

## **Nutrition for Energy**

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### **Mitochondria: page 39**

- The energy producer of the cell produces ATP which is used to hold the gated channels open and close for cell function.
- In all cells except RBC's there is an average of 2500 mitochondria per cell.
- Oocytes have 100,000
- Functions as a battery charger, regenerates each ATP 1000x per day.
- Generates 95% of human energy.
- Provides the energy that drives all the cellular processes including nutrient uptake, toxin elimination and cellular repair.
- Defects in mitochondria function leads to Parkinson's and Alzheimer's disease.
- Brain on fire is due to the uncoupling of neuronal mitochondrial function and the release of oxidants.
- Death of the organism occurs when there is a complete loss of its energy producing capacity.
- Brain mitochondria are more susceptible to oxidative damage.
- The brain uses 20% of the body's total O<sub>2</sub>.
- The brain has a relatively low amount of antioxidant enzymes. Brain neurons have limited regeneration capacity. DNA damage remains throughout the lifetime of the neuron.
- **Mitochondrial nutrients- CoQ10, NAC, alpha lipoic acid, magnesium, copper, Vitamins C, E, B1, B12, creatine, glutathione, carnitine, isoleucine, De-tox protocols, anti-oxidants support, Omega-3 (1-3 gm of DHA per day) and Green Energy.**

### **Healthy Bodies:**

- Healthy tissues use glucose for energy.
- Omega-6 promotes tumor growth. It inhibits the enzymatic desaturation of linoleic and linolenic acid.
- Omega-3 stops tumor growth.
- Have to feed the body the right nutrition to stay healthy.

### **Foods and Treatments to Stay Healthy:**

- French fries increase the rate of cancer 30X.
- Omega-6 promotes tumor growth.
- Omega-3 reduces tumor growth- 10 gms a day. Best source is salmon, mackerel, sardines then cod.
- GLA- 2 gms a day.
- Omega-3 has EPA and docosahexaenoic acid (DHA) has inhibitory effects on inflammation and tumorigenesis. This will stop or slow the growth of Metastatic cancer
- \*\*\*\*\* Omega-3 reduces inflammation, reduces angiogenesis, decreases oncogenes, induce differentiation, suppress NFκB, suppresses bcl-2 (apoptosis blocker), and reduces cachexia.

- **DHA** may activate peroxisome proliferator activated receptor which has antiproliferative effects in vitro on prostate cancer cells. It also improves the response of breast tumors to cytotoxic agents.
- 50 human genetic diseases caused by defective enzymes can be remedied or ameliorated with high doses of Vit. B. The coenzyme restores enzymatic activity with several single-nucleotide polymorphisms.
- **Glutamine** is for muscle production.
- Exercise is for mitochondria production, ATP and energy.
- The highest level of energy efficiency is at 30-40 years of age your metabolic rates do not reduce as long as you exercise. 30 minutes of cardio and weights recommended. Have to increase your heart rate.
- Hyperbaric chambers- pure O<sub>2</sub> at high pressure.
- \*\*\* Have to keep your body alkaline.
- Exercise 30 minutes a day aerobic or anaerobic.
- **Vitamin -B3, B6, B9, B12, riboflavin's** are essential for **methylation**.
- Methylation markers are the average size of the RBC. MCV>88, RDW< 11.5.
- **B12** is good for the nerves and DBA proliferate.
- **Zinc** is for sperm production, 50% of men don't have enough.
- 9 servings of vegetables and fruits a day.
- Vit C/ Vit K3 kills cancer cells
- Vit E kills cancer
- **Bioflavonoids**- fruits and vegetables, ginkgo, tangerine every day. Proliferate androgen-independent human prostatic tumor cells. Complete growth retardation is observed with PC-3 cells treated with 100microM quercetin, kaempferol and luteolin. **Green Energy is a good supplement.**
- They also reduce heat attack by 5 xs.
- They reduce all cancer by 9 xs.