

Absorption in the Large Intestine

- Absorb water
- Synthesize some B vitamins and vitamin K
- Collect food residue
- Undigested food is excreted as feces by way of rectum
- In healthy people, 99% of CHO, 95% of fat, and 92% of proteins are absorbed

Metabolism

- After digestion and absorption nutrients carried by blood to the cells
- Within cells nutrients changed into energy through the process of metabolism
 - Aerobic metabolism
 - Anaerobic metabolism

Metabolism

- As nutrients oxidize energy is released
 - Anabolism
 - Catabolism

Metabolism and the Thyroid Gland

- Metabolism governed primarily by hormones secreted by the thyroid gland
 - T3
 - T4
- Hyperthyroidism
- hypothyroidism

Basal Metabolic Rate

- Energy necessary to carry on all involuntary vital processes while the body is at rest
 - Respiration
 - Circulation
 - Regulation of body temperature
 - Cell activity and maintenance
- Known as BMR
 - Also referred to as resting energy expenditure (REE)

Basal Metabolic Rate

- Affected by
 - Lean body mass
 - Body size
 - Sex
 - Age
 - Heredity
 - Physical condition
 - climate