Health and Fitness by Combating Hormonal Decline, Compromised Metabolism, and Toxicity.

(by Dr Xanya Sofra)

We age because the biochemical processes that sustain life generate toxins that cause damage which accumulates despite endogenous repair. Toxicity interferes with the entire endocrinological system leading to a resistance in losing weight. (Dacu al 2016, Textbook of Modern Toxicology Hodgson 2004.) The decline of metabolic hormones in ageing causes a reduced resting metabolic rate (calories burned when the body is at rest), leading to weight gain and low-grade inflammation.

Sex hormones strongly influence body fat distribution and adipocyte differentiation. Estrogens and testosterone differentially affect adipocyte physiology leading to Obesity-associated hypotestosteronemia in males. (Liziano and Guzman 2014) Estrogens deficiency enhances metabolic dysfunction in women. (Carr 2003S)

Compromised metabolism results in increased visceral deposits signifying elevated toxicity since adipocytes store toxins. Blood carrying visceral fat cells, stuffed with excess triglycerides, take free fatty acids into the liver, pancreas & other organs causing dysfunction, impairing regulation of insulin & cholesterol. Fatty liver is enlarged by visceral fat invading it and rendering it ineffective in tis normal functioning.

A recent systematic review and meta-analysis including 2.8 million people and 270,000 deaths reported increased overall mortality only in those with extreme obesity (BMI > 35 kg m $^{-2}$, hazard ratio (HR) 1.29, 95% confidence interval (Fui et al, 2014)

The deleterious effects of obesity can be counterbalanced by exercise. C-reactive protein concentration for participants who engaged in physical activity were 0.53 (95% confidence interval =0.40–0.71) for vigorous exercise, 0.85 (0.70–1.02) for moderate exercise, & 0.98 (0.78–1.23) for light exercise, during a 30 day period, compared with participants who did not engage in any leisure-time physical activity.

However, most aged and overweight individuals have difficulty exercising or cannot exercise due to medical reasons. Clinical studies conducted under medical supervision (Badami, Barnard, Lampe and others) have shown that a London University technology inducing effortless exercise serves as a solution for such individuals. Effortless exercise offers an 8 seconds full contraction that involves the co-coordination of large muscle groups (e.g. abdomen, buttocks, chest, legs, arms)

working together, simulating strenuous exercise. This is a very different process from muscle stimulators' multiple bursts of electrical current that continuously twitch uncoordinated individual muscles. Muscle stimulators have been widely criticized by research for increased muscle cells apoptosis as a result of trapped calcium resulting to a pause in ATP production. (Pinton et al 2008 and others)

Goldspink et al (1991) found that effortless exercise technology produces rapid hypertrophy, reflecting changes in gene expression (detected by analysing the RNA). This expression involved skeletal genes that are associated with overload, stretch and physical exercise implying a kinsmanship between effortless exercise and physical activity. A study with 8 subjects receiving 6 treatments of effortless exercise within 3 weeks showed a significant decrease in BMI, body fat and an increase in muscle mass when compared to six weeks of physical exercise (Weiss, 2011). A follow up study (Ballot and Weiss 2012) that offered 12 effortless exercise treatments to 19 subjects found a statistically significant reduction of visceral and subcutaneous fat and a statistically significant increase of muscle mass in magnetic resonance imaging slides (MRIs).

Effortless exercise was originally built in London University in 1994 for Multiple Sclerosis after a 17 years research by the co-inventor of the first Pacemaker. Since then there have 24 upgrades, with the latest upgrade (Virtual Gym Unique II) being launched in August 2018. During treatment, voltage drives motor nerve blueprint copies through the skin to the central nervous system (a process similar to needle-less vaccination). Motor nerve excitation spreads throughout the CNS (like a domino effect), reaching the brain and inducing the release of hormones whose metabolites utilize adipocyte contents as an energy source to increase muscle mass. Hormonal concentration increases (T3, IGF-1, DHEA and Testosterone) have been shown by a number of medical doctors conducting clinical studies (Pollock, Barnard, Lampe, Gizerski, Badami, Ali, and others).

In a nutshell the crucial requirements for effortless exercise to work are:

- 1. Signalling compatibility with motor nerve signals. CNS discards all signals that are incompatible with its signalling network.
- 2. Resonance between incoming motor nerve blueprint signals and biological motor nerve signals resulting in lightening waves of motor nerve signals that spread via the CNS network reaching the brain to trigger hormonal release.

The technology employs original handmade mechanisms that safely reach visceral fat while inducing a powerful detoxification by specific complex signalling waveforms that target the lymphatic system. Lymphatic drainage is further reinforced by the experimentally observed phenomenon of RBC's separation (RBCs carry waste products to the liver and kidneys for their eventual excretion). The additional benefit of blood separation results in a more efficient oxygen and nutrients transport for

cellular nourishment and survival, as well as antibodies to their sites of action, ultimately strengthening the immune system.