

Smart Life Forum

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NEXT MEETING: Thursday, April 21, 2011, at 7pm

Dr. Mark Starr, MD(H)

on

Hypothyroidism Type 2: Thyroid Hormone Resistance

Short Presentation: "Effective Stress Release"

presented by **Dr. Olga Stevko & Mitchell Stevko**

These two mind-body medicine experts will share easy to use incredibly powerful & effective "stress release" techniques and strategies which can transform your life and your health! In this fun and informative presentation, you will learn how to:

- Eliminate stress in six seconds
- Embrace relaxation & mindfulness to begin healing
- Create more positive & empowered ways of thinking
- Transform stressful thoughts

Dr. Olga Stevko is an internationally renowned mind-body expert and medical doctor from Russia. Her work has been featured on NBC, MSNBC, Russian State TV, and internet media. Dr. Stevko is also a recognized expert in stress reduction, sleep, weight loss, surgery preparation and healing, and anti-aging medicine, and has helped over 1,000 private clients.

Mitchell Stevko is an experienced executive, executive coach, and mind-body expert who has been involved with over 100 successful growth companies. He has co-authored seven mind-body audio programs.

They co-founded Companion Health Products LLC to provide powerful and affordable audio programs for health, healing, and personal growth. Their audio programs are used and sold by doctors and other healthcare providers. Their products have been recognized and endorsed by Complementary Health industry giants including: John Gray (Venus & Mars author), Dr. Stephen Sinatra (the heart MD), Dr. Gary Gordon (the father of chelation therapy), Dr. Tony O'Donnell (the herb doc) and Dr. Richard Hanson (the father of laser dentistry). See

www.TheSurgeryCompanion.com, www.TheStressReleaseCompanion.com, and www.TheSleepCompanion.com.

Seeking SLF videos. The Smart Life Forum board is seeking a few rare videos/DVDs of previous meetings to complete its archive: numbers 2, 3, 23, 29, 30, 33, 40, 42, 70, 97, 98, 99, and 100. Please contact Mike Korek if you find one or more in your private collection.

Foundation for Mind Being Research (www.FMBR.org)

upcoming meetings:

- April 22: **Jean Millay, PhD**: "A 5th Fundamental Force in the Universe".
- May 6: **Bill Guggenheim**: "Afterlife communication"
- May 22: Annual FMBR picnic

Presentation Location:

Cubberley Community Ctr.
Room H1
4000 Middlefield Rd.
Palo Alto, California

*For those who cannot attend
we will have live streaming at
<http://SmartLifeForum.org/live>*

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Meet Dr. Mark Starr MD(H)

(for more information, visit <http://www.21centurymed.com>)

Dr. Mark Starr is board certified by the American Board of Pain Medicine and the Arizona State Board of Homeopathic Medical Examiners. He was also board certified by the American Academy of Physical Medicine and Rehabilitation in 1997. He has been in private practice since 1996 when he began his first pain clinic in Columbia, MO. After 5 years, his practice relocated to Marietta, GA. Dr. Starr recently opened his pain and sports medicine clinic in Paradise Valley, AZ. Dr. Starr received his MD(H) degree from the University of Missouri Medical School in 1990, and completed his residency in Physical Medicine and Rehabilitation at Howard A. Rusk Rehabilitation Center University of Missouri Hospital and Clinics, Columbia, Missouri.



In 2005, he published the widely acclaimed, *Hypothyroidism Type 2: The Epidemic*. Dr. Starr continues to speak internationally regarding his book.

Dr. Starr is a medical doctor who specializes in integrative medicine, pain, hormones, and the prompt rehabilitation of acute and chronic sports injuries. He utilizes a wide array of alternative methods that allow the body to heal itself naturally. These methods include desiccated thyroid, bio-identical hormones, nutrition, homeopathics, trigger point injections, Hans Kraus' protocols and exercises, Tennant Biomodulator, low-intensity lasers, and other energetic modalities.

Dr. Starr's progressive approach to alternative medicine offers cutting-edge therapies designed to accelerate the healing of hypothyroidism, Chronic Fatigue Syndrome, fibromyalgia, Candidiasis, acute and chronic injuries, sprains, strains and fractures.

Future Speakers:

May 19:
"Energy Solutions",
by Richard Gordon,
Quantum-Touch founder

About Smart Life Forum

Smart Life Forum, Inc. is a 501(c)(3) California nonprofit corporation whose primary mission is to provide credible health education to the public with an emphasis on optimal wellness, anti-aging medicine, and longevity.

Annual memberships in Smart Life Forum, Inc. and charitable donations are tax deductible to the extent allowed by law. For information on how to join or make a donation, please visit our website:
www.smartlifeforum.org.

For questions, please contact Mike Korek at (650) 941-3058.

MAIN PRESENTATION**Hypothyroidism Type 2:
Thyroid Hormone Resistance Epidemic****By Dr. Mark Starr MD(H)**

What do chronic pain, diabetes, heart disease, menstrual difficulties, fatigue, joint and muscle pain, headaches, depression, infections and sleep apnea have in common? There's an excellent chance that this apparently disparate collection of disorders – among literally dozens, if not hundreds – indicate abnormally low thyroid (hypothyroid) function.

The thyroid is a butterfly-shaped endocrine gland located at the throat that produces numerous related hormones: thyroxin (also known as T4), triiodothyronine (also known as T3), T2, and T1. T4, the most well-known of all the thyroid hormones, heats the body and speeds metabolism (of fats, proteins, and carbohydrates) and heart rate. T3, the most active form of thyroid hormone, also heats the body and speeds metabolism and heart rate. At best, T4 is only about one-quarter as potent as T3, and in any case, most is converted into the more active T3 by the liver, kidneys, and other body cells. T2 stimulates metabolism, while one animal study showed that T1 cools the body and slows the heart. Together, all four of these related hormones probably act synergistically in ways that are not yet fully understood.

Thyroid under activity, commonly called hypothyroidism, was first reported in London in 1875. According to many reliable sources, including doctors Broda Barnes, David Derry, Jacques Hertoghe (father of Thierry Hertoghe, another well-known endocrinologist and author), and James Howenstine, at least one-third to one-half of the US population suffers from slight to severe hypothyroidism.

With Type 1 Hypothyroidism, the thyroid does not produce sufficient amounts of hormone to maintain “normal” blood levels of hormones, which in turn will maintain normal blood levels of thyroid-stimulating hormone (TSH) produced by the pituitary. Type 1 is estimated to affect about 3% of the US population.

With Type 2 Hypothyroidism, the thyroid gland produces “normal” amounts of hormone, but the cells are unable to utilize

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the hormone properly. Some experts call this “thyroid hormone resistance” (which may be regarded as similar to insulin resistance). Type 2 is more common.

Laboratory tests showing inadequate bloodstream levels of thyroid hormone make it easy to diagnose Type 1 hypothyroidism. However, lab tests fail to detect Type 2 hypothyroidism, because despite adequate bloodstream hormone levels, the cells are unable to accept and utilize that hormone. Since the main problem lies with the cells that are actually utilizing the hormone, a different approach needs to be taken when testing for – and to a certain extent, treating – Type 2 hypothyroidism.

Dr. Starr became interested in the subject for both personal and professional reasons. More than a dozen years ago, he embarked on a quest to heal his own chronic pain, fatigue, and allergies after receiving no relief from the majority of physicians with whom he consulted. Professionally, while treating thousands of people who suffered chronic pain alongside a wide range of disorders, he discovered an underlying cause or contributing factor to their pain was low thyroid function. Dr. Starr’s book is the result of over a decade’s worth of intensive research and writing about the history, problems, politics, personnel, literature, case studies, and treatment related to hypothyroidism.

Endless Disease Conditions

Most people (correctly) regard the thyroid as responsible for proper metabolism. However, this gland plays a major role in hundreds of bodily functions. Here is just a sample of the many symptoms and conditions that can be caused, indirectly or directly, by an under-functioning thyroid gland:

Appetite disruption (heightened or diminished)

Autoimmune conditions, including allergies, lupus, and rheumatoid arthritis

Blood sugar disorders, such as diabetes, hypoglycemia, or a combination of the two

Cancers, all kinds

Cardiovascular abnormalities, including high cholesterol, poor circulation, heart palpitations, hypertension (high blood pressure), and hypotension (low blood pressure)

Dental problems, including chronic gum infections, receding gums, and TMJ or Temporomandibular Joint dysfunction (clenching of the teeth, leading to chronic inflammation and pain in the temporomandibular joint)

Fatigue and lethargy

Gastrointestinal disorders, including irritable bowel syndrome, and impaired digestion leading to constipation and nutritional disorders

Heart conditions, including coronary artery disease from accelerated atherosclerosis (hardening of the arteries), arrhythmia (irregular heartbeat), abnormal blood pressure (either too high or too low), diminished cardiac output, weakness of the heart muscle, and congestive heart failure

Hoarseness of voice, difficulty in swallowing, swollen enlarged tongue, and sleep apnea

Immune response malfunction, leading to increased infections (including *Candida albicans*) in all parts of the body

Mental and emotional problems, including difficulty in cognition, and anxiety, depression, memory loss, manic depression, psychosis, and schizophrenia

Metabolism malfunctions, leading to weight gain (usually) or weight loss (occasionally)

Muscular disturbances, including ataxia (lack of coordination), carpal tunnel syndrome, fibromyalgia, and weakness

Neurological impairment, including but not limited to ear conditions (deafness, tinnitus, and vertigo), headaches and migraines, Multiple Sclerosis, and paresthesia (numbness and “pins and needles” in nerves)

Pain in joints and muscles, including arthritis and fibromyalgia

Perspiration reduction

Reproductive disorders, including birth defects, cysts in breasts and ovaries, endometriosis, infertility, and menstrual disturbances

Respiratory conditions, including asthma, emphysema, pneumonia, and chronic sinus infections

Skin disorders, including acne, alopecia (hair loss), boils, dryness, eczema, hives, and psoriasis

Sleepiness and sleep apnea.

Slowed movement and speech

Structural weaknesses/deformities and impaired ability to repair damaged tissues, manifesting in brittle nails, brittle or scant hair (including baldness), degenerating bones (osteoporosis), malformed bones (scoliosis), and thinning and loss of eyebrows, notably the outer third

Temperature regulation malfunction: intolerance to heat, and excessive coldness, particularly in extremities.

Urinary tract problems, such as urinary infections and especially kidney failure from shrunken, scarred kidneys

Why So Many Conditions?

How is it possible that the malfunction of one tiny gland can influence so many other functions that do not seem related to each other? Consider the most obvious effect of an underactive thyroid: reduced cell metabolism of proteins, fats, and carbohydrates. This not only means inefficient transport of nutrients into the cell membrane, but also inefficient transport of wastes out. As holistic practitioners well know, inadequate nourishment and the buildup of toxins (regardless of the cause) can exacerbate or outright cause virtually all conditions that we call “disease.” The more toxins engorge the cells, the more one becomes susceptible to infections and degenerative conditions. As it turns out, the mitochondria – microscopic energy-burning units of the cell responsible for about 90% of the energy production that our

cells, tissues, and organs require for metabolism – are intimately affected by thyroid dysfunction. Excerpts from Dr. Starr’s book are below:

“Thyroid hormones are responsible for our metabolism. When thyroid hormones are given to animals, trillions of mitochondria increase in size and number. The total membrane surface of the mitochondria increases almost directly in proportion to the increased metabolic rate of the whole animal. My medical school textbook, *The Textbook of Medical Physiology*, states: “It seems almost to be an obvious deduction that the principal function of thyroxin [thyroid hormone] might be simply to increase the number and activity of mitochondria. (Guyton and Hall, 12th edition, p. 911).

There are scores of environmental toxins that interfere with every aspect of thyroid metabolism and cause the mitochondria to malfunction. These include petroleum and petroleum byproducts; pesticides, herbicides and fungicides; heavy metals, among them mercury, arsenic, lead, aluminum, barium, and cadmium; organic solvents, including benzene, toluene, trichloroethylene, and dichloromethane; and numerous other synthetic chemicals. Fat-soluble toxins lodge in the fat cells that lie beneath the skin and surround internal organs.

Faulty thyroid receptors on the cell membranes as well as mitochondrial mutations can cause a hypothyroid condition. “Defective thyroid receptors,” Starr writes, “may prevent a sufficient supply of hormones that are circulating in our blood from reaching the mitochondria and other crucial sites such as the nucleus of the cell. The nucleus is where the thyroid hormones activate genes and stimulate protein synthesis, among a host of other tasks”. This explains why so many people with underactive thyroids have brittle nails and hair, and even bone defects. If the body cannot utilize amino acids to create new, properly formed tissue, the cells will be imperfect and cause structural abnormalities.

You can see how an underactive thyroid can be responsible for so many debilitating and apparently disparate health problems. Just a small sample includes heart disease, digestive disorders, liver malfunction, lupus, muscular pain, neurological impairment, sinusitis, and sleep apnea (caused by a swelling of the trachea and larynx). Also worth noting are Temporomandibular Joint (TMJ) problems. These often accompany hypothyroidism due to slow contraction and relaxation of the muscles. Muscle spasms are common in hypothyroidism, as are arthritic changes and joint effusions (an abnormal buildup of joint fluid).

The biggest error in hypothyroid diagnosis is the medical profession’s excessive reliance on laboratory tests only, to the exclusion of the subjects’ symptoms. When hypothyroidism was first detected in the 1800s, physicians listened to the people who actually had the disorder and based their treatments on what they observed and on what their patients told them. There are many physical signs of hypothyroidism, among them puffy face and lips, hair loss, dry puffy skin, abnormally slow movements and speech, hoarse voice, and intolerance to cold. (Not only does the person subjectively feel chilly, but the hands and feet feel cold to another person’s touch.)

Today, the overwhelming majority of doctors are taught to check only the patients’ blood tests if they suspect hypothyroidism. If the tests are normal, the search begins for other possible causes of their problems. The vast majority of patients with hypothyroidism have normal thyroid blood tests, because the tests do not detect Type 2 hypothyroidism. Countless new syndromes, both mental and physical, have been adopted in [futile] attempts to explain the myriad symptoms related to hypothyroidism.

There is also another very simple hypothyroid indicator that was developed by Broda Barnes, MD, PhD. Barnes told his clients to take their armpit temperature before rising every day, usually over a period of weeks. If the temperature averaged lower than 97.8° F, the person was considered hypothyroid. Starr points out that the basal temperature test for hypothyroidism is “not infallible” – for example, someone might be hypothyroid but have a near-normal basal temperature, suggesting that the higher-than-expected temperature readings may be due to chronic inflammation in the lungs or elsewhere. Nevertheless, Barnes’s temperature test is still an effective and accurate diagnostic tool in most instances.

Treatment for Type 2 Hypothyroidism

1. Hormone Replacement

Whether the person’s thyroid gland is not producing enough hormone or the cells are unable (for whatever reason) to process what the gland is producing, the treatment is the same: replacement hormone. From the perspective of conventional medical training, flooding the system with thyroid hormone, in amounts greater than what laboratory blood tests might indicate are useful or prudent, may seem questionable. But consider the highly dysfunctional state of the mitochondria and/or cell receptors. If you saturate the tissues with enough hormone, for a long enough period, even malfunctioning mitochondria and stubborn receptor sites will start processing and utilizing the hormone. Once the body begins to function correctly, it has the potential to self-correct. Then, conceivably, the hormone dosage can be reduced. This points to the need for careful monitoring of people with Type 2 hypothyroidism. It’s easy to assess a body that is starting to heal, Starr maintains. “The increased basal temperature that results from administering desiccated thyroid is a direct result of enhanced mitochondrial activity.”

What type of pharmaceuticals work best? Up until the 1960s, people suffering from hypothyroidism were given desiccated thyroid derived from pigs. This means the entire dried gland and its contents – all four forms of thyroid hormone, RNA, DNA, and other co-factors. But by the 1970s, isolated thyroxin (T4) was introduced as the “gold standard” of thyroid medications. By definition, thyroxin is only a portion of the thyroid hormone complex. Since it does not contain the synergistic effects of the entire glandular material, not surprisingly, it proved less effective clinically than the desiccated thyroid.

Occasionally, Dr. Starr has found, some people require compounded T3 or T4 only or combinations of the two, because they are either allergic to, or unable to tolerate, desiccated thyroid. Or, they don’t want to take the desiccated pork product for religious reasons. Whatever replacement hormone product is used, it’s crucial that the client be monitored on a regular basis. This includes self-monitoring. The doctor must be willing to work closely with the client as well. And the client must be willing and able to detect physiological changes that indicate too little or too much hormone and regularly report to the doctor.

Significantly, as one’s metabolism becomes more efficient, perspiration will increase, allowing for the elimination of more toxins. As more toxins are eliminated, the better the cells – including the mitochondria and hormone receptor sites – will function. This suggests that mitochondrial defects can be corrected, given enough time.

2. Detoxification

Some of the most significant stressors of mitochondria are heavy metals. Mercury is particularly insidious, as it’s everywhere in our environment and affects the system in devastating ways. It can also be difficult to eliminate. Intravenous chelation therapy has proven effective, but is expensive and time-

consuming. Less expensive but effective alternatives include the oral ingestion of broken cell wall chlorella, liquid zeolite, alpha lipoic acid, and certain amino acids in the correct proportions, often in combination with each other.

3. Nutritional Support

Iodine is essential for proper thyroid function. Potassium iodide is absorbed directly by the thyroid gland, whereas iodine tends to be more heavily concentrated in the breasts, reproductive organs, and respiratory tract (including the sinuses). Both forms of iodine are necessary for optimal functioning. Some types of seaweed added to the diet, such as dulse, provide large quantities of iodine.

To assist in the conversion of T4 to T3, supplementation with selenium, zinc, and vitamins E and B6 are usually indicated. Manganese, known to protect the thyroid and liver, is sometimes called the “anti-pear nutrient,” so named because it helps eliminate the faulty weight distribution pattern common with hypothyroid people. Thyroid hormone increases the enzyme levels in the body. Since vitamins are essential constituents of both enzymes and co-enzymes, increased thyroid hormone levels require a higher intake of vitamins.

4. Glandular Support

Adrenal and thyroid functions are intricately related. Sometimes, hypothyroid subjects are unable to tolerate even sub-therapeutic amounts of thyroid hormone due to adrenal fatigue. (In their attempt to raise the energy of the body and compensate for the under-activity of the thyroid gland, the adrenals have overworked and are now exhausted.) Therefore, support for the adrenals, other glands, and even the hypothalamus may be indicated during or even before beginning thyroid hormone therapy.

Dr. Mark Starr's Clinic

In early 2008, Dr. Mark Starr left his established and thriving pain clinic in Atlanta, Georgia, to relocate to Phoenix, Arizona, where he continues to practice his specialty: the elimination of pain and the treatment of hypothyroidism, usually with desiccated thyroid hormone. Starr also specializes in sports injuries, using FDA-approved and FDA-cleared electromedical devices that include a state-of-the-art laser and the Tennant Biomodulator.

Summary

Dr. Mark Starr's book, *Hypothyroidism Type 2: The Epidemic*, is essential reading for both professionals and laypersons. The book cites long-term studies, involving thousands of subjects, showing that hypothyroidism is rampant. Starr's book also explains how Type 2 hypothyroidism develops and describes the best treatments for it. The many photographs in the book of hypothyroid people, before and after treatment with thyroid hormone, reinforce the differences between hypothyroidism and normalcy in an unmistakable and striking way. Anyone who looks at these “before” photographs is bound to recognize someone they know – someone who could have been helped to overcome a debilitating condition, if only they or their doctors knew about it.

Unfortunately, hypothyroidism is often the last possibility considered for those who are unwell. Since thyroid hormones are intricately related to virtually every bodily function, hypothyroidism can cause or exacerbate an almost unlimited number of conditions that initially might not seem related to each other.

This points to the importance of applying an integrative approach to how the body functions, instead of perceiving various conditions as discrete “diseases.”

Laboratory tests for hypothyroidism miss the vast majority of sufferers. The most commonly performed, “gold standard” tests do not reveal what is occurring at the cellular level. If the cells are unable to utilize and process thyroid hormone, even with normal bloodstream thyroid hormone levels, the person has hypothyroidism – in this case, Type 2, which is pervasive in a large percentage of the population and unrecognized by mainstream medicine.

Resources:

Dr. Starr’s website, www.21centurymed.com

Townsend Letter, 12/08: *Hypothyroidism Type 2 - A New Way of Looking at an Old Problem*, by Nenah Sylver

Hypothyroidism Type 2: The Epidemic, by Mark Starr, 2005 (updated version, 2010)

Why Do I Still Have Thyroid Symptoms? When My Lab Tests Are Normal: A Revolutionary Breakthrough in Understanding Hashimoto's Disease and Hypothyroidism, by Datis Kharrazian, 2010

Hypothyroidism: The Unsuspected Illness, Broda Barnes, 1976

The Hormone Solution: Stay Younger Longer with Natural Hormone and Nutrition Therapies, Thierry Hertoghe, 2002