

EMPOWERED PORTIONS

AMERICA'S SHIFT IN APPETITE

1942	Frederick Stare: Energy Balance Hypothesis – A calorie is a calorie.
1953 & 1956	Ancel Keys – Seven Countries Study later proved to be false.
1977	USDA, Senator George McGovern hires Hegsted to develop first Dietary Guidelines. 55-60% calories from carbohydrates.
Late 1970's	High-fructose corn syrup is poured into > 600,000 packaged foods and items
1992	First Food Guide Pyramid. Fat at the very top – use sparingly.
Late 1990's	Sugar Higher Correlation with Heart Disease.
2003	World Health Organization wants to change recommendations to <10% total energy from sugar. US threatens to cut funds.

HORMONES:

Insulin (storage hormone secreted from the pancreas):

Insulin Sensitivity - A positive thing for the body in which blood sugar can efficiently get into your cells. One whom is insulin sensitive will require smaller amounts of insulin to lower blood sugar. Ability to tolerate carbohydrates, ability to get blood sugar into the cells when needed, prevents hyperglycemia.

Insulin Resistance – A negative thing for the body in which blood sugar can't efficiently get into your cells. Someone may require the need for higher amounts of insulin in order to keep blood sugar in balance. Doesn't happen overnight...repeated exposure to refined carbohydrates, little activity and high levels of inflammation. It enhances the appetite, promotes weight gain and is typically in conjunction with inflammation and risk for various chronic diseases.

Cortisol (stress hormone secreted from the adrenal glands)

Stress - Those that are in chronic "fight" mode due to elevated stress are putting the body at risk for insulin resistance, enhanced appetite for sugar, increased inflammation and increased visceral fat.

Circadian Rhythm – Cortisol is ideally in sync with the Circadian Rhythm. Cortisol is naturally released during certain times of the day in order to match our natural 24-hour cycle that may be modulated by external cues such as sunlight and temperature.

Ghrelin (hunger hormone secreted from the stomach)

Ghrelin efficiency – Ghrelin levels increase roughly every 4 hours while getting to their lowest point approximately 1 hour after a meal has been consumed.

Protein - Consuming adequate protein and dietary fiber is essential for hunger regulation. Listen to the growl and honor your hun

Leptin (satiety hormone secreted from fat cells)

Leptin Sensitivity – one has the ability to stay satiated while having the ability to decrease food intake. Leptin is in sync with the brain to optimize food and body fat satisfaction, promote appropriate appetite and hunger and is essential for regulating food consumption.

Leptin Resistance - Leptin no longer has optimal capability to attach to leptin receptors in the brain. Even if we have high levels of circulating leptin, there is no way for our brain to recognize it...our brain is starved of satiation.

MACRONUTRIENTS

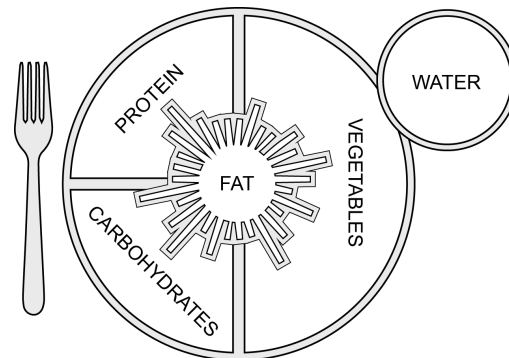
- A type of food required in large amounts in the human diet. “Energy Providing Chemicals”
- Assists in growth and development, proper circulation, and provides energy for proper cognitive function. (Protein, carbohydrates, and fat)

MICRONUTRIENT

- A chemical element or substance required in trace amounts for the normal growth and development of living organisms. (vitamins, minerals, antioxidants)
- Protects our bodies from disease, decrease the aging process and promote proper function of our body systems, break down macronutrients into usable pieces for the body, protects the brain, helps with hormone production, aids in proper digestion, allow cells to rejuvenate, and assist in DNA production

NOURISH RECOMMENDATIONS

- Adequate Protein, Fat, Carbohydrate, Micronutrients & Fiber*
- Limit Trans-Fats
- <5% of Total Energy from Added Sugar
- Set Boundaries around Alcohol
- Set Timing around Meals – when are you going to eat?
- Measure Food – starches, protein and fat sources



RECOMMENDATION

- Academy of Nutrition & Dietetics
- Dietitians in Integrative and Functional Medicine Practice Group
- Sports, Cardiovascular & Wellness Dietetic Practice Group
- Eat Fat, Get Thin – Mark Hyman, MD
- Fat Chance - Dr. Robert Lustig
- Intuitive Eating – Evelyn Tribole & Elyse Resch
- The Obesity Code – Jason Fung
- Wired to Eat - Robb Wolf