

Blood Glucose

The Physiologic regulation of blood glucose levels is largely dependent on hepatic:-

- 1.**Uptake of glucose.
- 2.**Glycogenesis.
- 3.**Glycogenolysis.

The peripheral tissues also contribute to the maintenance of normal blood level by using glucose for their energy requirement after ingestion and absorption of carbohydrates 60 % of absorbed glucose is transported to the liver.

The immediate effects on rise in blood glucose are :-

- 1.**Increase uptake of glucose by liver and brain cell .
- 2.**Release of insulin .
- 3.**Increase uptake of peripheral tissues.
- 4.**Inhibition of release of glucagon.

When the fasting blood glucose level rises above 100 mg/dL that is caused hyperglycemia.

Hyperglycemia disease :-

- 1.**Diabetics.
- 2.**Increase in the thyroid hormones.
- 3.**Increase in anterior pituitary hormones.

- 4.** Increase adrenal cortical hormones.
- 5.** Anshing's syndrome : excess produce from hydro cortizone .
- 6.** Acromeglyce : excess produce from growth hormone (GH) from anterior pituitary hormones.
- 7.** Excess insulin administration may occur in diabetics.

Hypoglycemia disease :-

Take place when blood glucose levels under 40 mg/dL .

- 1.** Decrease in the (myxedema) thyroidism.
- 2.** Decrease in the thyroid hormones.
- 3.** Decrease in anterior pituitary hormones.
- 4.** Decrease adrenal cortical hormones.
- 5.** Adesone's disease caused by excess from Adrenocorticoid (ACTH)