







FUNCTIONS OF THE DIGESTIVE SYSTEM...

- Ingestion—orally taking materials into the body
- Digestion—processes that make food absorbable
 - Mechanical digestion—chewing, stomach churning, and movements in intestinal tube (peristalsis)
 - Chemical digestion—enzymes break food down further
- Absorption—products of digestion move into bloodstream or lymph vessels and then into the body's cells

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• **Defecation**—elimination of indigestible or unabsorbed material from the body



































WHAT IS FOOD MADE OF??

- PROTEINS—Organic compounds that contain large combinations of amino acids
 - 10 amino acids are non-essential (can be synthesized by body); 8 amino acids are essential (must be ingested)
- CARBOHYDRATES—Body's preferred source of energy
 - Required for metabolism of other nutrients
 - Absorption mediated by insulin
 - Digestion begins in the mouth by way of salivary enzymes

- FATS—Composed of lipids or fatty acids; can range in consistency from solid to liquid
 - Saturated fats—lard, butter, coconut oil, hydrogenated fats: are solid at room temperature
 - Unsaturated fats—seed and nut oils, mono or poly; are liquid at room temperature
 - Alpha-linolenic acid (ALA), an omega-3 fatty acid, and linoleic acid (LA), an omega-6 fatty acid, are considered essential (must be ingested) because they cannot be synthesized by humans



FOOD, CONTINUED...

- WATER—Essential nutrient that every part of the body needs
 - Water-based fluids surround every cell in the body (except the outer layer of the skin)
 - All nutrients and wastes travel through waterbased fluids
- FIBER—Non-digestible matter, essential to provide a sensation of satiety, to move nutrients through and out of the system, to fuel biome
 - Soluble (dissolves in water): helps slow rate of nutrient absorption
 - Insoluble (cellulose): Helps maintain bowel ph, helps prevent constipation.

REVIEW MATCH THE FOLLOWING	Answers	Word
 Component of food; digestion starts in the 	Carbohydrates	Pancreas
mouth		Protein
 Non-organic compounds found in nature that the heady uses 	Minerals	Fiber
Non disastible accential	Fibor	Polyp
food	riber	Liver
 Detoxifies, produces hormones, recycles red 	Liver	Carbohydrates
blood cells		Vitamins
 Pre-cancerous growth in the colon 	Polyp	Minerals





GUIDELINES FOR MASSAGE

(P. 367, WERNER 6TH AND P. 406, 7TH)

MASSAGE REDUCES STRESS

RED FLAGS

Autoimmune digestive disorders respond well to massage. When the body is under stress, digestion is a low priority. Most of these conditions involve spastic or flaccid constipation, indigestion, or gas. Massage can help by bringing parasympathetic function on line and by normalizing muscle tone.

Before massaging, eliminate possibilities of serious contraindications. Red flag symptoms include severe local pain, bloody stools, anemia, bloating, and fever. Refer clients to a physician. Any new pattern of pain that persists for two weeks is also a reason for referral to a physician. While we want to provide relief our clients seek, we don't want to mask or reduce symptoms so much that clients do not seek the medical attention they need. Do not perform massage when clients have undiagnosed or unexplained pain. "Spastic constipation is not inherently dangerous, but colon cancer is – and massage therapists are not equipped to

tell the difference."

DON'T PRESUME

TO KNOW ...























Gallstones come in several varieties. Some are formed from cholesterol, some are mineral, etc. Any gallstone can lodge in the ducts that connect the gall bladder, liver, and pancreas to the duodenum. Gallstones are very painful and can cause partial or total blockage. Stones are typically removed surgically or they are broken up with sound waves. If a duct from the pancreas is blocked, it causes pancreatitis.

The 5 F's of gallstone risk: Fair, Fat, Fertile, Female, and Family History.





