



Newsletter

Contact us



877.656.9596



newsletter@labrix.com



True Weight Management by Harnessing Individual Hormone, Neurochemistry and Epigenetic Expression

There are few more frustrating or more important health concerns than regaining a lean body mass, when all too often a patient has spent his/her lifetime yo-yo dieting. It is estimated that seventy percent of U.S. adults are overweight or obese. Today's children are the first generation of Americans expected to age more quickly and die younger than their parents. The truth is we all want to fit into our jeans, yet it is our GENES that need our focus. They impact personality, habits, addictions, hormonal and neurotransmitter wellbeing, and yes, waistlines too. For many, this struggle is all about the science of epigenetics, and learning how to modify gene expression.

The human genome has not changed over the last 10,000 years, yet obesity was not the standard until recently. Certainly we can argue food scarcity and increased exercise were major contributors to the leaner population of yester years, but what other factors may be at work at the genetic and cellular levels contributing to the lean populations of the past and the overweigh population of the present? Educated clinicians already counsel proper dietary and exercise habits. There are additional factors that we must consider for our patients who struggle with weight management; especially for those who work out regularly, eat well, listen to our advice and yet still feel "stuck" in the Duncan^(TM) yo-yo competition of loss, gain, loss, gain. For these individuals, the missing factors may lie in the delicate balance of the neuroendocrine system which ultimately determines whether we reach our peak health potential or manifest the worst of our genetic potential.

We all know that neurochemistry is not limited to the Central Nervous System (CNS), as seventy percent of serotonin is located in the gut, and abundant supplies of catecholamines reside in the periphery and the adrenal medulla. Clinically, altered serotonin, dopamine and other catecholamines impact our potential for weight gain, over-eating and multiple disease states. Combine this with endocrine disruptors, as well as the hormonal changes of adolescence, adulthood, menopause/andropause and senescence, and we start to see that there are clues that are just begging to be evaluated and modified.

Our patients are fortunate to live in an era that allows for the quantification of sex hormones, adrenal cortex hormones such as cortisol, adrenal medulla contributions of norepinephrine and epinephrine, and so much more. It is the holistic provider that can best treat the WHOLISTIC person that presents to our clinics.

The evidence pointing to these neuroendocrine imbalances as key contributors to weight management is plentiful. For instance, one study showed that obese, hypogonadal men lost an average of 36 pounds during long-term testosterone replacement therapy and lost about 3.5 inches from their waistline. In another recent study of testosterone replacement in men, more than half of the men (53%) lost at least 33 pounds, and almost a third lost 44 pounds or more. Similarly, 86% of the participants had at least a 2 inch reduction in waist circumference, and 46% dropped 6 inches or more. (1)

Likewise, if we explore the hormonal impact of excess estrogen in women and men, we often see weight gain. The question is, what were these same individuals like when they were between the ages of 12 to 15? Were they overweight? The rare "yes" to that question will prompt the astute clinician to explore those formative years closely. However, more often than not, weight started loading on as wear and tear on the body began to mount due to continued and chronic stress.

Neuroendocrine imbalance is not to blame for all weight struggles, and addressing the underlying lifestyle causes beyond diet and exercise is vitally important. This is emphasized by a sleep and weight loss study conducted and reported in 2011 by Kaiser Permanente. Their conclusion was simple and impactful; they found that people who slept 6-8 hours a night and reported lower stress levels lost the most weight. Individuals trying to lose at least 10 pounds were more likely to reach that goal if they had lower stress levels and slept more than six hours but not more than eight hours a night. Proper amounts of sleep may have more than a direct impact on weight loss as demonstrated by another recent study showing that sleep deprivation alters brain activity (hence neurotransmission) as it relates to food, increasing the activity in the area of the brain that is associated with the desire to eat.

This topic will be explored further during next month's webinar as we discuss the 5 major transitional phases of life, and steps to best understand an individualized approach to each patient that maximizes their personal health and weight goals. Join Dr. Chris Meletis, ND for the upcoming webinar, Weight Loss Programs Based on Your Patients Hormonal & Neurotransmitter Levels on June 6th, 2013 at 3:00 pm PSTD as like-minded clinicians gather to explore new and novel ways to win the battle of health for our patients. [Click here to register.](#)

Resources

1. Saad F, et al "Restoring testosterone to normal levels in elderly men is efficacious in weight reduction. A follow-up study over 5 years" ENDO 2012; Abstract SAT-118
2. C R Elder, C M Gullion, K L Funk, L L DeBar, N M Lindberg, V J Stevens. "Impact of sleep, screen time, depression and stress on weight change in the intensive weight loss phase of the LIFE study." International Journal of Obesity, 29 March 2011.
3. Christian Benedict, Samantha J. Brooks, Owen G. O'Daly, Markus S. Almèn, Arvid Morell, Helgi B. Schioth, et al. "Acute Sleep Deprivation Enhances the Brain's Response to Hedonic Food Stimuli: An fMRI Study." J Clin Endocrinology & Metabolism, January 18, 2012

Upcoming events

West Coast Core Training
July 27, 2013
[Register Here](#)

Weight Loss Programs Based on
Your Patients Hormonal &
Neurotransmitter Levels
June 6, 2013 at 3:00pm PSTD
[Register Here](#)