Lab Results for Ben Greenfield

Last Test Date: 2014-04-23

Vital Signs

While vital signs often do not give as much specific information as blood tests, they are commonly tracked as macroscopic measures of health.

Weight

Weight Your weight	●	180
Body Mass Index Measure of weight to …	●	23.1

Cardiovascular Health

Your cardiovascular system is made up of your heart and blood vessels, and is responsible for transporting oxygen, nutrients, hormones, and waste products throughout the body. A healthy cardiovascular system ensures a good balance of nutrients and optimal brain and body function.

Basic Lipid Panel

The basic lipid panel includes cholesterol levels (both the good HDL and the bad LDL and other non-HDL cholesterols), as well as triglycerides. Elevated levels of triglycerides or non-HDL cholesterol can increase your risk of cardiovascular disease, which can lead to heart attacks and strokes. Higher levels of artery-clearing HDL, however, can reduce this risk.

Total to HDL Ratio Total Cholesterol to H…	●● ─ ●●● ─ ●	1.8
Triglycerides to … Ratio of Triglycerides t…	●● ─ ●●● ─ ●	0.3
HDL "Good" Cholesterol	●● ─ ●●● ─ ●	129
LDL Less Healthy Low-De…	●● ─ ●●● ─ ●	97
Triglycerides Type of Fat	●● ─ ●●● ─ ●	35
Total Cholesterol A Type of Fat	●● ─ ●●● ─ ●	233
Non-HDL Choles… All Less Healthy Chol…	● ─ ●	104

LDL Particles

Higher levels of LDL or "bad" cholesterol can result in increased amounts of plaque in your blood vessels, which can obstruct blood and oxygen flow to vital organs. While almost half of those with heart attacks have normal basic lipid panels, two-thirds of heart-attack victims have elevations in other types of LDL particles. By reducing those deeper LDL numbers, you can reduce your risk of a heart attack and stroke.

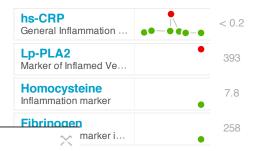|	
Apo B Protein in LDL ("Bad") …	76
Lp(a) Different Form of LDL	10
Lp(a) Mass Total amount of Lp(a)	5
vLDL-C Precursor to LDL Chol…	8

HDL Particles

High density lipoprotein particles are often referred to as "good cholesterol" because they are associated with a lower risk of developing cardiovascular disease.

Apo A1 Protein in HDL ("Good…	214

Inflammation

Inflammation is your body's reaction to stress or injury. Though inflammation can be helpful in the short-term, long-term inflammation can be harmful and contribute to many chronic diseases, such as cardiovascular disease, cancer, diabetes, dementia, and osteoporosis.

hs-CRP General Inflammation …	< 0.2
Lp-PLA2 Marker of Inflamed Ve…	393
Homocysteine Inflammation marker	7.8
Fibrinogen marker i…	258

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Fatty Acids

Fatty Acids are oily substances that help build cell membranes, though in excess increase deposits in blood vessels leading to cardiovascular disease.

Free Fatty Acids

Free fatty acids (FFAs) enter the bloodstream when fat is metabolized, or broken down. An excess amount of free fatty acids can increase clogging deposits in blood vessels leading to cardiovascular disease.

Free Fatty Acids Fatty acids	0.35

Index

The omega-3 index is an indicator of how much of two fatty acids, EPA and DHA, you have in your blood. Studies have found that a lower omega-3 index may be linked to a higher risk of sudden cardiac death. Increasing your EPA and DHA intake could be beneficial to your cardiovascular health.

Omega Index Amount of omega-3 fa…	5.7
Omega Risk Risk based on omega …	Low

Omega-3 Fatty Acids

Eicosapentaenoi… Omega-3 fatty acid	🟢	1.2
Docosahexaenoi… Omega-3 fatty acid	🔴	4.5

Omega-6 Fatty Acids

Omega-6 fatty acids (FAs) are essential fatty acids: your body needs them but cannot make them. Recent studies suggest that omega-6 FAs can lower your LDL, or "bad," cholesterol and reduce the risk for heart-related health conditions.

Arachidonic acid Omega-6 fatty acid	🔴	0.2

Fatty Acids Ratios

The fatty acids ratios can help you and your health care provider gain more information about the fatty acids (FAs) within your body. One ratio may be a predictor for heart-related medical problems; another measures FAs that may benefit your heart health.

Omega-6:Omega… unsaturated fatty acid …	🟢	1.7
AA:EPA Ratio Ratio of two fatty acids	🟢	0.2

Metabolic Health

Metabolism is your body's way of chemically processing sugar and fat for use throughout the body as energy. An optimal metabolism supports healthy weight control and energy levels, while a dysfunctional metabolism can lead to undesired fluctuations in weight and fatigue or hyperactivity.
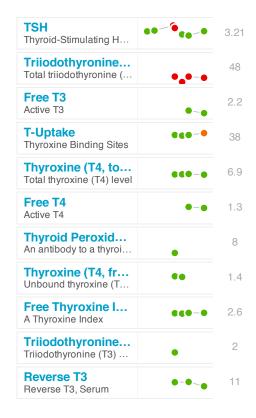
Diabetes & Insulin Resistance

High blood sugar can lead to cardiovascular disease, kidney disease, blindness, or ulcers. Insulin, a hormone created in the pancreas, helps the body use or store blood glucose from food. Insulin resistance can lead to higher levels of insulin and blood sugar, resulting in type 2 diabetes.

Insulin Blood sugar storage h…	🟢🟢🟢 🟢	< 2
Hemoglobin A1c… Average blood sugar l…	🟢🟢 🟢🟢🟢 🟢	5.5
Glucose Blood Sugar	🟢🟢 🟢🟢🟢 🟢	87

Thyroid

The thyroid gland is your body's regulator of metabolism. An underactive thyroid, or hypothyroid, can result in low energy, weight gain, and cold intolerance, while an overactive thyroid, or hyperthyroid, can cause hyperactivity, undesired weight loss, and heat intolerance.

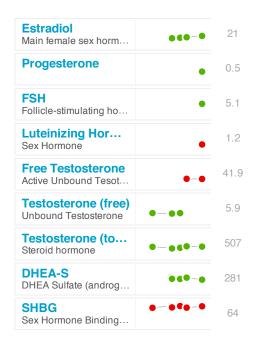|		
TSH Thyroid-Stimulating H…		3.21
Triiodothyronine… Total triiodothyronine (…		48
Free T3 Active T3		2.2
T-Uptake Thyroxine Binding Sites		38
Thyroxine (T4, to… Total thyroxine (T4) level		6.9
Free T4 Active T4		1.3
Thyroid Peroxid… An antibody to a thyroi…		8
Thyroxine (T4, fr… Unbound thyroxine (T…		1.4
Free Thyroxine I… A Thyroxine Index		2.6
Triiodothyronine… Triiodothyronine (T3) …		2
Reverse T3 Reverse T3, Serum		11

Metabolic Hormones

Hormones influence how you metabolize fat, sugar, and protein to produce and store energy, and build tissues such as fat or muscle. Hormonal imbalance can lead to excess fat storage or the inability to gain muscle.

Cortisol The body's main stres…		18.2
Insulin Blood sugar storage h…		< 2
Insulin-Like Gro… A Measure of Growth …		97
Z score IGF-1 compared to oth…		-0.9

Reproductive Hormones

Reproductive hormones are controlled and produced by a complex interaction of your brain, adrenal glands, and reproductive organs. An imbalance in these hormones can affect many important functions, including overall growth and muscle gain, metabolism, mood, libido, and reproductive health.
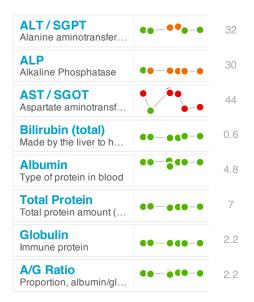
Estradiol Main female sex horm…		21
Progesterone		0.5
FSH Follicle-stimulating ho…		5.1
Luteinizing Hor… Sex Hormone		1.2
Free Testosterone Active Unbound Tesot…		41.9
Testosterone (free) Unbound Testosterone		5.9
Testosterone (to… Steroid hormone		507
DHEA-S DHEA Sulfate (androg…		281
SHBG Sex Hormone Binding…		64

Liver Health

Your liver's main function is to filter blood coming from the digestive tract before passing it throughout the body. A vital organ, your liver is also responsible for detoxifying chemicals, metabolizing drugs, producing proteins, and more. Liver dysfunction can have a negative impact on your immune system and energy levels and can lead to liver disease and cancer.

Liver Enzymes and Function Tests

Liver enzymes help monitor liver function and liver inflammation, most commonly from medications, infections, or excess fat on the body. A marked elevation in liver enzymes can signify liver dysfunction.

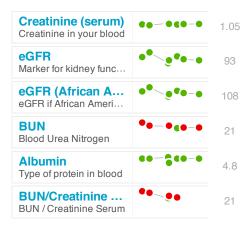|		
ALT / SGPT Alanine aminotransfer…		32
ALP Alkaline Phosphatase		30
AST / SGOT Aspartate aminotransf…		44
Bilirubin (total) Made by the liver to h…		0.6
Albumin Type of protein in blood		4.8
Total Protein Total protein amount (…		7
Globulin Immune protein		2.2
A/G Ratio Proportion, albumin/gl…		2.2

Kidney Health

Your kidneys help maintain blood pressure, keep the blood's acid-base level within a healthy range, and filter the blood so nutrients are absorbed and waste is passed out of the body as urine.

Kidney Function

Your kidney function reflects how well your kidneys are filtering your blood. Abnormal kidney function could result in the accumulation of waste products in the body, which can cause fatigue, headaches, nausea, and more.
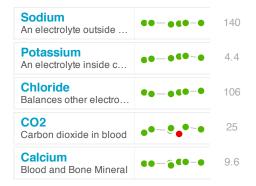
Creatinine (serum) Creatinine in your blood	1.05
eGFR Marker for kidney func...	93
eGFR (African A… eGFR if African Ameri…	108
BUN Blood Urea Nitrogen	21
Albumin Type of protein in blood	4.8
BUN/Creatinine … BUN / Creatinine Serum	21

Electrolytes

An electrolyte imbalance can lead to an imbalance in your body's acid-base status, hydration, or conduction of charges across cells, all of which are essential, especially with increased activity.

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Sodium An electrolyte outside …	140
Potassium An electrolyte inside c…	4.4
Chloride Balances other electro…	106
CO2 Carbon dioxide in blood	25
Calcium Blood and Bone Mineral	9.6

Bone Health

Your bones play many roles in your body, from storing minerals to protecting organs such as the brain. Bone markers are indicators of how well bone tissue is being removed and replaced, aka "bone remodeling." Significantly abnormal marker levels suggest possible bone disorders.

Bone

Bones are primarily made of calcium, supported by vitamin D, and regulated through constant bone remodeling. When bones remodel excessively or become inflamed, there may be large elevations in an enzyme called ALP (alkaline phosphatase).

25-Hydroxy Vita… Precursor to vitamin D		52
25-hydroxy Vita… Vitamin D found in pla…		< 4
25-hydroxy Vita… Vitamin D from sunlig…		52
Calcium Blood and Bone Mineral		9.6
ALP Alkaline Phosphatase		30

Blood Health

Your blood consists of two main components: the cellular components (red blood cells, white blood cells, and the cell fragments known as platelets); and the liquid component, called plasma. Together, these two parts of the blood are responsible for many functions, including oxygen transport, temperature regulation, blood clotting, and immune defense.
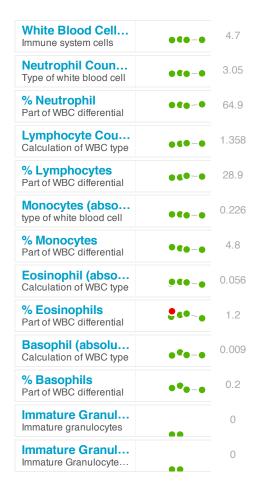
Platelets

Platelets help form blood clots at the site of an injured blood vessel. Knowing your platelet count, as well as how large your platelets are, may help reveal any bleeding or clotting problems.

Platelet Count Clot-forming cell frag…		234

White Blood Cells

Your white blood cells are responsible for protecting your body from disease and foreign materials. A low white blood cell count is a decrease in the disease-fighting cells your body depends on, while an overproduction of white blood cells could indicate the presence of diseases like leukemia.

White Blood Cell… Immune system cells	●●●—●	4.7
Neutrophil Coun… Type of white blood cell	●●●—●	3.05
% Neutrophil Part of WBC differential	●●●—●	64.9
Lymphocyte Cou… Calculation of WBC type	●●●—●	1.358
% Lymphocytes Part of WBC differential	●●●—●	28.9
Monocytes (abso… type of white blood cell	●●●—●	0.226
% Monocytes Part of WBC differential	●●●—●	4.8
Eosinophil (abso… Calculation of WBC type	●●●—●	0.056
% Eosinophils Part of WBC differential	●●●—●	1.2
Basophil (absolu… Calculation of WBC type	●●●—●	0.009
% Basophils Part of WBC differential	●●●—●	0.2
Immature Granul… Immature granulocytes	●●	0
Immature Granul… Immature Granulocyte…	●●	0

Red Blood Cells

Red blood cells are the most numerous cell type in your blood and have one main role: to carry oxygen to tissues in your body and transport carbon dioxide back to the lungs to be exhaled. If your blood lacks enough healthy red blood cells, you may be anemic.

Hematocrit Fraction of red blood c…	●●●—●	41.9
RBC Red blood cell count	●●●—●	4.46
Hemoglobin Protein in red blood cells	●●●—●	13.7
MCV Mean corpuscular vol…	●●●—●	93.9
MCH Mean cell hemoglobin	●●●—●	30.7
MCHC RBC hemoglobin con…	●●●—●	32.7
RDW Red cell distribution w…	●●●—●	14.5

Iron

Iron is an essential mineral needed to form hemoglobin, the main protein found in red blood cells. Iron deficiency can lead to anemia, while excess iron can be toxic to the liver or other organs.

Iron (serum) Iron in liquid part of bl…	105
Ferritin Iron storage protein	48
Total Iron Bindin… Estimates Transferrin l…	301
Unsaturated Iron… Iron transport protein …	239
Iron Saturation The percent of Iron tra…	35
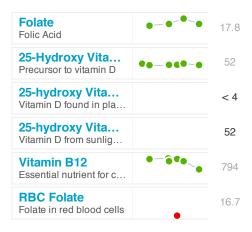
Vitamins & Minerals

Vitamins and minerals are substances obtained from food and supplements needed for normal growth and body processes. Deficiencies in certain vitamins and minerals can interfere with normal body function.

Vitamins

Vitamins are organic substances required for normal health and function. For example, vitamin B12 is essential for cellular development, including the development of red and white blood cells. Deficiency in B12 can lead to anemia and immune dysfunction.

Folate Folic Acid	17.8
25-Hydroxy Vita… Precursor to vitamin D	52
25-hydroxy Vita… Vitamin D found in pla…	< 4
25-hydroxy Vita… Vitamin D from sunlig…	52
Vitamin B12 Essential nutrient for c…	794
RBC Folate Folate in red blood cells	16.7

Minerals

Minerals are inorganic substances needed for many of your body's processes such as cellular development, carrying oxygen to tissues, and bone growth. Mineral deficiencies result in weak bones, organ malfunction, and poor cellular development, which can cause conditions such as anemia.

RBC Magnesium The Magnesium in our…	4.3
Calcium Blood and Bone Mineral	9.6

Release Notes

2013-05-21
Lab Report released by a WellnessFX practitioner with note: No critical values were found.

2013-05-07
Lab Report released by a WellnessFX practitioner with note: No critical values were found.

2013-05-07
Lab Report released by a WellnessFX practitioner with note: No critical values were found.

2013-04-30

Lab Report released by a WellnessFX practitioner with note: No critical values were found. Lipid values need to be discussed with practitioner. Adjustment of treatment plan recommended.

2012-09-28
Lab Report released by a WellnessFX practitioner with note: No critical values were found.

2012-09-28
Lab Report released by a WellnessFX practitioner with note: No critical values were found. Ensure to follow up to discuss treatment of all of your abnormal biomarkers.

Lab Notes

2014-04-23   HDL
Verified by repeat analysis.

2014-04-23   HDL
Verified by repeat analysis.

2013-10-30   HDL
Verified by repeat analysis.

2013-05-07   HDL
Verified by repeat analysis According to ATP-III Guidelines, HDL-C >59 mg/dL is considered a negative risk factor for CHD.

2013-05-07   HDL
Verified by repeat analysis According to ATP-III Guidelines, HDL-C >59 mg/dL is considered a negative risk factor for CHD.

2013-04-30   HDL
Results confirmed on dilution. According to ATP-III Guidelines, HDL-C >59 mg/dL is considered a negative risk factor for CHD.

2012-09-28   HDL
Verified by repeat analysis According to ATP-III Guidelines, HDL-C >59 mg/dL is considered a negative risk factor for CHD.

2014-04-23   LDL
Desirable range <100 mg/dL for patients with CHD or diabetes and <70 mg/dL for diabetic patients with known heart disease.

2014-04-23   LDL
Desirable range <100 mg/dL for patients with CHD or diabetes and <70 mg/dL for diabetic patients with known heart disease.

2013-10-30   LDL
Desirable range <100 mg/dL for patients with CHD or diabetes and <70 mg/dL for diabetic patients with known heart disease.

2012-09-28   LDL
Please note reference interval change

2012-09-28   Triglycerides
Please note reference interval change

2012-09-28   Total Cholesterol
Please note reference interval change

2014-04-23   Non-HDL Cholesterol (Calculated)
Target for non-HDL cholesterol is 30 mg/dL higher than LDL cholesterol target.

2014-04-23   Non-HDL Cholesterol (Calculated)
Target for non-HDL cholesterol is 30 mg/dL higher than LDL cholesterol target.

2013-10-30 Non-HDL Cholesterol (Calculated)

Target for non-HDL cholesterol is 30 mg/dL higher than LDL cholesterol target.

2013-05-07 Lp(a)

Desirable: <20 Borderline high risk: 20 - 30 High risk: 31 - 50 Very high risk: >50 . Note: Values >30 may indicate independent risk factor for CHD. Significance of high Lp(a) in non-white populations must be evaluated with caution.

2013-05-07 Lp(a)

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2012-09-28 Lp(a)

Desirable: <20 Borderline high risk: 20 - 30 High risk: 31 - 50 Very high risk: >50 . Note: Values >30 may indicate independent risk factor for CHD. Significance of high Lp(a) in non-white populations must be evaluated with caution.

2014-04-23 hs-CRP

Lower relative cardiovascular risk according to AHA/CDC guidelines. For ages >17 Years: hs-CRP mg/L Risk According to AHA/CDC Guidelines <1.0 Lower relative cardiovascular risk. 1.0-3.0 Average relative cardiovascular risk. 3.1-10.0 Higher relative cardiovascular risk. Consider retesting in 1 to 2 weeks to exclude a benign transient elevation in the baseline CRP value secondary to infection or inflammation. >10.0 Persistent elevation, upon retesting, may be associated with infection and inflammation.

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2013-10-30 hs-CRP

Lower relative cardiovascular risk according to AHA/CDC guidelines. For ages >17 Years: cCRP mg/L Risk According to AHA/CDC Guidelines <1.0 Lower relative cardiovascular risk. 1.0-3.0 Average relative cardiovascular risk. 3.1-10.0 Higher relative cardiovascular risk. Consider retesting in 1 to 2 weeks to exclude a benign transient elevation in the baseline CRP value secondary to infection or inflammation. >10.0 Persistent elevation, upon retesting, may be associated with infection and inflammation.

2013-05-07 hs-CRP

Relative Risk for Future Cardiovascular Event Low <1.00 Average 1.00 - 3.00 High >3.00

2013-05-07 hs-CRP

Relative Risk for Future Cardiovascular Event Low <1.00 Average 1.00 - 3.00 High >3.00

2013-04-30 hs-CRP

Relative Risk for Future Cardiovascular Event Low <1.00 Average 1.00 - 3.00 High >3.00

2012-09-28 hs-CRP

Relative Risk for Future Cardiovascular Event Low <1.00 Average 1.00 - 3.00 High >3.00

2014-04-23 Omega Risk

The Omega-3 Index is associated with a low risk of cardiovascular disease because it is in the top population quartile. The Omega-3 Index categories are based on the top (75th percentile) and bottom (25th percentile) quartiles of the reference population. Consumption of foods high in omega-3 fatty acids (EPA and DHA) or

supplements containing omega-3 fatty acids can increase the Omega-3 Index. Index <1.1: High Index 1.1-3.3: Moderate Index >3.3: Low

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2014-04-23   Insulin

Insulin analogues may demonstrate non-linear cross-reactivity in this assay. Interpret results accordingly.

2014-04-23   Insulin

Insulin analogues may demonstrate non-linear cross-reactivity in this assay. Interpret results accordingly.

2013-10-30   Insulin

Insulin analogues may demonstrate non-linear cross-reactivity in this assay. Interpret results accordingly.

2014-04-23   Hemoglobin A1c (HbA1c)

According to ADA guidelines, hemoglobin A1c <7.0% represents optimal control in non-pregnant diabetic patients. Different metrics may apply to specific patient populations. Standards of Medical Care in Diabetes-2013. Diabetes Care. 2013;36:s11-s66 For the purpose of screening for the presence of diabetes <5.7% Consistent with the absence of diabetes 5.7-6.4% Consistent with increased risk for diabetes (prediabetes) >or=6.5% Consistent with diabetes This assay result is consistent with a decreased risk of diabetes. Currently, no consensus exists for use of hemoglobin A1c for diagnosis of diabetes for children.

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2013-10-30   Hemoglobin A1c (HbA1c)

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2013-05-07   Hemoglobin A1c (HbA1c)

. Increased risk for diabetes: 5.7 - 6.4 Diabetes: >6.4 Glycemic control for adults with diabetes: <7.0

2013-05-07   Hemoglobin A1c (HbA1c)

. Increased risk for diabetes: 5.7 - 6.4 Diabetes: >6.4 Glycemic control for adults with diabetes: <7.0

2013-04-30   Hemoglobin A1c (HbA1c)

. Increased risk for diabetes: 5.7 - 6.4 Diabetes: >6.4 Glycemic control for adults with diabetes: <7.0

2012-09-28   Hemoglobin A1c (HbA1c)

. Increased risk for diabetes: 5.7 - 6.4 Diabetes: >6.4 Glycemic control for adults with diabetes: <7.0

2014-04-23   Glucose

Fasting reference interval

2014-04-23   Glucose

Fasting reference interval

2013-10-30   Glucose

Fasting reference interval

2014-04-23 **Cortisol**

Reference Range: For 8 a.m.(7-9 a.m.) Specimen: 4.0-22.0 Reference Range: For 4 p.m.(3-5 p.m.) Specimen: 3.0-17.0 * Please interpret above results accordingly *

2014-04-23 **Cortisol**

Reference Range: For 8 a.m.(7-9 a.m.) Specimen: 4.0-22.0 Reference Range: For 4 p.m.(3-5 p.m.) Specimen: 3.0-17.0 * Please interpret above results accordingly *

2013-10-30 **Cortisol**

Reference Range: For 8 a.m.(7-9 a.m.) Specimen: 4.0-22.0 Reference Range: For 4 p.m.(3-5 p.m.) Specimen: 3.0-17.0 * Please interpret above results accordingly *

2013-05-07 **Cortisol**

Cortisol AM 6.2 - 19.4 Cortisol PM 2.3 - 11.9

2013-05-07 **Cortisol**

Cortisol AM 6.2 - 19.4 Cortisol PM 2.3 - 11.9

2013-04-30 **Cortisol**

Cortisol AM 6.2 - 19.4 Cortisol PM 2.3 - 11.9

2012-09-28 **Cortisol**

Cortisol AM 6.2 - 19.4 Cortisol PM 2.3 - 11.9

2014-04-23 **Z score**

This test was developed and its performance characteristics have been determined by Quest Diagnostics Nichols Institute, San Juan Capistrano. Performance characteristics refer to the analytical performance of the test.

2014-04-23 **Z score**

This test was developed and its performance characteristics have been determined by Quest Diagnostics Nichols Institute, San Juan Capistrano. Performance characteristics refer to the analytical performance of the test.

2013-10-30 **Z score**

This test was developed and its performance characteristics have been determined by Quest Diagnostics Nichols Institute, San Juan Capistrano. Performance characteristics refer to the analytical performance of the test.

2014-04-23 **Estradiol**

Reference range established on post-pubertal patient population. No pre-pubertal reference range established using this assay. For any patients for whom low Estradiol levels are anticipated (e.g. males, pre-pubertal children and hypogonadal/post-menopausal females), the Quest Diagnostics Nichols Institute Estradiol, Ultrasensitive, LCMSMS assay is recommended (order code 30289).

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2013-05-07 **Estradiol**

Roche ECLIA methodology

2013-05-07 **Estradiol**

Roche ECLIA methodology

2013-04-30 **Estradiol**

Roche ECLIA methodology

2014-04-23 SHBG

Tanner Stages Male (nmol/L) Female (nmol/L) (7-17 Years) Tanner I 47-166 47-166 Tanner II 23-168 25-129 Tanner III 23-168 25-129 Tanner IV 21-79 30-86 Tanner V 9-49 15-130

2014-04-23 SHBG

Tanner Stages Male (nmol/L) Female (nmol/L) (7-17 Years) Tanner I 47-166 47-166 Tanner II 23-168 25-129 Tanner III 23-168 25-129 Tanner IV 21-79 30-86 Tanner V 9-49 15-130

2013-10-30 SHBG

Tanner Stages Male (nmol/L) Female (nmol/L) (7-17 Years) Tanner I 47-166 47-166 Tanner II 23-168 25-129 Tanner III 23-168 25-129 Tanner IV 21-79 30-86 Tanner V 9-49 15-130

2014-04-23 25-Hydroxy Vitamin D

25-OHD3 indicates both endogenous production and supplementation. 25-OHD2 is an indicator of exogenous sources, such as diet or supplementation. Therapy is based on measurement of Total 25-OHD, with levels <20 ng/mL indicative of Vitamin D deficiency, while levels between 20 ng/mL and 30 ng/mL suggest insufficiency. Optimal levels are > or = 30 ng/mL.

2014-04-23 25-Hydroxy Vitamin D

25-OHD3 indicates both endogenous production and supplementation. 25-OHD2 is an indicator of exogenous sources, such as diet or supplementation. Therapy is based on measurement of Total 25-OHD, with levels <20 ng/mL indicative of Vitamin D deficiency, while levels between 20 ng/mL and 30 ng/mL suggest insufficiency. Optimal levels are > or = 30 ng/mL.

2013-10-30 25-Hydroxy Vitamin D

25-OHD3 indicates both endogenous production and supplementation. 25-OHD2 is an indicator of exogenous sources, such as diet or supplementation. Therapy is based on measurement of Total 25-OHD, with levels <20 ng/mL indicative of Vitamin D deficiency, while levels between 20 ng/mL and 30 ng/mL suggest insufficiency. Optimal levels are > or = 30 ng/mL.

2013-05-07 25-Hydroxy Vitamin D

Vitamin D deficiency has been defined by the Institute of Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. JCEM. 2011 Jul; 96(7):1911-30. Medicine and an Endocrine Society practice guideline as a level of serum 25-OH vitamin D less than 20 ng/mL (1,2). The Endocrine Society went on to further define vitamin D insufficiency as a level between 21 and 29 ng/mL (2). 1. IOM (Institute of Medicine). 2010. Dietary reference intakes for calcium and D. Washington DC: The National Academies Press. 2. Holick MF, Binkley NC, Bischoff-Ferrari HA, et al.

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2012-09-28 25-Hydroxy Vitamin D

Vitamin D deficiency has been defined by the Institute of Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. JCEM. 2011 Jul; 96(7):1911-30. Medicine and an Endocrine Society practice guideline as a level of serum 25-OH vitamin D less than 20 ng/mL (1,2). The

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2014-04-23   25-hydroxy Vitamin D2
Reference Range: Not established

2014-04-23   25-hydroxy Vitamin D2
Reference Range: Not established

2013-10-30   25-hydroxy Vitamin D2
Reference Range: Not established

2014-04-23   25-hydroxy Vitamin D3
Reference Range: Not established

2014-04-23   25-hydroxy Vitamin D3
Reference Range: Not established

2013-10-30   25-hydroxy Vitamin D3
Reference Range: Not established

2013-05-07   Ferritin
Effective May 20, 2013, Ferritin reference interval will be changing to: Male Female ng/mL ng/mL 0 - 5 months: 13 - 273 12 - 219 6 - 12 months: 12 - 95 12 - 110 1 - 5 years: 12 - 64 12 - 71 6 - 11 years: 16 - 77 15 - 79 12 - 19 years: 16 - 124 15 - 77 Adult: 30 - 400 15 - 150

2013-05-07   Ferritin
Effective May 20, 2013, Ferritin reference interval will be changing to: Male Female ng/mL ng/mL 0 - 5 months: 13 - 273 12 - 219 6 - 12 months: 12 - 95 12 - 110 1 - 5 years: 12 - 64 12 - 71 6 - 11 years: 16 - 77 15 - 79 12 - 19 years: 16 - 124 15 - 77 Adult: 30 - 400 15 - 150

2014-04-23   Folate
Reference Range Low: <3.4 Borderline: 3.4-5.4 Normal: >5.4

2014-04-23   Folate
Reference Range Low: <3.4 Borderline: 3.4-5.4 Normal: >5.4

2013-10-30   Folate
Reference Range Low: <3.4 Borderline: 3.4-5.4 Normal: >5.4

2013-05-07   Folate
A serum folate concentration of less than 3.1 ng/mL is considered to represent clinical deficiency.

2013-05-07   Folate
A serum folate concentration of less than 3.1 ng/mL is considered to represent clinical deficiency.

2013-04-30   Folate
A serum folate concentration of less than 3.1 ng/mL is considered to represent clinical deficiency.

2012-09-28   Folate
A serum folate concentration of less than 3.1 ng/mL is considered to represent clinical deficiency.

2012-09-28   RBC Magnesium
Plasma NOT separated from cells; may falsely decrease RBC Magnesium levels. .

2013-05-21
Siemens (DPC) ICMA Methodology

2012-09-28
Written Authorization Received. Authorization received from SAMANTHA LEVINE 10-02-2012 Logged by Karlyn Ransom