DIGESTIVE SYSTEM

THE BALANCE OF LIFE

SESSION I

DIGESTION:

The digestive system – alimentary canal is 30 feet long in adults; however, it can be longer depending on the persons height, weight and gut distention. This system begins in the mouth and extends to the anus. There are several organs and passageways in between the mouth and anus that uptake nutrients and expel waste by products from foods consumed.

Depending on the type of foods, the season in which they are consumed, whether they are chewed well or gulped, and your emotional temperament at the time of consuming them, determines how they will interact with your body.

Digestion is the chemical break down of food into smaller particles that nourish the blood, cells, tissues, and organs. The digestive process discriminates whether food by products remain in the body or releases as waste. If for any reason the digestive process fails, the body is unable to receive nourishment, resulting in mal-absorption, causing mal-nutrition. Malnutrition, reduces the body's immunity, opening it up to a host of unhealthy conditions.

There was a time in family's history when being thin was seen as being unhealthy. Now, it is the opposite. In today's world, being heavy (having some meat on one's bones) indicates that the body is not digesting, absorbing, assimilating nutrients and eliminating food by products in a timely manner, resulting in overweight conditions that can causes other health disharmonies. There are no Fat people in the world, they are just full of waste.

Poor digestion begins in the womb and continues from birth to death. Digestion is the relationship between mother, placenta and baby. It is where the baby receives nutrients and waste is released from the baby's blood. Once a baby is born, breastfeeding is the next step in the digestive process.

Breastfeeding serves several different health relationships in a child's life, it jumps starts the movement of digestion, it embraces the child's ability to comprehend feelings, emotions, touch, attachment, and security in life. It begins the nourishment of the child's ability for nourishment, growth, and development of cells, tissues and organs as it builds their immune system. It balances their microbiome in the small intestines.

Sciences shows that when a child are not breast feed, they tend to have more health disharmonies then children who are breastfeed. In many of us who where not breastfeed, as we age, we find that we have more health disharmonies and must take medications for health stabilize. As we age, our digestive system declines with age.

Improper digestion is an issue neither frequently addressed nor investigated by many health authors when researching obesity and other health conditions. Some researchers may mention the digestive system; however, it is not an in-depth discussion. Maybe the digestive system is not viewed as an important function of food processing in the body or perhaps society is more interested in counting calories, than understanding whether food is being digested. Humans are the only animal in GOD's kingdom that count calories. When we consume foods that are healthy, then

the energy of foods called calories are being absorbed as nutrients were nutrients are enhancing the quality of the body's elements (energy, blood, organs, systems, etc.).

To be truthful, digestion begins in the mind and not in the mouth. It begins with the sensory perceptions of smell, the site of foods, or a conversation about food. These three subjects stimulate the flow of gastric juices through the organs of digestion. Perception increases the salivation in the mouth, churning of gastric juices of the stomach and the movement of peristalsis (motion that move the waste to the colon). Therefore, just the smelling food can create a rumbling sound in the intestinal tract (borborygmus), which is the sound of digestive juices churning. If digestion is unable to separate nutrient from foods, it can turn to waste, and lodge in the body for years. This storage sits the stage for health disharmonies of all types. When the digestive system, mainly small intestines, is unable to and the body is not able to determine the type of substances it is, then it will turn the substance into waste causing fermentation, putrefaction and toxic poisoning, which in some cases results in health conditions or possibly death.

The digestive chemical process includes elements such as enzymes, minerals, vitamins, amino acids, carbohydrates, water, fats, antioxidants and other organic substances. These elements provide the action of building health.

Digestion is a basic act of combustion that converts food into energy. This energy allows us to live healthy. Energy increases or decreases depending on the types of food intake and the body's ability to digest properly.

DIGESTIVE PROCESS

After one has decided to eat food, the food enters the mouth where it is chewed (masticated) and turned into liquid. Food is then mixed digestive enzyme to breakdown starches into sugar. When this process is obstructed or inhibited by a lack of chewing or drinking while eating, the body becomes unable to receive nourishment from food and illness can occur.

Once again, the process of digestion does not begin in the mouth it begins in the mind. The sight, smell or discussion of food, stimulate the olfactory nerve, which promotes digestive juices to flow, inducing the feeling to consume food or beverages. Taste, on the other hand, occurs when food is placed in the mouth, which changes the Ph balance in the mouth and stimulates the flow of the digestive system.

Many food-processing companies enhance foods looks, color and texture with dyes, additives, and preservatives to increase its appeal to stimulate a chemical reaction within your body to trigger craving for their product. In some conditions, consumers can become addicted to the product (coffee, sugar, etc.).

When the digestive process is malfunctioning, the body is unable to extract nutrients from your food allowing waste to accumulate resulting in health disharmonies.

THE MOUTH

The mouth is an acid and alkaline environment, its Ph balance is from 6.2-7.6. ¹ The mouth houses taste buds with sensory receptors that stimulates a chemical reaction to digest starch through an enzyme called amylase. The mouth receptors identify taste, texture, temperature,

¹ pH is the level of potential hydrogen in the body and cells. The pH balance scale is from 0 to 14, with the low number below 7 being acidic and the number above 7 being alkaline.

and form of foods to be digested. However, the body can be fooled by the incorrect combination of food. The results of these incorrect combinations can cause indigestion, gas, constipation and other gastrointestinal illness.

Emotions – worry – impatient – anxiety – anger – joy – fear - can reduce the ability of the body to receive nutrients. Can cause excessive waste storage increasing the scale.

Health Disharmonies: canker sores – cold sores – dental health – gum disease – salivary gland disorders.

Attributes: blocking your voice in life – blocking your nourishment of life – stifling your love for self and other – overzealous in the expression of love.

THE STOMACH

Food leaves the mouth and travels down the esophagus into the stomach. The stomach is found in the left side upper abdomen. Hydrochloric acid in the stomach has a Ph balance of 1.5 to 3.5 where the enzyme pepsin digests protein. Because protein has a nitrogen element, it needs an acidic environment for absorb into the body.

If the acid environment of the stomach is functioning improperly, proteins resulting in acid reflux (GERD), heart burn, hiatus hernia, and another digestive imbalance.

When a person drinks any liquid whether hot or cold at the same time they are eating, it alters the digestive juice balance, (especially hydrochloric acid) hindering the digestive process. When the liquid is cold, it really affects the hydrochloric acid's temperature and disrupts the ability to digest proteins. It is not advisable to drink while eating a meal.

Fluids should be consumed an hour before or an hour after a meal. The only time a person should drink at the time of eating is when taking supplements, and only enough water should be consumed to swallow the supplement. The only other time one should drink and eat is when consuming bulky fibrous foods like brain, psyllium etc.

Protein should always be eaten by itself; it makes it easier to digest. Another thing to remember is that starch will not digest in the stomach because it needs an alkaline environment for digestion. Starches will only ferments in the stomach.

Emotions: Worry – Anxiety – too much thinking reduces the stomachs ability to process protein allowing it to flow into the small intestine where it putrefies.

Health disharmonies – Gastroesophageal Reflux Disease (GERD) – hiatal hernia – dyspepsia peptic ulcers – gastroenteritis - cancer

Attributes: a feeling of lack of fulfillment in life – not able to let go – lack of understanding nourishment of life – discriminate of inabilities in life – undecisive in life – mentally blocking your path to healing.

SMALL INTESTINE

As food leaves the stomach, it enters the small intestines by way of the duodenum where the environment begins to change to a Ph of 6 and move to 7.4, but in the caecum, it drops to a 5.7 before moving to a 6.7 in the rectum. At the same time, the pancreas is secreting enzymes to digest carbohydrates, fats, proteins and nucleic acids (DNA and RNA).

The environmental changes of the small intestine make it the major digestive organ because of the balance of the microbiome. It is the organ that determines whether your body receive nutrients or filles with waste. After the upper digestive tract has processed food into chemical, the small intestine separate waste from nutrients, where the nutrients are absorbed, and a simulated into blood as waste by products from foods are evacuated. When waste is unable to evacuated, it stores in the adipose tissue (fat cell).

The liver manufacture bile and secretes it to the gallbladder, where your gallbladder secreted it into the common ducts to the small intestines to digests fatty.

Emotions: Impatient – joy - blocks the heart's rhythm and slows the flow of Qi and blood. It impedes the small intestine 's ability to absorb, assimilate nutrients and guide separated waste by products to the large intestines and bladder.

Health Disharmonies – malnutrition – malabsorption of nutrients - interruption of cells growth – development – impeding on the healing prosses – obstruction of bowels – obstruction of blood vessels - dysbiosis – cancer – candida albicans – bleeding – celiac – crohn's disease – infections – obstruction – irritable bowel syndrome – h pylori –

Attributes: lack of stability – unable to let go – attachments to thing, people, and places.

<u>PANCREAS/ SPLEEN</u>

The pancreas is in the left upper abdomen area behind the stomach and reach all the way to the live and gallbladder. It is exocrine and endocrine gland with two function, one of which is to secrete digestive enzymes for the digestion of fats (lipases), carbohydrates (amylase) and proteins (proteases). As an endocrine gland, it maintains the balance of your glucose in the blood through the secretion of insulin. It is one of the digestive organs that does not transport food.

The enzymes of the pancreas are very alkaline and when foods from the stomach are over acidic, the pancreas secrets an extremely large amount of pancreatic juice to buffer the acid to aid in proper digestive.

Insulin assists in the digestion of fats, carbohydrates and proteins. It secretes the hormone insulin to balance blood sugar levels. The pancreas, does not

Emotions: worry – anxiety – inhibits the secretion of insulin, interrupting the digestive process.

Health Imbalances: pancreatitis – cancer – cystic fibrosis – lace of hormonal secretions –

Attributes: thinking of failing in life – unable to receive the sweetness of life – lack of identifying direction in life – always looking for sweetness – unable to stabilize life.

THE LIVER

The clearinghouse of your body is the liver. The liver is engaged in performing over 500 different functions, which allows it to aid the body in maintaining health and wellbeing. When the liver is out of balance, the entire body is out of balance. The liver has a pH balance of 7.

The liver converts nutrients from food and the gastrointestinal tract into newly enriched blood. This blood is pumped from the liver through the vena cava (large vein) to the heart where it re-circulates fresh blood back into the body.

Many sugars (starch, carbohydrates, sugar, honey, maple syrup) are transformed into glycogen by the liver, and then introduced into the system as glucose for energy. A healthy liver can except large doses of sugar from intestinal blood and converted to glycogen to be slowly released when needed.

If the liver is not able to filter sugar, it raises the blood sugar level (a sudden burst of energy occurs), which signals the pancreas to secrete large doses of insulin in order to bring the blood sugar level down to normal. This sugar creates a surge of energy that feels warm and alerting the body stability for a half-hour to an hour. After which there is a rapid depletion of energy and the person feels tired or run down.

This is known as low blood sugar or hypoglycemia. The

body craves for more sugar to increase the blood sugar level and the cycle repeats itself all over again. Especially, if the liver does not have enough glycogen to convert back into sugar, so the blood sugar level is boosted once again.

The liver/gallbladder secretes bile salts to aid in the digestion of fat. The bile salts assist the intestinal tract in the assimilation of fats by dispersing fat globules through the system. This allows the pancreas's enzyme lipase to break down fat into fatty acids, which empower them to penetrate the intestinal walls.

Bile salts are detergent agent that emulsifies fats and emit bicarbonates, which aid in neutralizing hydrochloric acid. It also moves the fat-soluble vitamins (A, D, E, and K) and trace minerals through the body. The bile salts stimulate normal peristaltic (wave like) conditions in the colon, as well as filters waste out of the body.

The liver/gallbladder plays an interesting role the in storing and distributing cholesterol within the body. The bile salts are secreted from the liver and stored in the gallbladder until food enters the duodenum (first part of the intestinal tract). Bile is then secreted to assist in fat digestion, turned feces matter and is carried out of the body. With the bile salts, cholesterol and some minerals and vitamins, which are also eliminated from the body.

Emotions: anger – hatred – jealousy – resentment – envy build heat in the liver reducing its ability to detox the blood. It interferes with the flow of Qi and blood. It has the tendencies to cause blood clots. Causes PMS and menopause emotional instability.

Health Imbalances: hypertension – hepatitis – cirrhosis – excessive menstrual flow – irregular menstrual flow – menopause – mental instabilities – lack of blood nutrients – impeding blood circulation – cancer of many types.

Attributes - strengthens and weaknesses of life – storage of emotions – instabilities – lack of self-nurturing – egotistical – confidence – controlling.

GALLBLADDER

The Gallbladder, which is a pear-shaped organ located in the right middle cavity (Jiao) under the liver. The function of the gallbladder is to store, concentrate and secrete bile salts, received from the liver. Bile, which is secreted through the common duct into the small intestines (duodenum), is a fat (lipid) and cholesterol emulsifier that assists in the absorption of fat vitamins (A.D.E.K.). emulsifies that is secreted through the common duct into the small intestines (duodenum). The pH balance of the gallbladder is 6.80 -7.65

Emotions: anger – hatred – jealousy – resentment – envy reduce the secretion of bile. Inhibits courage.

Health Imbalances: gallbladder – cholecystitis – choledocholithiasis – gallbladder cancer – polyps.

Attributes: lack of courage – lack of planning skill - mental confusion – instability in life

APPENDIX

The Appendix is a small, sac that looks like fingers extending from the beginning of the colon. It is a member of the immune system producing IgA as it assists in the maturity of B-lymphocytes (a type of white blood cell). It is a stores sulfur and health bacteria.

Health disharmonies: appendicitis.

Emotions: sadness – grief – fear

LARGE INTESTINE

The large intestine fills the abdominal cavity, and it extends from the ileum into the anus. It is comprised of three parts cecum, colon, and rectum. The large intestine has an additional four parts: the ascending colon, transverse colon, descending colon, sigmoid colon, which terminates at the anal opening. The pH balance of the large intestine is 4-6.5

The primary function of the large intestine is to eliminate waste by products and undigested foods from the body. The large intestine maintains the body's water balance. It absorbs mineral salts (sodium and chloride) and electrolytes from the foods processed in the digestive tract.

The large intestine is also the site where bacteria are stored. Bacteria and the remaining carbohydrates mix to ferment in the intestinal tract, producing hydrogen, carbon dioxide, and methane gases which is released from the body as gas (flatulence).

Proteins and amino acids are broken down in the intestine into indoles, skatoles, hydrogen sulfide, and fatty acids. Some of the indole and skatole are found in the feces, they are what cause the odor. The feces get its brown color from bacteria that decompose bilirubin into urobilinogen. The liver absorbs the rest of indoles, skatole, hydrogen sulfide and fatty acids, converting them into urine.

The bacterium in the large intestines synthesizes and absorbs many vitamins needed for the metabolic process, including some of the B complex vitamins and vitamin K. The large intestines complete its process through peristaltic (wave like movement in the intestinal tract), which force fecal material into the rectum and out of the body.

Emotions: sadness – grief – fear - blocks the flow of waste to be evacuated and the reabsorption of water from the bowie.

Health imbalances: dysbiosis – cancer – bleeding – celiac – crohn's disease – infections – obstruction – irritable bowel syndrome – h pylori

Attributes: holding on to people, places and things – creating blockages in life – obstructing the flow of your blessings in life – fear of what is to come out of life – impeding your life's forward movement.

BALANCING YOUR MICROBIOME:

The **microbiome** is **essential** for human development, immunity and nutrition. The bacteria living in and on us are not invaders but beneficial colonizers. Autoimmune diseases such as diabetes, rheumatoid arthritis, muscular dystrophy, multiple sclerosis, and fibromyalgia are associated with dysfunction in the **microbiome**. Washington University.

Digestive enzymes: assist foods to break down in their proper digestive locations. They assist the body in receiving nutrients.

Probiotics: are elements that promote healthy gut bacteria. They reduce the prevalence of health disharmonies as they enhance immunity. Probiotics are food in the health food stores, some are in the refrigerator and others are on the shelf. During the winter and fall you should take them at night and during spring and summer take them in the morning on an empty stomach.

Some probiotic foods: Yogurt – Kefir – Sauerkraut – Tempeh – Kimchi - Miso