Info taken from the book, Toxic Fat by Dr. Barry Sears, PhD., 2008

- Dr. Sears reveals how weight accumulation is not always what is too often viewed as a singular lack of self-control. He clearly shows how the combination of genetic predisposition along with dramatic dietary changes that have affected our culture for the past 25 years have sabotaged many individuals. The good news is that diet and lifestyle changes can make a difference and this situation can be turned around. Information and understanding are important keys to gaining victory.
- Dr. Sears calls the <u>PERFECT NUTRITIONAL STORM</u>, that has set so many up for disaster, to be the <u>combination</u> of a increased consumption of <u>refined carbohydrates</u> like crackers, chips, pretzels, pizza, pasta, bagels and sugar all which lead to an increased production of insulin levels <u>along with an increased consumption of omega 6 fatty acids</u>. (Please refer to the omega 3 & 6 explanation sheet) These two factors along with a reduction of omega 3 fatty acids in the typical American diet have become a "fat trap". An overwhelming percentage of Americans are genetically predisposed to obesity and the PERFECT STORM activates the genes so that they are expressed.
- The combination of these foods in excess has created an internal environment of inflammation throughout the body. This inflammation makes people "fatter, dumber and sicker," according to Dr. Sears. Most people associate inflammation with pain. The type of inflammation created by the above dietary habits is referred to as silent inflammation because it is inflammation, which is below the perception of pain. This inflammation attacks the organ systems of the body and can lead to slow death by causing the development of chronic degenerative diseases like type 2 diabetes, heart disease, neurological disorders, immunological disorders, Alzheimer's and cancer. Being overweight is one of the initial signs of toxic fat syndrome. Although, thin individuals are not exempt from this situation. Dr Sears points out that thin doesn't always mean healthy. It all depends on what is happening in the internal environment of the body.
- This scenario is the reason so many individuals are powerless to reduce weight. They are often told to eat less and exercise more yet the underlying dynamics of toxic fat will negate the effects of this type of thinking which is based on "calories in" must be less than "calories expended" in order to lose weight. If a person has toxic fat this theory of eating less and exercising more will fail every time.
- The cause of this silent inflammation is a substance called arachidonic acid. Arachidonic acid stimulates fat to increase the production of fat cells which become a toxic fat waste dump for the refined carbohydrates that can no longer be used in the body effectively for an energy source via the production of ATP (the energy source for the body).

- If a person is inefficient at converting calories to ATP then in order to sustain physical activity they need to either:
 - a. eat more
 - b. slow down their physical activity or
 - c. begin to break down their tissues (muscle & organs) to get the necessary calories to form ATP

And all of the above are counter productive to weight loss.

- This toxic fat environment causes disturbances in hormonal balances. Specifically disturbing insulin and the hormones, which govern hunger and satiety in the brain. These hormonal changes must be normalized in order to get out of this defeating situation. There is no drug available that will reverse this detrimental body environment- the only way to change this is by introducing dietary changes.
- According to Dr Sears if you answer yes to any 3 of the following questions you more than likely have toxic fat:
 - a. Are you overweight?
 - b. Are you taking a cholesterol-lowering drug?
 - c. Are you constantly craving carbohydrates?
 - d. Are you groggy upon waking?
 - e. Are you prone to stress?
 - f. Are your fingernails brittle?
 - g. Are you especially hungry two hours after dinner?
 - h. Are you fatigued throughout the day?
 - What is the solution?
 - a. Eat protein at every meal and snack- protein stimulates the production of the hormone glucagon which has the opposite effect of insulin- it increases blood sugar by releasing stored carbohydrates in the liver
 - b. Eat lots of colorful vegetables daily
 - c. Daily supplement with fish oil- it is best to take this after the meal when hunger is most noticeable- for instance many people snack regularly after lunch or dinner- if fish oil is taken after a meal it will help the brain create a feeling of satiety for 4-6 hrs
 - d. Eat 3 meals and 2 snacks during the day
 - e. Look at carbohydrates in a whole new light- they are the source of much of the problem that has developed here
 - f. Reduce the intake of omega 6 fatty acids they are proinflammatory
 - g. Eliminate the use of dairy products (especially high fat) and red meat which are both direct sources of arachidonic acid
 - h. Treat "treats" like condiments.