bostonheart
diagnostics®

Curated Women's and Men's Health Profiles

Boston Heart is proud to offer 2 curated profiles for the assessment of women's and men's health. These profiles are excellent for monitoring risk factors for cardiovascular disease, diabetes, and metabolic and hormonal dysfunction.

These conditions are widespread and very common among patients, but they are largely treatable, reversible, and/or preventable. The right combination of blood tests is needed to unmask risk factors and optimize health.

Cardiovascular and Diabetes Risk

Advanced Lipid Testing and Inflammation

Routine lipid testing is insufficient to identify and monitor patients' cardiometabolic risk adequately. Small Dense LDL-C, Lp(a), and fatty acids are all important for uncovering and treating hidden risk. Inflammation in the arteries is an important cause of cardiovascular risk. Basal levels of the inflammation marker, CRP, are good measures of CVD risk after ruling out other causes of inflammation.

Fatty Acids

Fatty acids are essential to heart health. Balancing fatty acids can improve cholesterol and triglyceride levels, improve immune system function as well as reduce inflammation and rate of heart disease. The Boston Heart Fatty Acid Balance™ test measures the major fatty acids (FA) for the purposes of cardiovascular disease characterization and management.

Glucose Testing

Prediabetes is a serious health condition where blood sugar levels are higher than normal, but not high enough yet to be diagnosed as type 2 diabetes. Approximately 96 million American adults—more than 1 in 3—have prediabetes. Of those with prediabetes, more than 80% don't know they have it. Prediabetes puts you at increased risk of developing type 2 diabetes, heart disease, and stroke.

Over 37 million people in the U.S. have diabetes with approximately 1 in 4 undiagnosed. Diabetes is associated with a significantly increased risk of developing CVD, stroke, peripheral vascular disease, kidney failure, neuropathy, and retinopathy.

Hormonal Imbalance

Hormones affect how patients feel and how well their body functions. They affect mood and can influence personality, behavior and decision making. They also affect metabolism, sex drive, and physical appearance. In women, hormones also affect fertility, the menstrual cycle and symptoms of menopause. Men's testosterone levels are higher than women's, accounting for many of the physical and other differences between the sexes.

Imbalances happen when there is too much or not enough of certain hormones. The imbalance can happen suddenly or gradually over time. Some imbalances cause physical illness, while others reduce quality of life. Many hormonal imbalances require testing and evaluation of underlying causes to determine the appropriate treatment options.

Examples of hormonal imbalances are:

Irregular menstruation	Constipation
Infertility	Diarrhea
Acne	Depression or anxiety
Obesity	Hair loss
Diabetes	Fatigue
High cholesterol	Erectile dysfunction (ED)
Thyroid disease	Vaginal dryness.

Metabolic Dysfunction

Electrolytes, kidney function, liver function and other measures of normal metabolic activity are valuable tools for health assessment and patient management. When deficiencies are detected, it is important to understand the underlying cause to determine treatment options.
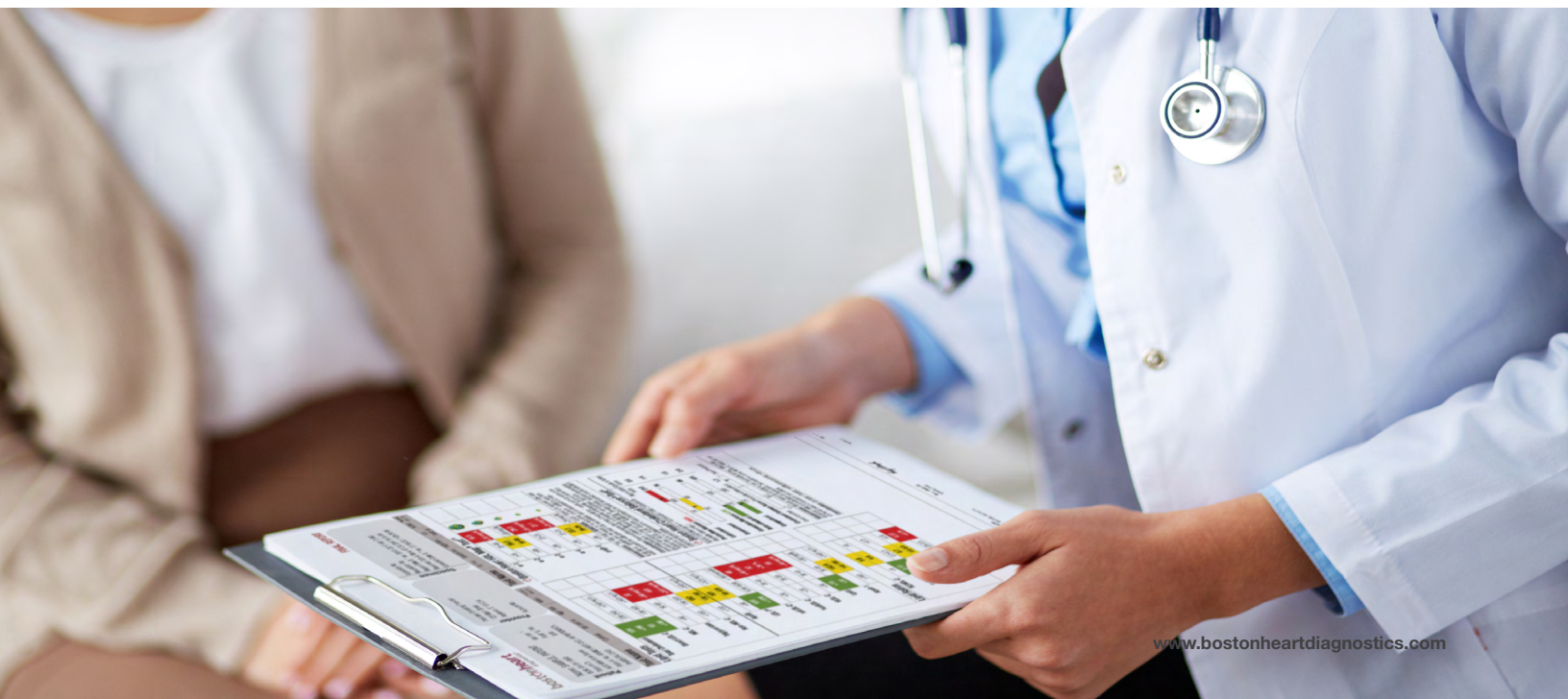
PROFILE COMPARISON

BIOMARKER NAME	WOMEN'S HEALTH	MEN'S HEALTH	BIOMARKER DESCRIPTION
ORDER CODE	87209	87208	
Lipids			
Total cholesterol	✓	✓	Measures the amount of cholesterol in all cholesterol-containing lipoproteins.
Direct LDL-C	✓	✓	Amount of cholesterol in the atherogenic low-density lipoproteins.
Small dense LDL-C (sdLDL-C)	✓	✓	Amount of cholesterol in the densest and most atherogenic LDL-particles. Stronger predictor of CVD than apoB or LDL-P. Includes % sdLDL-C.
Non-HDL-C	✓	✓	Calculation that represents the cholesterol carried by all atherogenic particles.
HDL-C	✓	✓	Higher levels of HDL are associated with reduced CVD risk, but not all HDL is good.
Triglycerides	✓	✓	Elevated levels increase CVD risk by altering lipoprotein metabolism.
Lipid Ratios	✓	✓	TC/HDL-C is a stronger risk factor than LDL-C or HDL-C. Low HDL-C/TG is associated with insulin resistance.
Lp(a)	✓	✓	Elevated levels, present in 20% of the population, are an independent risk factor for CVD.
Fatty Acid Balance	✓	✓	Measures saturated, trans, mono, omega-6, and omega-3 fatty acids. Includes EPA and DHA.
Metabolics			
Glucose	✓	✓	Fasting glucose is a strong predictor of diabetes and CVD risk.
Inflammation			
hs-CRP	✓	✓	Acute phase inflammatory protein. Associated with atherosclerosis after excluding other causes.
Hormones			
TSH	✓	✓	TSH regulates thyroid gland function and is useful in screening for hypo and hyperthyroidism.
DHEA-S	✓	✓	DHEA-S is an androgenic steroid secreted by the adrenal cortex and is the major androgen precursor.
Estradiol	✓	✓	Estrogens in women affect the menstrual cycle and reproduction and maintenance of female secondary sex characteristics. In men, estrogens are important for libido, sexual functioning, and sperm production.
SHBG	✓	✓	SHBG is a glycoprotein that binds to sex hormones, specifically testosterone and estradiol.
Total Testosterone	✓	✓	Total testosterone includes free and protein-bound testosterone. It is produced in the testes in response to luteinizing hormone. Testosterone is also produced by the ovary and adrenal cortex in small amounts.
Free Testosterone		✓	Free testosterone is a calculated estimate of testosterone that is not bound to SHBG. It reflects active hormone.
PSA		✓	Increased PSA levels are associated with an increased risk of prostate cancer.
LH	✓		LH is one of the gonadotropins of the anterior pituitary gland that works with FSH to induce ovulation of mature follicles and secretion of estrogen by the ovary.
FSH	✓		FSH is one of the gonadotropins of the anterior pituitary gland that stimulates the growth and maturity of Graafian follicles in the ovary.
Progesterone	✓		Promotes normal sexual function and secondary sex characteristics in women, as well as to prepare the uterus for implantation of the fertilized ovum and to maintain pregnancy.
Cortisol	✓	✓	Cortisol, the primary stress hormone, is involved in regulating blood sugar, blood pressure, and inflammation.
Chemistries			
Comprehensive Metabolic Profile	✓	✓	Includes Na, K, CO2, Cl, BUN, Creat, Glu, Ca, ALT, AST, AlkPhos, Tbil, Alb, TP and eGFR.

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Boston Heart Diagnostics, a subsidiary of Eurofins Scientific (EUFI.PA), offers a comprehensive and integrated approach to enhance care management. We accomplish this by using the following three phases, each an integral part of our success:

Characterize: Diagnostics that drive reports with color coded test results, interpretations and clinical treatment considerations that help characterize risk, develop insight and communicate more reflectively with patients.

Individualize: Diagnostic reports communicate test results into actionable, individualized and easy-to-understand steps which improves patient engagement, health literacy and adherence to treatment plans.

Engage: Personalized Nutrition and Life Plan will use the patients' lab results and food preferences to provide personalized and easy-to-follow lifestyle direction so patients can improve their test results and reduce their chronic disease risk.