Link to Chronic Fatigue and Degenerative Diseases

Reversing 10 Major Causes of Illness Can Save Your Life

Part Two Part of a Three Part Series

Dr. Smith Live

54th Episode

Part Two: You Will Learn 2 Major Potential Root Causes:

- **Hypothyroidism**
- **Hypoadrenia**

Deuteronation may slow down electron transfer in the electron transport chain and decrease production of ATP and less energy will be produced.

Biological effects of deuteronation: ATP synthase as an example

Abdullah Olguncorresponding author1

Theor Biol Med Model. 2007; 4: 9.

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The Link to Chronic Fatigue and Degenerative Diseases

Trace Minerals Associated with Body Organs

- **Thyroid:** Iodine, selenium
- **Pancrease:** chromium, zinc, vanadium
- **Pituitary:** Manganese
- **Adrenals:** Copper
- **Parathyroid:** calcium and phosporous
- **Mitochondria:** magnesium

- **Thymus gland:** iron, magnesium, selenium, and zinc
- **Spleen:** zinc
- **Liver:** copper, phosphorus, selenium, zinc and iron.

- *"IF YOU WANT TO FIND THE SECRETS OF THE UNIVERSE, THINK IN TERMS OF ENERGY, FREQUENCY AND VIBRATION"*

— NIKOLA TESLA

There are many causes for chronic fatigue and other illnesses. There are 10 major issues that must be evaluated as potential root causes:

- **Hypothyroidism**
- **Hypoadrenia**

1. **Hypothyroidism:** The endocrine connection to hypoadrenia
30 MILLION women and 15 million men are affected. Hypothyroidism is frequently associated with hypoadrenia. When thyroid function reduces due to toxicity, nutritional deficiencies, infections, heavy metals, etc. cellular metabolism decreases. Since the adrenal glands are in the biofeedback loop, the adrenals increase their function to raise cellular metabolism. Thyroid hormones are also required for nearly every physiological process in your body. Research in 1878 by William Ord,MD, and 1920s by Dr. Eugene Hertoghe, a medical doctor from Belgium and in the 1950s by Dr. Broda Barnes all discovered lower metabolism as a side effect of an under-active thyroid. A slower metabolism interferes with digestion specially wheat and gluten complexes, and is accompanied by many
clinical symptoms:
• fatigue
• constipation

- headaches
- acne
- infertility
- depression, anxiety and panic attacks
- insomnia
- dry, scaly rough skin
- weight gain
- increase tooth decay
- thinning and loss of hair
- allergies
- weak immune system
- ringing in the ears (tinnitus)
- muscle spasms
- enlarged heart
- high blood pressure
- dizziness
- weak muscle and ligaments
- loss of libido
- cold hands and feet
- mental fog
- apathy
- poor comprehension and memory
- hoarseness
- coarse hair
- fluid retention (non pitting edema)
- high cholesterol levels
- Associated with Fibromyalgia and generalized pain

7 Common factors that suppress thyroid function

1. Fluoride, Chlorine and Bromide: halogens compete for the same receptors that are used in the thyroid gland to capture iodine.
2. Mercury: from dental fillings and fish
3. Radiation: Fukushima Japan March 2011 melt down of atomic reactors

4. Unsaturated fats: block hormone secretion
5. Soy products: phytoestrogens are potent anti-thyroid agents
6. Stress: increase cortisol levels interfere with thyroid function
7. Gluten

Caffeine has been found to block absorption of thyroid hormone replacement, says Dr. Lee. "People who were taking their thyroid medication with their morning coffee had uncontrollable thyroid levels. Alcohol consumption can wreak havoc on both thyroid hormone levels in the body and the ability of the thyroid to produce hormone. Alcohol appears to have a toxic effect on the thyroid gland and suppresses the ability of the body to use thyroid hormone. I

Nutritional Support for Thyroid

1. Natural B complex vitamins
2. Manganese: helps cell membrane activation of conversion of T4 to T3 in the liver.
3. Vitamin C: a large experimental study published in the BMC Endocrine Disorders journal reported that all subjects with benign or malignant thyroid disease had low levels of antioxidants, particularly with selenium, zinc, and vitamin C.
4. Selenium: converts T4 to T3
5. Vitamin E: wheatgerm oil
6. Ayurvedic herb Commiphora mukul: active component is Gugglesterone which helps lower LDL cholesterol, triglycerides, and toxins. Gugglesterones have been used intraditional Ayurvedic medicine in India for several thousand years to help weight management.
7. Zinc

Endocrine System

It's estimated that up to 80 percent of adults experience adrenal fatigue during their lifetime, yet it remains one of the most under-diagnosed illnesses in the United States. When your adrenal glands are fatigued, a condition known as adrenal fatigue or adrenal exhaustion exists. Hypoadrenia is the most common cause of Fatigue that is missed or misdiagnosed by most physicians.

The Optimal Function of Your Adrenal Glands

Your body has two adrenal glands, located just above each of your kidneys. Your adrenal glands secrete more than 60 different hormones, many of which are essential for life:

• **Glucocorticoids.** These hormones, which include cortisol, help your body convert food into energy, normalize blood sugar, respond to stress and maintain your immune system's inflammatory response.

• **Mineralocorticoids.** These hormones, which include aldosterone, help keep your blood pressure and blood volume normal by maintaining a proper balance of sodium, potassium, and water in your body.

• **Adrenaline.** This hormone increases your heart rate and controls blood flow to your muscles and brain, along with helping with the conversion of glycogen to glucose in your liver.

Together, these hormones and others produced by your adrenal glands control such body functions such as:

• Maintaining metabolic processes, such as managing blood sugar levels and regulating inflammation
• Regulating your body's balance of salt and water
• Controlling your "fight or flight" response to stress
• Maintaining pregnancy
• Initiating and controlling sexual maturation during childhood and puberty
• Producing sex steroids such as estrogen and testosterone

Over function is actually what causes them to break down.

One of your adrenal glands most important tasks is to get your body ready for the “fight or flight" stress response, which means increasing adrenaline and other hormones. As part of this response, your heart rate and blood pressure increase, your digestion slows, and your body becomes ready to face a potential threat or challenge. Many of us are constantly faced with stressors (work, environmental toxins, not enough sleep, worry, relationship problems and more) and therefore are in this "fight or flight"
mode for far too long -- much longer than was ever intended from a biological standpoint. The result is that your adrenal glands, faced with excessive stress and burden, become overworked and fatigued. Some common factors that put excess stress on your adrenals are:

• Anger, fear, anxiety, guilt, depression and other negative emotions
• Overwork, including physical or mental strain
• Excessive exercise
• Sleep deprivation
• Light-cycle disruption (such as working the night shift or often going to sleep late)
• Surgery, trauma or injury
• Chronic inflammation, infection, illness or pain
• Temperature extremes
• Toxic exposure
• Nutritional deficiencies and/or severe allergies
• Malocclusions (bad bite): Structural imbalances of the teeth cause distress to the adrenals
• Hypothyroidism: a low functioning thyroid will cause the adrenal to over work to bring up the body’s metabolism.

Signs and Symptoms of Adrenal Fatigue

The deficiencies in certain adrenal hormones will vary with each case, ranging from mild to severe. In its most extreme form, this is referred to as Addison's disease, a condition that causes muscle weakness, weight loss, low blood pressure and low blood sugar, and can be life threatening.

Fortunately, only about four persons per 100,000 develop Addison's disease, which is due to “autoimmune disease” in most cases but can also develop after very severe episode of disstress.

In the more serious cases of adrenal fatigue, the activity of the adrenal glands is so diminished that the person may have difficulty getting out of bed for more than a few hours per day. With each increment of reduction in adrenal function, every organ and system in your body is more profoundly affected.”

Classic signs and symptoms of adrenal fatigue include:

• Fatigue and weakness, especially in the morning and afternoon
• A suppressed immune system
• Increased allergies
• Muscle and bone loss and muscular weakness
• Depression
• Cravings for foods high in salt, sugar or fat
• Hormonal imbalance
• Skin problems
• Autoimmune disorders
• Increased PMS or menopausal symptoms
• Low sex drive
• Lightheadedness when getting up from sitting or lying down
• Sensitivity to bright light
• Decreased ability to handle stress
• Trouble waking up in the morning, despite a full night's sleep
• Poor memory

People with adrenal fatigue often get a burst of energy around 6 p.m., followed by sleepiness at 9 p.m. or 10 p.m., which is often resisted. A "second wind" at 11 p.m. is then common, which often may keep you from falling asleep until 1 a.m.

Those with adrenal fatigue often also have abnormal blood sugar levels and mental disturbances, such as increased fears and anxiety, and rely on coffee, caffeinated sodas and other forms of stimulation to keep them going. The most common symptom of adrenal fatigue is unrelenting fatigue, a feeling of being run down or not able to keep up with your daily demands. And because fatigue is such a common symptom, the syndrome is very often missed or misdiagnosed by physicians.

The Common Medical Test for Adrenal Function Cannot Diagnose Adrenal Fatigue

Adding to the problem of misdiagnosis is the fact that doctors typically use an ACTH (adrenocorticotropic hormone) test to check for problems with your adrenal glands. However, the test only recognizes extreme underproduction or overproduction of hormone levels, as shown by the top and bottom 2 percent of a bell curve. Symptoms of adrenal malfunction, meanwhile, occur after 15 percent of the mean on both sides of the curve. So your adrenal glands could be functioning 20 percent below the mean, and your body experiencing symptoms of adrenal fatigue, and the standard test won't recognize it.

The test that will recognize adrenal fatigue, in all of its stages, is a salivary cortisol test. This is an inexpensive test you can purchase online and do at home, as no prescription is needed. However, if you suspect you have adrenal fatigue a knowledgeable natural health care provider can help you with diagnosis and treatment.

Natural, and Simple, Steps to Recover From Adrenal Fatigue

It takes time to burnout your adrenal glands, and as you might suspect it also takes some time to recover. You can expect:

- Six to nine months of recovery time for minor adrenal fatigue
- 12 to 18 months for moderate adrenal fatigue

• Up to 24 months for severe adrenal fatigue

The good news is that natural treatments are very effective for this syndrome, and with time, patience, and the tips that follow it is possible to recover.

• Probably the single most important area is to have powerful tools and strategies to address the current and past emotional traumas in your life. Prayer, meditation and meridian tapping techniques can be very helpful here. If you were to focus only on one area it would be best to concentrate in this area as this really is the central key to restoring your adrenal health.

• Listen to your body and rest when you feel tired (this includes during the day by taking short naps or just laying down)
• Sleep in (until 9 a.m. if you feel like it)
• Exercise regularly using a comprehensive program of strength, aerobic, core, and interval training
• Eat a healthy nutrient-dense diet: raw foods, fresh juices
• Avoid stimulants like coffee and soda, as these can further exhaust your adrenal glands.

5 Nutritional Factors to Support Your adrenal Function

1. **Natural B complex vitamins:** primarily concerned with low levels of B-12, B-5, and B6 because these B-vitamins are actively involved in cell metabolism. B-5, also known as Pantothenic Acid, helps break down food into proper energy metabolites so you have more energy. B6 is involved in the production of adrenal hormones and B12 helps with energy production. Together, these B-vitamins help reduce adrenal fatigue by providing your body with what it needs to recover.

2. **Vitamin C:** intimately involved in the production of all your adrenal hormones. The highest concentration of Vitamin C in the body is actually in the adrenal glands, so when put in a stressful situation, your adrenal glands use Vitamin C to produce the stress-response hormones.

3. **Magnesium:** A deficiency often results in symptoms like fatigue, depression, muscle cramping, and insomnia. Mg calms down the sympathetic nervous system. According to a recent study: many individuals have a low magnesium status associated with increased chronic inflammatory stress that could be alleviated by increased magnesium intake.

4. **Adaptogens:** Adaptogens are herbs and plant extracts that help the body adapt to stress. Adaptogens help keep everything in balance.

a. **Ashwagandha** - "Ashwagandha has anxiolytic effect and improves energy levels and mitochondrial health"

b. **Holy Basil** - "Tulsi [Holy Basil] has also been shown to counter metabolic stress through normalization of blood glucose, blood pressure and lipid levels, and psychological stress through positive effects on memory and cognitive function…"

c. **Cordyceps Mushroom:** supports greater levels of energy, appetite, stamina, libido, boosts immune system, and endurance, along with improving sleeping patterns.

d. **Pyrroloquinoline quinone (PQQ)**: acts as an antioxidant, enhances mitochondrial function and increases the number of mitochondria. Also exerts neuroprotective effects on adult humans.

5. **Protein:** Supports adrenal repair, keeps energy levels high without causing spikes in your blood sugar. Good choices include beef, wild fish, eggs, free-range chicken and good quality protein powders. Always try to buy your meat organic if possible.

Studies show the body uses 98% of the liquid extract compared to only about 39-53% of a capsule or tablet, meaning the remainder of those ingredients and the money spent on them are just flushed down the toilet.

The 7 worst foods for Adrenal Fatigue are:

- High sugar fruits
- Sugary snacks
- Fast food
- Processed foods
- Refined grains (e.g. white bread, cookies, and pasta)
- Dried fruits
- Coffee