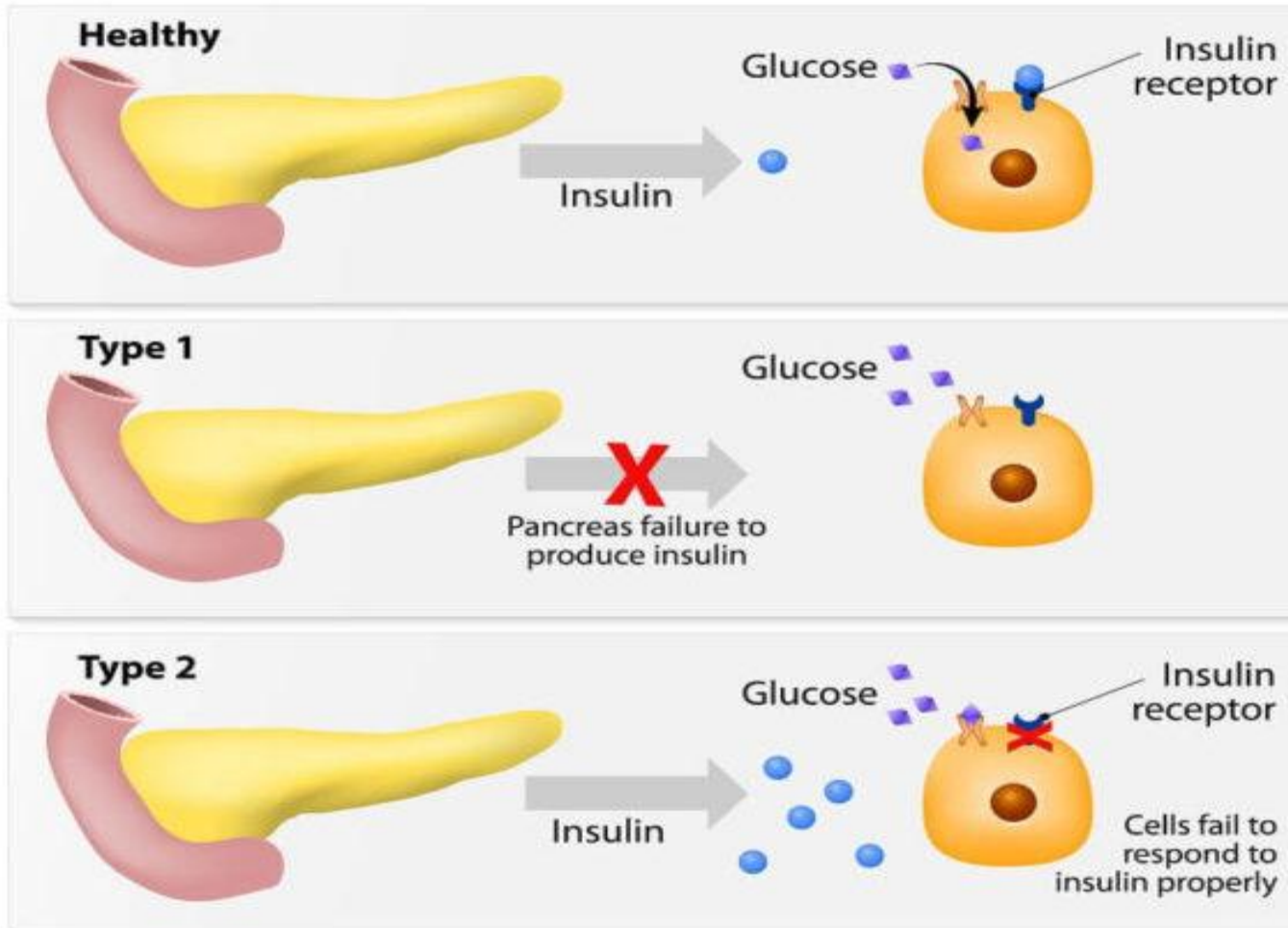
- A) Nasoenteric Feeding B) oral Feeding C) Parenteral feeding

THERAPEUTIC NUTRITION FOR DIABETIC PATIENTS

The human body obtains carbohydrates through the food it eats and they are digested and absorbed in the form of glucose (sugar), and the blood transports glucose to the various cells of the body for the body to use in energy production. The insulin hormone secreted by the pancreas is the main regulator of blood glucose levels, and it also plays an important role in introducing glucose into the cells.

A person gets diabetes as a result of the pancreas's inability to secrete insulin or secreting it in sufficient or ineffective quantities, which leads to an increase in blood sugar levels that exceed the normal level (80-120 mg/100 ml).

TYPES OF DIABETES MELLITUS



Causes of diabetes mellitus:

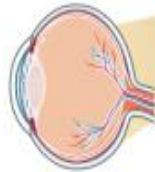
The main cause of diabetes is unknown, but there are several factors that contribute to its occurrence, including:

- 1.Genetics**
- 2.Obesity**
- 3.Infections**
- 4.Medications**
- 5.Alcohol**
- 6.Psychological state**

COMPLICATIONS OF DIABETES MELLITUS

Eye

High blood glucose and high blood pressure can damage eye blood vessels, causing retinopathy, cataracts and glaucoma



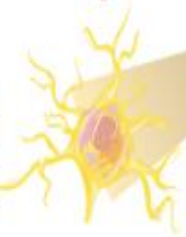
Kidney

High blood pressure damages small blood vessels and excess blood glucose overworks the kidneys, resulting in nephropathy.



Neuropathy

Hyperglycemia damages nerves in the peripheral nervous system. This may result in pain and/or numbness. Feet wounds may go undetected, get infected and lead to gangrene.



Brain

Increased risk of stroke and cerebrovascular disease, including transient ischemic attack, cognitive impairment, etc.



Heart

High blood pressure and insulin resistance increase risk of coronary heart disease



Extremities

Peripheral vascular disease results from narrowing of blood vessels increasing the risk for reduced or lack of blood flow in legs. Feet wounds are likely to heal slowly contributing to gangrene and other complications.



Objectives of treating a diabetic patient:

- Preventing blood sugar levels from fluctuating within normal limits.
- Maintaining the ideal body weight, which helps regulate blood sugar levels.
- Enjoying a normal life that is no different from anyone else.
- Preventing or delaying the onset of complications resulting from irregular blood sugar.

How to treat a diabetic patient:

There are three main factors in treating a diabetic patient:

- Diet system
- Exercise system
- Medication system (oral or by insulin)

TYPES OF INSULIN

Type of Insulin	Duration of Action
Rapid-acting insulin	4–5 hours
Short-acting insulin	6–8 hours
Intermediate-acting insulin	6–8 hours
Long-acting insulin	14–24 hours

Checkpoint

It is preferable to useacting insulin in hospitals

A) rapid

B) short

C) long

Diabetic patients should the dose of insulin if they do excessive muscle effort.

A) increase

B) reduce

C) not change

High blood sugar leads to

A) gout

B) cholecystitis

C) kidney failure



مع تمنياتى لكم بالنجاح والتوفيق

لمزيد من المعلومات

<http://www.bu.edu.eg/staff/doaamohamed7-courses>