11/9/17 Notes

**Energy Drinks**

* High amounts of sugar, caffeine, herbal stimulants and supplements
* Claims of: increased endurance, strength and power, weight loss, feelings of euphoria
* Originated in Asia and Europe in the 60s. Came to US in the 80s (jolt cola)
  + 45-50 mgs caffeine in coke
  + Double in Jolt Cola
  + 150 mgs in a Red Bull
* Bitter orange: not an orange, it’s an herb. May fail a drug test because of it.
* Taurine: believed to enhance the effects of caffeine.
* Glucuronolactone: increases the feelings of well-being
  + Human metabolite formed from glucose
  + When glucuronolactone is taken orally, it is rapidly absorbed, metabolized and excreted
  + Like consuming more sugar.
  + 600 mg/can ----- normal is 250 mg/day.

**Nitric Oxide:**

* Vasodilation: better delivery of oxygen and nutrients. Reduces blood pressure and the amount of oxygen required to do the same amount of work.
* Affects: neuro transmission, calcium handling, glucose uptake, vasodilation, mitochondrial respiration, muscle force production
* Celery salt contains nitrate 🡪 you get more nitrate than a controlled dose of nitrate oxide.

More phosphocreatine: less ADP, more ATP.

Leptin concentration decreases as you lose fat and increases your desire to eat.

Body defends itself against weight loss, extreme diets eventually lower metabolism. (thyroid hormone concentrations drop, lean tissue loss, activity of lipoprotein lipase increases making it more efficient at taking up fat for storage).

Behavior Modification: modify problem (eating) behaviors, chain-breaking, cognitive restructuring, contingency management, self-monitoring.