WellnessFX
Lab Results for Ben Greenfield

Last Test Date: 2013-05-07

Your medical history is not complete. | Complete Medical History |

What's Next

Blood Draw

- ☑ Blood draw scheduled
- ☐ Complete your medical history
- ☑ Lab Documents will be provided to you at the time of your draw
- ☑ Blood draw complete
- ☑ Your blood results are in!

Cardiovascular Health

Your heart and blood vessels are called your cardiovascular system. When bad cholesterol and triglycerides clog your arteries that feed your brain and heart, raising your risk for a stroke or heart attack, this is known as cardiovascular disease.

Basic Lipid Panel

The basic lipid panel encompasses your cholesterol, including your good (HDL) and bad (LDL and other non-HDL) cholesterol, and fats in the blood.

Marker	Value
Total Cholesterol — A Type of Fat	205
LDL-C Direct — "Bad" Cholesterol	79
HDL-C Direct — "Good" Cholesterol	118
Triglycerides — Type of Fat	42

LDL Particles

Bad, or LDL, cholesterol has many parts and similar particles. By examining all of these particles, one can better understand their risk of atherosclerosis, or the clogging of blood vessels, leading to cardiovascular disease such as a heart attack or stroke.

Marker	Value
vLDL-C — Precursor to LDL Cholest…	8
LP(a) — Different Form of LDL	5
Apo B — Protein in LDL ("Bad") Ch…	74

Inflammation

Inflammation is our bodies reaction to stress or injury. Though this can be helpful in the short-term, long-term chronic inflammation can contribute to many chronic diseases.

Marker	Value
hs-CRP — General Inflammation Mar…	4.56

Metabolic

Metabolism includes many physical and chemical reactions that are needed to stay alive and in good health. The metabolic lab tests include markers for glucose use and storage, energy regulation, and gender-specific hormone tests.

Diabetes & Insulin Resistance

Diabetes, a disease of persistently high blood sugar, can lead to cardiovascular disease, kidney disease, blindness, or ulcers in the legs.

Glucose Blood Sugar		90
Insulin Blood sugar storage hor…		2.2
Hemoglobin A1c (… Average blood sugar level		5.5

Reproductive Hormones

Hormones are substances that are produced in one part of the body and travel to another part of the body to exert their effects. Hormones can affect many processes in your body, including growth, metabolism, mood, sexual functioning, and reproductive ability.

Estradiol Main female sex hormone		14.2
Testosterone (free) Unbound Testosterone		4.9
Testosterone (total) Steroid hormone		310
DHEA-S DHEA Sulfate (androgen)		307.1
SHBG Sex Hormone Binding Gl…		59.1

Thyroid

The thyroid gland makes hormones that regulate your body's metabolism. An underactive thyroid results in low energy and weight gain, while an overactive thyroid causes hyper-activity or excessive weight loss.

TSH Thyroid-Stimulating Hor…		3.94

Metabolic Hormones

Hormones influence how we metabolize fat, sugar, and protein to produce energy or store glycogen (stored blood sugar), muscle, and fat. These hormones govern are anabolic, or muscle building, fat-burning, pathways and our catabolic, or tissue breakdown, pathways.

Cortisol The body's main stress h…		23.7
Insulin-Like Growt… A Measure of Growth Hor…		109

Liver

Your liver detoxifies, produces proteins, and performs many other vital functions. A marked elevation in liver enzymes can signify liver dysfunction.

Liver Enzymes and Function Tests

Liver enzymes help monitor liver function and liver inflammation.

ALT / SGPT Alanine aminotransferase		42
ALP Alkaline Phosphatase		35
AST / SGOT Aspartate aminotransferase		72
Bilirubin (total) Made by the liver to help …		0.4
Albumin Type of protein in blood		4.5
Total Protein Total protein amount (ser…		6.7
Globulin Immune protein		2.2
A/G Ratio Proportion, albumin/glob…		2

Kidney

Your kidneys help maintain your blood pressure, keep your blood's acid-base level within a healthy range, and filter your blood so that needed substances are reabsorbed and waste substances are passed out of the body as urine.

Kidney Function

Your kidney function tests reflect how well your kidneys are working--abnormal kidney function tests suggest that your kidneys may be damaged. By monitoring, you can detect and treat kidney problems as early as possible.

Test		Value
Creatinine (serum) Creatinine in your blood		1.06
eGFR Marker for kidney function		93
eGFR (African Am… eGFR if African American		108
BUN Blood Urea Nitrogen		24
Albumin Type of protein in blood		4.5
BUN/Creatinine R… BUN / Creatinine Serum		23

Electrolytes

Electrolytes

Test		Value
Sodium An electrolyte outside cells		138
Potassium An electrolyte inside cells		4.3
Chloride Balances other electrolytes		102
CO2 Carbon dioxide in blood		26
Calcium Blood and Bone Mineral		9.1

Bone

Your bones play many roles in your body, ranging from storing minerals to protecting organs such as your brain. Bone tissue in your body undergoes constant remodeling--old bone is removed and new bone forms to replace it. Bone markers are indicators of how well bone remodeling is happening within your body; significantly abnormal marker levels suggest a possible bone disorder.

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 in bone called ALP (alkaline phosphatase).

Test		Value
ALP Alkaline Phosphatase		35
25-Hydroxy Vitami… Precursor to vitamin D		53.6
Calcium Blood and Bone Mineral		9.1

Blood

Blood consists of two main components or parts: 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.

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 carry carbon dioxide back to the lungs to be exhaled. The red blood cell lab tests are commonly done as part of routine health checks or if your doctor suspects you have anemia.

RBC Red blood cell count	●	4.17
Hemoglobin Protein in red blood cells	●	13.2
Hematocrit Fraction of red blood cells	●	38.9
MCV Mean corpuscular volume	●	93
MCH Mean cell hemoglobin	●	31.7
MCHC RBC hemoglobin concen…	●	33.9
RDW Red cell distribution width	●	13.8
Folate Folic Acid	●—●	17.8

White Blood Cells

Your white blood cell (WBC) panel includes a WBC count and a WBC differential. The WBC count measures the number of WBCs you have in a sample of blood; the differential is the proportion of the different WBC types present in the blood. Abnormal values for your WBC count or components of your WBC differential can indicate a wide variety of medical diseases and conditions.

White Blood Cell C… Immune system cells	●	4.5
Neutrophil Count (… Type of white blood cell	●	2.8
% Neutrophil Part of WBC differential	●	62
Lymphocyte Count… Calculation of WBC type	●	1.1
% Lymphocytes Part of WBC differential	●	25
Monocytes (absol… type of white blood cell	●	0.3
% Monocytes Part of WBC differential	●	7
Eosinophil (absolute) Calculation of WBC type	●	0.2
% Eosinophils Part of WBC differential	●	5
Basophil (absolute) Calculation of WBC type	●	0
% Basophils Part of WBC differential	●	1
Immature Granulo… Immature granulocytes	●	0
Immature Granulo… Immature Granulocytes (…	●	0

Iron

Iron is an essential mineral; it is needed to form hemoglobin, the main protein found in red blood cells. Your iron panel includes tests that help your doctor detect conditions of iron deficiency or iron overload.

Iron (serum) Iron in liquid part of blood		44
Ferritin Iron storage protein		100
Total Iron Binding … Estimates Transferrin level		284
MCH Mean cell hemoglobin		31.7
MCV Mean corpuscular volume		93
Hematocrit Fraction of red blood cells		38.9
Hemoglobin Protein in red blood cells		13.2
Unsaturated Iron-… Iron transport protein not…		240
RBC (Red Blood C… The Magnesium in our cells		4.9
Iron Saturation The percent of Iron trans…		15

Platelets

Your platelets play a key part of an important process in your body: forming blood clots at the site of an injured blood vessel. Your platelet panel includes a measure of how many platelets you have circulating as well as how large your platelets are; these values can provide important information about your risk for bleeding problems or clotting problems.

Platelet Count Clot-forming cell fragments		207

Vitamins & Minerals

Vitamins are carbon-containing (organic) substances and minerals are inorganic substances; both are needed for normal body processes. Your vitamin and mineral levels provide important clues to your overall health and nutrition status.

Vitamins

Vitamins are substances that are essential for normal health and well being.

Vitamin B12 Essential nutrient for cells		1304
25-Hydroxy Vitami… Precursor to vitamin D		53.6
Folate Folic Acid		17.8

Minerals

Minerals are inorganic substances that are needed for many processes in your body. A healthy diet can help prevent harmful mineral deficiencies.

Ferritin Iron storage protein		100
Iron (serum) Iron in liquid part of blood		44

Release Notes

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

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  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 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

- 2012-09-28
  Please note reference interval change

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

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  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.

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  Cortisol AM 6.2 - 19.4 Cortisol PM 2.3 - 11.9

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  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

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  Plasma NOT separated from cells; may falsely decrease RBC Magnesium levels. .

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