CARDIOVASCULAR SYSTEM

- Consuming fewer calories than you need means that the body breaks down its own tissue to use for fuel. Muscles are some of the first organs broken down, and the most important muscle in the body is the heart. Pulse and blood pressure begin to drop as the heart has less fuel to pump blood and fewer cells to pump with. The risk for heart failure rises as the heart rate and blood pressure levels sink lower and lower.
 - Some physicians confuse the slow pulse of an athlete (which is due to a strong, healthy heart) with the slow pulse of an eating disorder (which is due to a malnourished heart). If there is concern about an eating disorder, consider low heart rate to be a symptom.
- Purging by vomiting or laxatives depletes your body of important chemicals called electrolytes. The electrolyte potassium plays an important role in helping the heartbeat and muscles contract but is often depleted by purging. Other electrolytes, such as sodium and chloride, can also become imbalanced by purging or by drinking excessive amounts of water. Electrolyte imbalances can lead to irregular heartbeats and possibly heart failure and death.
- Reduced resting metabolic rate, a result of the body's attempts to conserve energy.

GASTROINTESTINAL SYSTEM

- Slowed digestion known as gastroparesis. Food restriction and/or purging by vomiting interferes with normal stomach emptying and the digestion of nutrients, which can lead to:
 - Stomach pain and bloating
 - Nausea and vomiting
 - Blood sugar fluctuations
 - o Blocked intestines from solid masses of undigested food
 - Bacterial infections
 - Feeling full after eating only small amounts of food
- Constipation, which can have several causes:
 - Inadequate nutritional intake, which means there's not enough in the intestines for the body to try and eliminate
 - Long-term inadequate nutrition can weaken the muscles of the intestines and leave them without the strength to propel digested food out of the body
 - Laxative abuse can damage nerve endings and leave the body dependent on them to have a bowel movement

- Binge eating can cause the stomach to rupture, creating a life-threatening emergency.
- Vomiting can wear down the esophagus and cause it to rupture, creating a life-threatening emergency.
 - Frequent vomiting can also cause sore throats and a hoarse voice.
- When someone makes themselves vomit over a long period of time, their salivary (parotid) glands under the jaw and in front of the ears can get swollen. This can also happen when a person stops vomiting.
- Both malnutrition and purging can cause pancreatitis, an inflammation of the pancreas. Symptoms include pain, nausea, and vomiting.
- Intestinal obstruction, perforation, or infections, such as:
 - Mechanical bowel problems, like physical obstruction of the intestine, caused by ingested items.
 - Intestinal obstruction or a blockage that prevents food and water from passing through the intestines.
 - Intestinal perforation, caused by the ingestion of a nonfood item that creates a hole in the wall of the stomach, intestines or bowels.

NEUROLOGICAL

- Although the brain weighs only three pounds, it consumes up to one-fifth of the body's calories. Dieting, fasting, self-starvation, and/or erratic eating means the brain isn't getting the energy it needs, which can lead to obsessing about food and difficulties concentrating.
- Extreme hunger or fullness at bedtime can create difficulties falling or staying asleep.
- The body's neurons require an insulating, protective layer of lipids to be able to conduct electricity. Inadequate fat intake can damage this protective layer, causing numbness and tingling in hands, feet, and other extremities.
- Neurons use electrolytes (potassium, sodium, chloride, and calcium) to send electrical and chemical signals in the brain and body. Severe dehydration and electrolyte imbalances can lead to seizures and muscle cramps.
- If the brain and blood vessels can't push enough blood to the brain, it can cause fainting or dizziness, especially upon standing.
- Individuals of higher body weights are at increased risk of sleep apnea, a disorder in which a person regularly stops breathing while asleep.

ENDOCRINE

• The body makes many of its needed hormones with the fat and cholesterol we eat. Without enough fat and calories in the diet, levels of hormones can fall, including:

- Sex hormones estrogen and testosterone
- Thyroid hormones
- Lowered sex hormones can cause menstruation to fail to begin, to become irregular, or to stop completely.
- Lowered sex hormones can significantly increase bone loss (known as osteopenia and osteoporosis) and the risk of broken bones and fractures.
- Reduced resting metabolic rate, a result of the body's attempts to conserve energy.
- Over time, binge eating can potentially increase the chances that a person's body will become resistant to insulin, a hormone that lets the body get energy from carbohydrates. This can lead to Type 2 Diabetes.
- Without enough energy to fuel its metabolic fire, core body temperature will drop and hypothermia may develop.
- Starvation can cause high cholesterol levels, although this is NOT an indication to restrict dietary fats, lipids, and/or cholesterol.

OTHER HEALTH CONSEQUENCES

- Low caloric and fat consumption can cause dry skin, and hair to become brittle and fall out.
- To conserve warmth during periods of starvation, the body will grow fine, downy hair called lanugo.
- Severe, prolonged dehydration can lead to kidney failure.
- Inadequate nutrition can decrease the number of certain types of blood cells.
- Anemia develops when there are too few red blood cells or too little iron in the diet. Symptoms include fatigue, weakness, and shortness of breath.
- Malnutrition can also decrease infection-fighting white blood cells.

*These statistics have been taken from www.nationaleatingdisorder.org

Flutters of Hope Inc. <u>www.fluttersofhopeinc.org</u> <u>hello@fluttersofhopeinc.org</u>