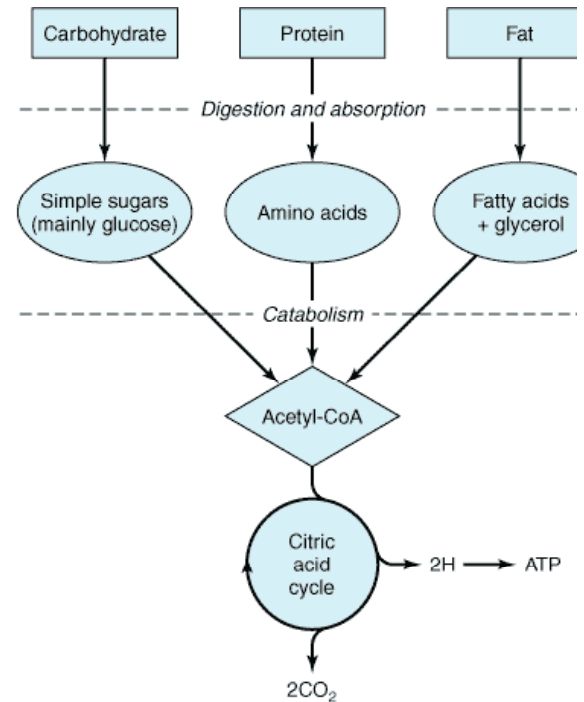


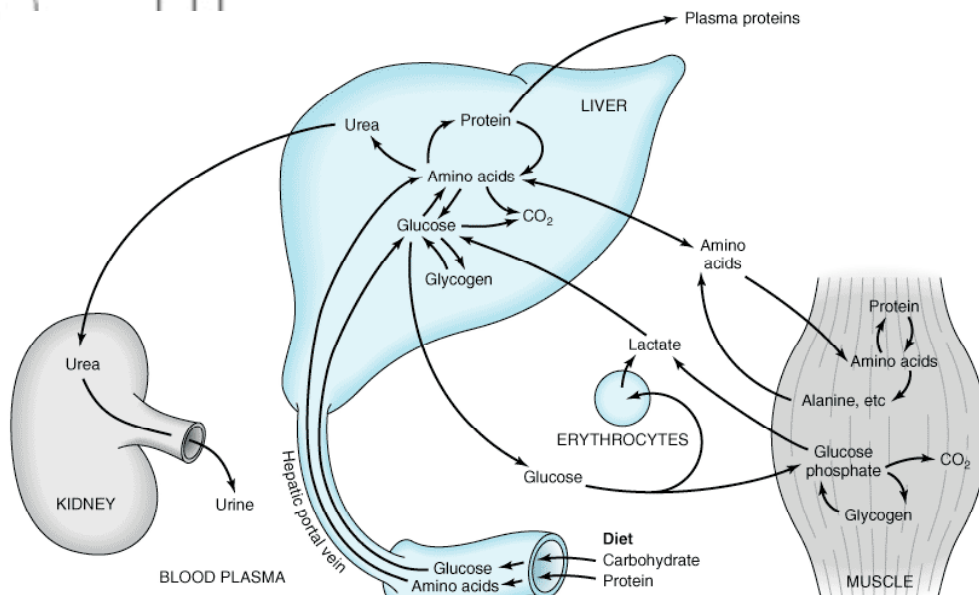
MCB 102
Digestion and Metabolism Overview
GSI: Nadia Taylor

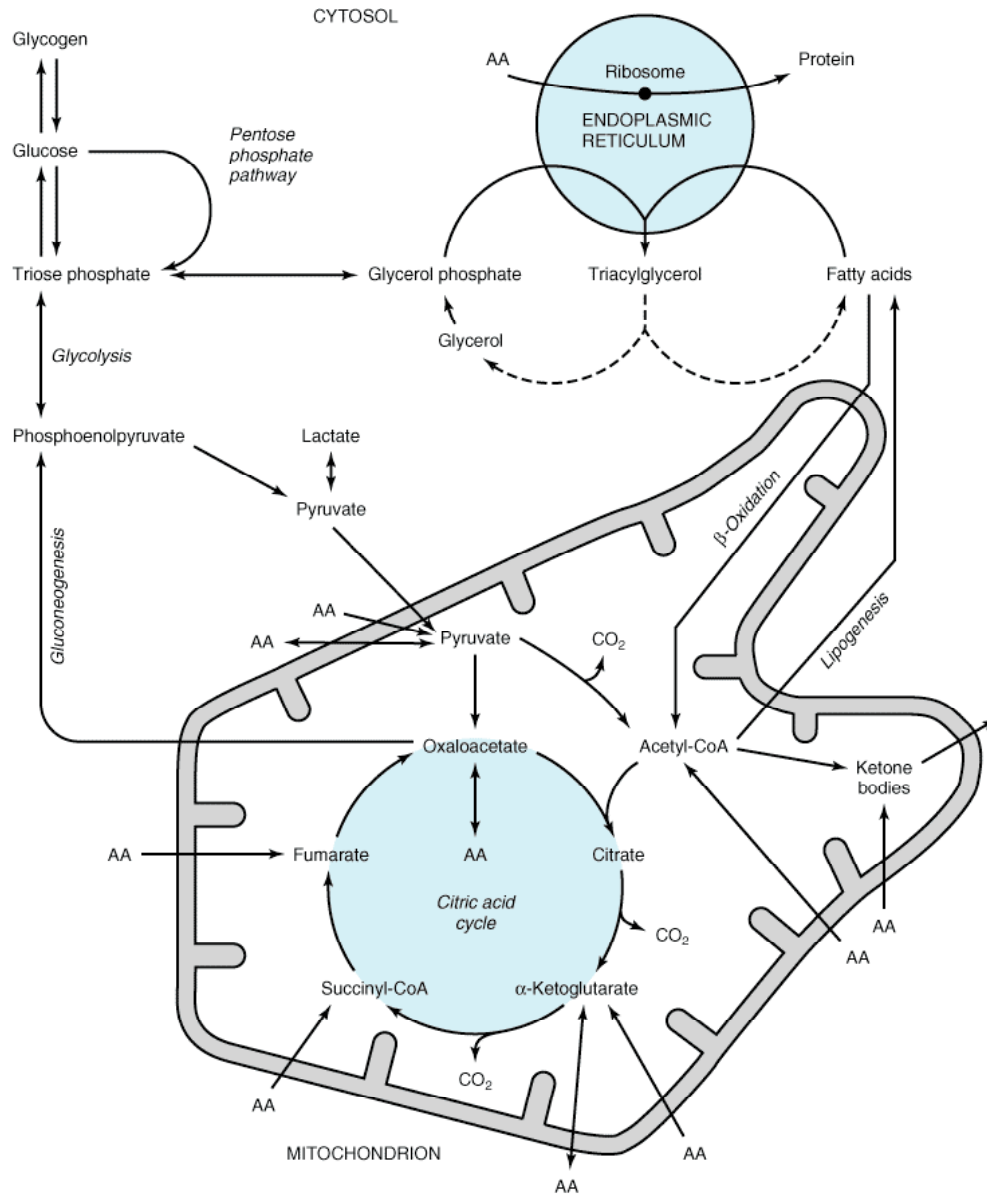
How do those nutrients get in our body? What is Metabolism?

Organ	Exocrine Secretions	Functions
Mouth and pharynx		Chewing (mechanical digestion); initiation of swallowing reflex
Salivary glands	Salt and water Mucus Amylase	Moisten food Lubrication Polysaccharide-digesting enzyme
Esophagus		Move food to stomach by peristaltic waves
Stomach	Mucus	Lubrication
	HCl	Solubilization of food particles; kill microbes
	Pepsin Mucus	Protein-digesting enzyme Lubricate and protect epithelial surface
Pancreas		Secretion of enzymes and bicarbonate
	Enzymes	Digest carbohydrates, fats, proteins, and nucleic acids
	Bicarbonate	Neutralize HCl entering small intestine from stomach
Liver		Secretion of bile
	Bile salts Bicarbonate	Solubilize water-insoluble fats Neutralize HCl entering small intestine from stomach
	Organic waste products and trace metals	Elimination in feces
Gallbladder		Store and concentrate bile between meals
Small intestine		Digestion and absorption of most substances; mixing and propulsion of contents
	Enzymes Salt and water Mucus	Food digestion Maintain fluidity of luminal contents Lubrication
Large intestine (colon)		Storage and concentration of undigested matter; absorption of salt and water; mixing and propulsion of contents
	Mucus	Lubrication
Rectum		Defecation



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