



Newsletter

Contact us



877.656.9596



newsletter@labrix.com



The Father's Day Gift That Keeps Giving

June is the month when we celebrate our fathers and grandfathers, but did you know that it is also Men's Health Month? The purpose of Men's Health Month is to heighten the awareness of preventable health problems and encourage early detection and treatment of disease among men and boys. Though women are much more likely to visit their doctors, both when they are ill and for preventative care, a proactive approach can make a world of difference for male patients as well.

Among the most looming of health concerns for many men are the fluctuating blood sugar levels, hypertension, elevated BMI and other signs and symptoms that are part of a larger picture we call metabolic syndrome. This condition is extremely prevalent and statistics suggest that the situation is only getting worse. A CDC report from 2009 estimates that 34% of Americans meet the criteria for metabolic syndrome and this prevalence increases with age (51% of males over the age of 60 fall into this category).¹ Though treatments for metabolic syndrome should always include lifestyle alterations including a diet of predominately high fiber, low glycemic foods and exercise incorporated into a daily schedule, what many patients and their health care providers miss is the important role that testosterone plays in the metabolic syndrome picture.

Testosterone replacement in hypogonadal men has repeatedly been shown to improve insulin resistance, and reduce abdominal obesity and the risk of cardiovascular disease. There are a number of mechanisms through which this action occurs including the testosterone induced reduction of lipoprotein lipase activity and consequent uptake of triglycerides in visceral adipose cells^{2, 3}, increases in lean muscle mass and improved insulin sensitivity in muscle cells⁴ and the alteration of cytokine profiles that reduces inflammation, a major contributor to cardiovascular disease.⁵ Unfortunately, the prevalence of low or suboptimal testosterone levels is quite common. A 2006 study designed specifically to estimate the prevalence of this problem concluded that approximately 38% of men over the age of 45 had total serum testosterone levels that were below 300 ng/dl⁶, which is low by many standards and suboptimal at the very least. This number is alarming on its own, but becomes particularly interesting when we understand that a relatively small percentage of that testosterone is available for tissues to use. Some 95-97% of all testosterone circulating in the system is bound to carrier proteins, including sex hormone binding globulin (SHBG), and the small percentage that is NOT bound is really the number we should be most interested in because that is what is available for use. In addition to the decline in TOTAL testosterone levels, there are several factors that cause an increase in SHBG levels rendering even less of the hormone available for action at the tissue level.

Salivary hormone testing measures only the fraction of the hormone that is available to the tissues and provides an invaluable tool for monitoring testosterone levels, enabling proactive treatment that can prevent many of the problems associated with metabolic syndrome. This Father's Day, let's give the men in our lives more than another neck tie or DVD. Provide them with the knowledge and empowerment to make positive changes in their health.

Resources

1. Ervin RB. Prevalence of metabolic syndrome among adults 20 years of age and over, by sex, age, race and ethnicity, and body mass index: United States, 2003-2006. National health statistics reports; no 13. Hyattsville, MD: National Center for Health Statistics. 2009.
2. Rebuffe-Scrive M, Marin P, Bjorntorp P. Effect of testosterone on abdominal adipose tissue in men. *Int J Obes*. 1991 Nov;15(11):791-5.
3. Marin P, Oden B & Bjorntorp P. Assimilation and mobilization of triglycerides in subcutaneous abdominal and femoral adipose tissue in vivo in men: effects of androgens. *J Clinical Endocrinol Metab* 1995(80) 239-243.
4. Holmang A & Bjorntorp P. The effects of testosterone on insulin sensitivity in male rats. *Acta Physiologica Scandinavica* 1992 (146);505-510.
5. Malkin CJ, Pugh PJ, Kapoor D, Jones RD, Channer KS & Jones TH. The effect of testosterone replacement on endogenous inflammatory cytokines and lipid profiles in hypogonadal men. *J Clin Endocrinol Metab* 2004 (89) 3313-3318.
6. Mulligan T, Frick MF, Zuraw QC, Stemhagen A, McWhirter C. Prevalence of hypogonadism in males aged at least 45 years: the HIM study. *International Journal of Clinical Practice*. 2006: 60:762-769.

Check out tomorrow's webinar

In tomorrow's webinar 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 PST as like-minded clinicians gather to explore new and novel ways to win the battle of health for our patients. [Click here to register.](#)

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 PST
[Register Here](#)