Diagnostic Report for Jane Hart

Prepared for
Jane Hart

Health Care Provider
Ernst Schaefer MD

Account No.
8888

Patient ID
101928

May 9, 2017

YOUR HEART HEALTH STORY

What is your risk for heart disease?

Part 1   **Your Lipids**
Are you at risk of forming blockages?

Part 2   **Your Inflammation**
Do you have inflammation that can damage your arteries?

Part 3   **Your Metabolics**
Is diabetes increasing your risk of heart disease?

Part 4   **Your Genetics**
How do your genes help guide the right treatment plan?

YOUR PLAN FOR WELL BEING

What can you do to improve your heart health?

This report provides you with information about your heart health based on your recent test results. There may be other factors not part of this report that may change your risk. Talk to your healthcare provider about these results, questions you may have and actions you can take to improve your heart health.

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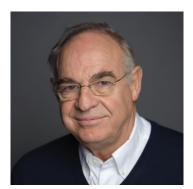
This is your story

Dear Jane,

This report was created just for you and is based on your blood test results and information provided by Ernst Schaefer MD. On the following pages, you will learn that cholesterol results do not tell the entire story of your heart health. That's why your healthcare provider ordered advanced blood testing for you.

Knowing your risk of heart disease, heart attack, stroke or diabetes is a key step in your heart health journey. Some of your test results may require attention and action by you.

The good news is that even small changes can make big improvements to your heart health. Your plan for well being outlines lifestyle, medication and supplement considerations specific to your test results.

Let's get started!

Sincerely yours,

Ernst J. Schaefer

Ernst J. Schaefer, MD
Chief Medical Officer
Boston Heart Diagnostics

Dr. Schaefer is a co-founder of Boston Heart Diagnostics, a Distinguished University Professor at Tufts University School of Medicine, a senior scientist in the Cardiovascular Nutrition Laboratory in Boston, MA. He received his education at Harvard College and Mount Sinai School of Medicine. Dr. Schaefer is Board Certified in Internal Medicine, fellowship trained in Endocrinology and is author of over 500 scientific publications.

One in three Americans suffer from heart disease.

For most, it is preventable and reversible.

You can take action to improve your heart health.
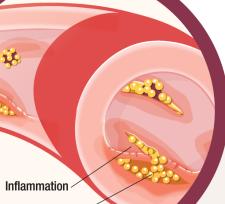
The Four Parts of Heart Disease Testing

Your blood test results provide valuable information about your heart health. Use this report to learn more about your test results, heart disease risk and your plan for well being. Your healthcare provider combines your test results with other risk factors such as your family history or lifestyle habits to complete the picture and determine the best treatment for you.

HDL

LDL

Blockage

PART 1: LIPIDS

Lipids are made up of different kinds of cholesterols and fats that your body needs to function. Your test results will tell you if you have too much cholesterol or fat, whether the kind you have is dangerous, and if you are at risk of forming blockages that can lead to heart attack or stroke.

PART 2: INFLAMMATION

Inflammation doesn't just affect your joints and gums—it can also affect your arteries. Your test results will tell you if you have the kind of inflammation in your arteries that would increase your near-term risk of heart attack or stroke.

Inflammation

Blockage

PART 3: METABOLICS

Metabolic tests tell you if you have diabetes or if you are at risk for developing diabetes. Diabetes significantly increases your risk for heart attack and stroke.

Sugar in the blood

Scratch or tear

PART 4: GENETICS

Your genes can influence your body's response to medications and nutrition. While your genes don't change, this information helps your healthcare provider determine your treatment— the right medication, the right dose, and even the right foods.

DNA

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Jane, you have risk of heart disease.

Here is the summary of your lab test results for each part of your heart health story.
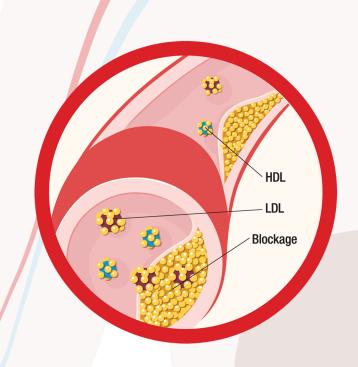
RISK COLOR KEY

- Green is Good
- Yellow is Caution
- Red is Danger
- Not Available

Even if your risk falls within the "danger" or "caution" categories, your results do not necessarily mean that you will suffer a heart attack, stroke, or develop diabetes or any other illness.

GET TO GREEN

Your goal is to "Get to Green"—the optimal test result. Take action to improve your test results by understanding your results and your plan for well being.

HDL

LDL

Blockage

PART 1: LIPIDS
You are in danger because you have a high risk of forming a blockage which can lead to a heart attack or stroke.

PART 2: INFLAMMATION

You have inflammation that may damage your artery wall lining. This is how blockages can form.

Inflammation

Blockage

PART 3: METABOLICS

You have a 1.6 times normal risk of developing diabetes within 10 years. This increases your risk of heart disease.

Sugar in the blood

Scratch or tear

PART 4: GENETICS

You are more likely than others to experience muscle pain from certain statins. Your healthcare provider may recommend different types and dosages of medications or supplements, or encourage you to engage in lifestyle changes.

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HOW BAD CHOLESTEROL FORMS BLOCKAGES

LDL cholesterol is essential, but it can become "bad" or dangerous when there is too much and it is small or sticky. This can cause a buildup in the artery wall lining and may lead to a blockage (plaque). Blockages make it harder for blood to get where it is needed, increasing risk of heart attack or stroke.

LDL

Blockage

LDL trapped
in a blockage

THINK OF IT LIKE THIS

Your heart is like a house with plumbing. Your arteries carry blood through your body like pipes carry water through your house. When too much dirt or grease (fat) gets caught in your pipes (arteries), over time it creates a blockage. When this happens water (blood) can't get to where it's needed.

Jane, caution. You are at risk of forming a blockage which can lead to a heart attack or stroke.

CAUTION

You have more total cholesterol than you should, and you have too much fat floating in your blood. You have more bad cholesterol than you should; it is too small and too sticky. This can lead to blockages. You also have too much of the dangerous inherited bad cholesterol, which puts you at higher risk. The good news is you can take steps to reverse this risk.

TEST TYPE	● GOOD ● CAUTION ● DANGER	WHERE YOU STAND
Total Cholesterol amount of good and bad	208	*more than you should*
LDL-C bad cholesterol	134	*more than you should*
Triglycerides fat in the bloodstream	203	*too much fat in your blood*
ApoB a part of LDL	122	*too sticky*
Non-HDL-C amount of all bad cholesterol	172	*too much*
sdLDL-C small bad LDL	43	*too many of the small bad kind*
Lp(a) dangerous inherited LDL	58	*too much of the inherited bad kind of LDL*

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HOW GOOD CHOLESTEROL PREVENTS BLOCKAGES

HDL cholesterol is made of different sized particles and becomes "good" when it is large enough to remove cholesterol from the artery walls. Even with the right amount of HDL cholesterol, if it is mostly small, then it is too weak to remove the cholesterol from your body. Large HDL particles are big and strong enough to remove cholesterol before it builds up and creates a blockage (plaque).

HDL removing cholesterol from blockage

HDL grabbing cholesterol from LDL

THINK OF IT LIKE THIS

Too much bad cholesterol is like garbage building up in the street, blocking traffic. Your good cholesterol acts like strong garbage collectors and large dump trucks that pick up and remove the garbage (bad cholesterol), keeping the streets clear.

Jane, you are in danger. You do not have enough of the right kind of good cholesterol to remove your bad cholesterol.
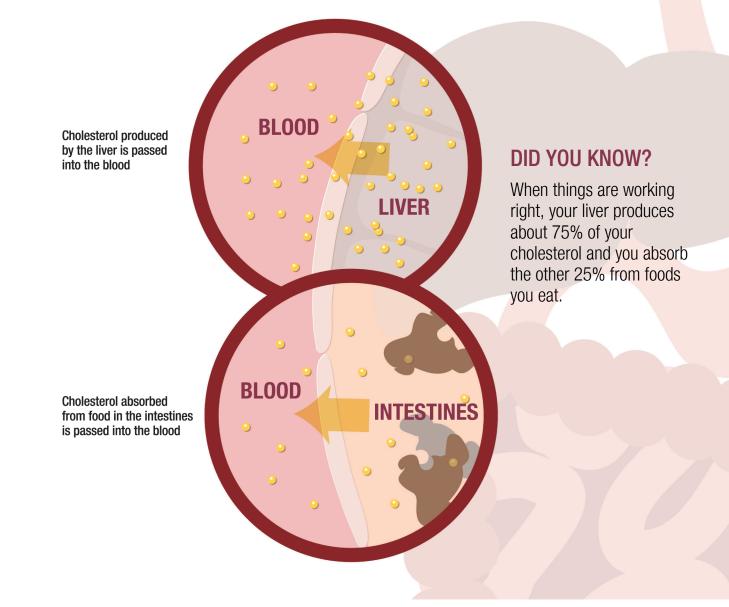
You don't have enough good cholesterol, and it is not strong enough to remove your bad cholesterol. This is because you don't have enough very large HDL particles; however, your very small HDL particles look good. Lifestyle changes can improve your good cholesterol.

TEST TYPE	○ GOOD	○ CAUTION	○ DANGER	WHERE YOU STAND
HDL-C good cholesterol			36	*not enough*
ApoA-I strength of HDL to carry out bad cholesterol			131.6	*not strong enough*

Boston Heart HDL Map®

Alpha-1 very large HDL particles			19.9	*not enough*
Alpha-2 large HDL particles		55.9		*less than you should*
Alpha-3 medium size HDL particles		24.0		*too many*
Alpha-4 small HDL particles	14.2			*looks good*
Prebeta-1 very small HDL particles	9.1			*looks good*

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HOW CHOLESTEROL GETS IN THE BODY

Everyone needs cholesterol to live. Cholesterol gets in the body two ways. The liver produces it, and the body absorbs it from food. Understanding how cholesterol gets in the body helps healthcare providers determine the best treatment.

Cholesterol produced by the liver is passed into the blood

BLOOD

LIVER

DID YOU KNOW?

When things are working right, your liver produces about 75% of your cholesterol and you absorb the other 25% from foods you eat.

Cholesterol absorbed from food in the intestines is passed into the blood

BLOOD

INTESTINES

Jane, here is how your body produces and absorbs cholesterol.

Your liver produces too much cholesterol and your body absorbs too much cholesterol from the food you eat. This information helps your healthcare provider determine the right treatment for you.

TEST TYPE	○ GOOD	○ CAUTION	○ DANGER	WHERE YOU STAND

Boston Heart Cholesterol Balance®
Production Markers

Lathosterol produced by the liver	269	*too much*

Desmosterol produced by the liver	111	*too much*

Boston Heart Cholesterol Balance®
Absorption Markers

Beta-Sitosterol absorbed from food	130	*more than you should*

Campesterol absorbed from food	218	*more than you should*

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HOW INFLAMMATION INCREASES HEART DISEASE RISK

The artery wall lining can become inflamed for different reasons, such as a poor diet or smoking. Inflammation weakens and scars the artery wall lining making it easier for cholesterol to attach and form blockages (plaque). Inflammation also increases the risk that plaque can break off and cause a clot, which can result in a heart attack or stroke.

LDL

Inflammation

Blockage

Weakened lining

Inflammation

THINK OF IT LIKE THIS

Inflammation in your arteries is like having rusty pipes in your house. Rusty pipes are more likely to get clogged and eventually burst. Reducing inflammation in your arteries is like keeping your pipes smooth and clean, making it easier for water (blood) to flow freely.

Jane, caution. You have inflammation that may damage your artery wall lining. This is how blockages can form.

If you have a blockage in your artery wall lining, it may be cracking or shifting which may increase the risk of it breaking and forming a clot. If your inflammation is not addressed this can cause a heart attack or stroke.

TEST TYPE	● GOOD ● CAUTION ● DANGER	WHERE YOU STAND
MPO marker of a blockage forming or breaking	174	*looks good*
LpPLA$_2$ Activity marker of a blockage forming, cracking, or shifting	197	*more than you should*
hs-CRP marker of inflammation	0.3	*looks good*
Fibrinogen marker of early inflammation	383	*more than you should*

HOW TOO MUCH SUGAR IN THE BLOOD DAMAGES ARTERY WALLS

Three out of four diabetics die from heart attack or stroke, not from diabetes. Diabetes occurs when the body cannot manage the amount of sugar in the blood. Over time, this excess sugar damages the artery wall lining leading to increased risk of heart attack or stroke. Fortunately, changes in diet and exercise can substantially reverse diabetes.

Sugar in the blood

Scratch or tear

THINK OF IT LIKE THIS

Sugar crystals are like small bits of glass. Too much sugar in your blood is like having broken glass tearing at and damaging your artery walls, making the lining rough. This increases the likelihood of cholesterol getting trapped and forming a blockage.

Jane, caution. You have a 1.6 times normal risk of developing diabetes within 10 years. This increases your risk of heart disease.

Your average blood sugar level over the last 2-3 weeks is elevated. Your actual blood sugar level is in the prediabetic range. When you were tested your insulin was in the normal range, but you are not responding to insulin as you should. Your levels of adiponectin hormone are not high enough to protect you from heart disease. A heart healthy lifestyle can improve your results and reduce your risk.

CAUTION

TEST TYPE	⬤ GOOD	⬤ CAUTION	⬤ DANGER	WHERE YOU STAND
Boston Heart Prediabetes Assessment® risk of developing diabetes in prediabetics		11.7		*11.7% or 1.6 times normal risk of developing diabetes within 10 years*
HbA1c average blood sugar over previous three months	5.6			*looks good*
Insulin Resistance body's ability to process sugar			3.5	*ineffective*
Glucose actual amount of sugar in your blood		108		*too much*
GSP average blood sugar over previous two to three weeks		219		*too high*
Adiponectin protective hormone produced by fat cells			8.9	*not enough*
Insulin hormone that controls blood sugar	13			*looks good*

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HOW GENES HELP DETERMINE THE BEST TREATMENT

Genetic tests can be done in a short period of time using a small sample of blood. Knowing specific gene types helps healthcare providers choose the right medications, dosage, diet and exercise plans for each person.
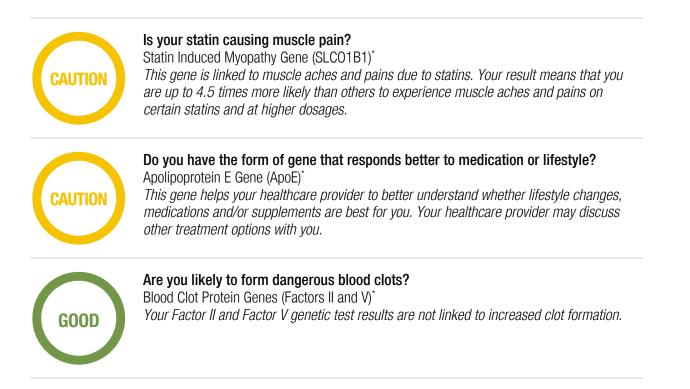
DNA

THINK OF IT LIKE THIS

Are there foods you eat that do not agree with you, but your friends eat the same food with no problem at all? Everyone's body processes food differently. The same is true with medications. If you have a gene type that does not process a particular medication well, then you may need a different dose, type of drug, supplement or lifestyle change.

Jane, here are your genetic test results and treatment considerations.

Even if your genetic test results indicate sensitivity to certain medications, continue to take them as prescribed. Monitor how you feel and talk with your healthcare provider.

CAUTION

Is your statin causing muscle pain?
Statin Induced Myopathy Gene (SLCO1B1)*
This gene is linked to muscle aches and pains due to statins. Your result means that you are up to 4.5 times more likely than others to experience muscle aches and pains on certain statins and at higher dosages.

CAUTION

Do you have the form of gene that responds better to medication or lifestyle?
Apolipoprotein E Gene (ApoE)*
This gene helps your healthcare provider to better understand whether lifestyle changes, medications and/or supplements are best for you. Your healthcare provider may discuss other treatment options with you.

GOOD

Are you likely to form dangerous blood clots?
Blood Clot Protein Genes (Factors II and V)*
Your Factor II and Factor V genetic test results are not linked to increased clot formation.

*Please refer to your laboratory report that begins on page 29 for the date these tests were performed.
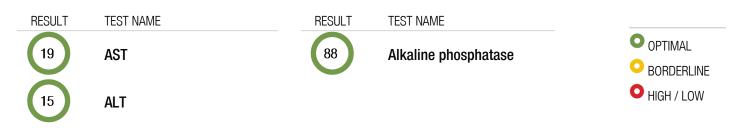
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What else should you know about your health?

Your healthcare provider ordered these tests to better understand your health and treatment response.

LIVER TESTS

These tests can evaluate liver function. When your liver is not functioning as it should, there may be too much fat in the blood stream.

RESULT	TEST NAME		RESULT	TEST NAME
19	AST		88	Alkaline phosphatase
15	ALT			

- OPTIMAL
- BORDERLINE
- HIGH / LOW

KIDNEY TESTS

These tests can evaluate kidney function and any kidney damage, which can lead to heart disease.

RESULT	TEST NAME		RESULT	TEST NAME
15.8	BUN/Creatinine		11.2	BUN
88	eGFR/Non-African American		0.71	Creatinine
102	eGFR/African American			

MUSCLE AND OTHER TESTS

These tests can assess whether you have any muscle breakdown, if statins are affecting your muscle or how well your heart is working.

RESULT	TEST NAME		RESULT	TEST NAME
88	Creatine Kinase (CK)		4.4	Uric Acid
169	NT-proBNP			

THYROID AND OTHER TESTS

These tests show if you have thyroid disease or other underlying conditions. This can help your healthcare provider determine if your risk of heart disease is elevated and which medications and/or supplements might be right for you.
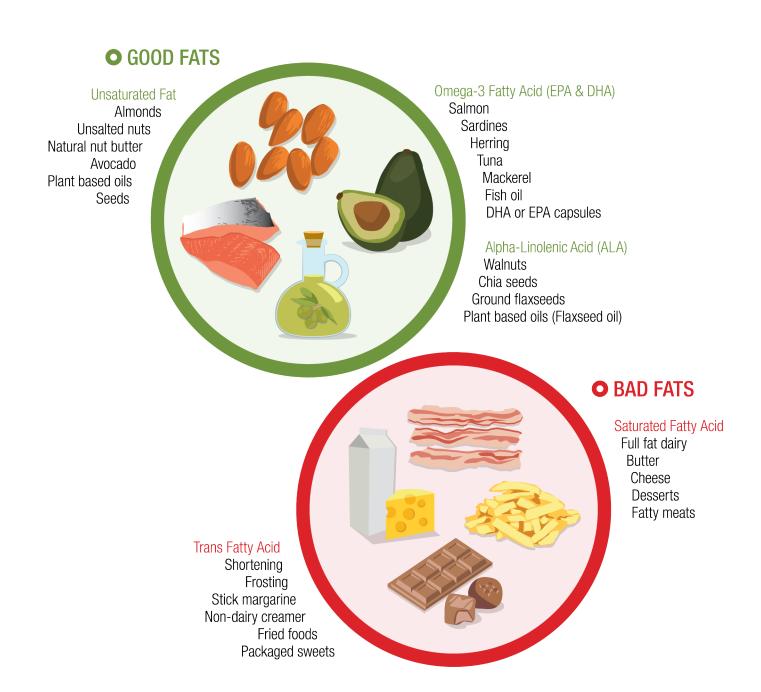
OTHER
TESTS

Other Test Results

RESULT	TEST NAME		RESULT	TEST NAME
7.6	Homocysteine		26	Vitamin D, 25-OH
4.5	Albumin			

- ○ OPTIMAL
- ○ BORDERLINE
- ○ HIGH / LOW

THE GOOD, THE BAD, AND THE BALANCED

Fatty acids play an important role in healthy cell function and are made in your body from foods and oils that you eat. Fatty acids become the building blocks for healthy cells throughout your body. Maintaining the right balance of unsaturated "good" fats to saturated "bad" fats is important for your heart health. Unsaturated fat helps keep arteries healthy, flexible and protected, and Omega-3 fatty acids help reduce inflammation. Too much saturated fat can make your arteries stiff and too much trans fat can damage your arteries.

⊙ GOOD FATS

Unsaturated Fat
Almonds
Unsalted nuts
Natural nut butter
Avocado
Plant based oils
Seeds

Omega-3 Fatty Acid (EPA & DHA)
Salmon
Sardines
Herring
Tuna
Mackerel
Fish oil
DHA or EPA capsules

Alpha-Linolenic Acid (ALA)
Walnuts
Chia seeds
Ground flaxseeds
Plant based oils (Flaxseed oil)

⊙ BAD FATS

Saturated Fatty Acid
Full fat dairy
Butter
Cheese
Desserts
Fatty meats

Trans Fatty Acid
Shortening
Frosting
Stick margarine
Non-dairy creamer
Fried foods
Packaged sweets

Boston Heart Fatty Acid Balance™ Test

Fats are not all bad—the right balance and types of fats in your diet are important for your health.

RESULT	TEST NAME	WHERE YOU STAND
28.8	**Saturated FA Index**	*Looks good, continue to choose low-fat dairy, lean meats like poultry and fish, and to limit unhealthy fats found in butter, cheese, desserts and fatty cuts of meat.*
0.85	**Trans FA Index**	*Avoid hydrogenated or trans fats such as shortening, frosting, stick margarine, packaged sweets, and non-dairy creamer.*
16.9	**Monounsaturated FA Index**	*Increase your monounsaturated fat by eating healthy fat such as natural nut butter, almonds, avocado or plant-based oils.*
2.37	**Unsat/Sat Ratio Index**	*Continue to choose healthy unsaturated fats (listed on the other page) over saturated fats to maintain a good fatty acid balance.*
4.05	**Omega-3 FA Index**	*Increase your EPA and DHA levels by eating fish rich in these Omega-3s such as salmon, sardines, herring, tuna and mackerel. If you eat 2 servings or less of fish high in Omega-3 fat per week, talk with your healthcare provider about whether a fish oil, EPA or DHA supplement is right for you.*
51.8	**EPA**	
100.8	**DHA**	
38.0	**ALA**	*ALA is a plant-based Omega-3. Maintain your levels by consuming walnuts, chia seeds, ground flaxseeds and plant-based oils rich in ALA.*

Other Fatty Acid Test Results

RESULT	TEST NAME	RESULT	TEST NAME
47.5	**Omega-6 FA Index**	8.3	**AA/EPA Ratio Index**
1248.8	**Linoleic Acid (LA)**	9.39	**Omega-6/Omega-3 Ratio Index**
429.2	**Arachidonic Acid (AA)**		

Jane, you can improve your heart health. Your plan for well being is based on your red and yellow test results. Let's go—"Get to Green."

Your plan for well being includes medications, supplements and lifestyle changes which research has shown can reduce your risk of heart disease. Work with your healthcare provider to determine the right treatment for you.

MEDICATIONS

LIPIDS	INFLAMMATION	METABOLICS	GENETICS	
●	●		●	**Statins*** — lower cholesterol, bad cholesterol and inflammation
●	●			**Cholesterol Absorption Inhibitor (ezetimibe)** — lowers bad cholesterol in the blood by reducing cholesterol absorption
●	●			**Fibrates** — lower fat in the blood and may increase good cholesterol
●		●		**Bile Acid Sequestrants** — lower bad cholesterol circulating in the blood
●		●		**Glucose Stabilizing and/or Insulin Sensitizing Medications** — reduce glucose and insulin levels
●				**Aspirin** — stops platelets from sticking together and forming a clot
	●			**ACE inhibitors** — help enlarge arteries making it easier for the heart to pump blood

SUPPLEMENTS

LIPIDS	INFLAMMATION	METABOLICS	GENETICS	
●				**Niacin** — raises good cholesterol, especially the very large HDL particles, lowers fat in the blood, and lowers dangerous inherited bad cholesterol
●	●			**Fish Oil (Omega-3 Fatty Acids)** — lowers fat in the blood and slows the growth rate of plaque
●				**CoQ10** — helpful for muscle function in patients on statin therapy
●				**Soluble Fiber** — stabilizes blood glucose, tends to reduce blood cholesterol and permits better absorption of nutrients

For you: to reduce risk of muscle pain with a statin these types of statins may work best: pravastatin, rosuvastatin, pitavastatin or fluvastatin.

WELL BEING

DANGER

LIPIDS *You are in danger because you have a high risk of forming a blockage which can lead to a heart attack or stroke.*

CAUTION

METABOLICS *You have a 1.6 times normal risk of developing diabetes within 10 years. This increases your risk of heart disease.*

CAUTION

INFLAMMATION *You have inflammation that may damage your artery wall lining. This is how blockages can form.*

CAUTION

GENETICS *Your genetic results may help your provider decide the best medication for you. Monitor how you feel and talk with your healthcare provider.*

LIPIDS	INFLAMMATION	METABOLICS	GENETICS	LIFESTYLE CHANGES
●	●	●		**Learn how to eat for your heart health on page 22** **For you:** *Carbs* **40%***, Proteins* **30%***, Fats* **30%**
●	●	●		**Maintain a healthy weight** Eat only enough calories each day to maintain a healthy weight **For you:** *Keep your waist size below* **35 inches**
●	●	●		**Eat healthy carbohydrates** Eat vegetables, fruits and whole grains; limit refined grains and sweets **For you:** *Get at least* **25 grams** *of fiber daily*
●				**Eat lean and healthy proteins** Limit fatty meats and high-fat dairy; choose fish, beans, nuts, and lean poultry and meat **For you:** *Eat less than* **200 mg** *of cholesterol daily*
●	●			**Include Omega-3 Fatty Acids** Fattier fish (like salmon) have the most omega-3 fats **For you:** *Eat fish at least* **2 times** *per week*
●				**Eat Healthy Fats** Avocados, nuts and olive oil are healthy choices **For you:** *Limit saturated fats to no more than* **10%** *of your total calories per day*
				Limit salt **For you:** *Consume* **1,500-2,300 mg** *per day*
●	●	●		**Be Active** Almost anyone can gradually increase their activity level **For you:** *Each week strive to make some progress*
●	●	●		**Limit sugary foods and drinks** Limit all processed foods with sugar added **For you:** *Aim to gradually reduce the amount of foods with added sugar; instead choose fruit*

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Jane, take action to improve your health with the Boston Heart Lifestyle Program.

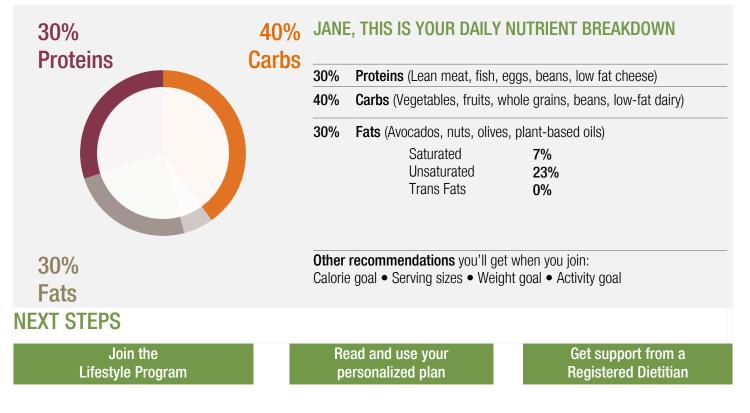## JOIN THE LIFESTYLE PROGRAM, INCLUDED WITH YOUR TESTING.

Simply complete a brief questionnaire and you'll unlock several tools including a 7-day menu, heart-healthy recipes, calorie, weight and activity goals, food journal, and support from a Registered Dietitian.

Go to mybostonheart.com or call 877.425.1252 to join.

HERE IS A PREVIEW OF YOUR PERSONALIZED NUTRITION AND LIFE PLAN BASED ONLY ON YOUR TEST RESULTS.

Jane, your heart will benefit from the right amounts of healthy proteins, carbs and fats. Your nutrient breakdown may change after answering questions about your food preferences on mybostonheart.com.

ABOUT YOU
Making small changes today can have a big impact.

NUTRITION
Eating the right foods in the right amounts can improve your health.

ACTIVITY
Increasing physical activity can help your heart and mind.

JOURNALING
Tracking in a journal can help you achieve your goals.

SUPPORT
Using a Registered Dietitian can help you learn about nutrition and stay motivated.

SUMMARY
Following your plan can help you get to where you want to be.

30% Proteins

40% Carbs

30% Fats

JANE, THIS IS YOUR DAILY NUTRIENT BREAKDOWN

30%	**Proteins** (Lean meat, fish, eggs, beans, low fat cheese)	
40%	**Carbs** (Vegetables, fruits, whole grains, beans, low-fat dairy)	
30%	**Fats** (Avocados, nuts, olives, plant-based oils)	
	Saturated	7%
	Unsaturated	23%
	Trans Fats	0%

Other recommendations you'll get when you join:
Calorie goal • Serving sizes • Weight goal • Activity goal

NEXT STEPS

Join the Lifestyle Program	Read and use your personalized plan	Get support from a Registered Dietitian

Jane, get started now by using this preview of your food list.

Aim to eat most of your servings from the **GREAT** and **OK** foods.

To get your personalized food list as well as a 7-day menu based on your likes and dislikes, join the Lifestyle Program at mybostonheart.com.

	VEGETABLES	FRUITS	GRAINS	DAIRY	PROTEIN	FAT/OIL

GREAT FOODS	any green or leafy vegetable
	beets
	cabbage
	carrot
	eggplant
	mushrooms
	onion
	pepper
	squash
	sweet potato, yam
	tomato
	vegetable soup
		apple
		banana
		berries
		cantaloupe
		grapefruit
		grapes
		kiwi
		orange
		peach
		pear
		pineapple
		tangerines
			bulgur
			oat bran
			steel cut oats
			whole grains:
			  barley
			  buckwheat
			  brown rice
			  popcorn (air
			    popped)
			  quinoa
			  wheat berries
			  wild rice
			  wheat germ
				almond milk,
				  unsweetened
				Greek yogurt,
				  low-fat, plain
				low-fat kefir, plain
				low-fat cheese
				skim or 1% milk
				soy milk, plain
				yogurt, low-fat
				  plain or light
				0-2% fat cottage
				  cheese
					chicken breast no skin
					egg whites or egg sub
					fish
					lean chicken sausage
					lean turkey sausage
					protein powder
					shellfish
					tenderloin, beef
					tenderloin, pork
					tempeh or tofu
					turkey breast no skin
					vegetable burgers
					95% lean meat
						avocado
						natural nut butter
						nuts
						seeds
						  chia
						  flax
						  pumpkin
						  sesame
						  sunflower
						tahini
						  (sesame paste)

OK FOODS	beans (kidney, white, etc.)
	chick peas, hummus
	lentils
	soy beans, edamame
	sweet corn
		canned fruit in juice
		dried fruit
		watermelon
			bran cereal
			sprouted whole
			  grain bread
			granola, low-fat
			rolled oats
			whole grain pita
			  chips
			100% whole wheat
			  pasta
				low-fat, no sugar
				  desserts
				part skim cheese
				2% cheese
				2% milk
					chicken, dark meat
					  no skin
					egg yolk or whole egg
					falafel
					turkey, dark meat
					  no skin
					vegetable burgers, soy
					90-94% lean ground
					  meat
						mayonnaise
						plant-based
						  oils
						vinaigrette
						  dressing

LIMIT FOODS	potatoes (red, white, gold)
	French fries
	fried vegetables
	potato chips
	vegetables in creamy
	  sauce
		canned fruit in syrup
		dates
		fruit drinks
		fruit juices
		sweetened fruits
			any breads or rolls
			cereals, sweetened
			muffins or pastries
			oatmeal, sweetened
			salty snacks
			tortillas
			white rice
			white pasta
				full fat cheese
				creamy soups
				ice cream, frozen
				  yogurt
				non-light yogurts
				sweetened milks
				whole milk
					bacon
					fried chicken
					fried fish
					fried meats
					meat < 90% lean
					chicken skin
					turkey skin
					pork sausage
						bacon grease,
						  lard
						butter, ghee
						cream,
						  sour cream,
						  cream cheese
						dark chocolate
						margarine
						non-dairy
						  creamer

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Terms

Artery: A blood vessel that carries oxygen rich blood from the heart to organs and tissues.

Artery Wall Lining: A tissue consisting of a single layer of cells that line arteries and blood vessels. Formally called the "Endothelium."

Blockage (Plaque): A buildup of fat, cholesterol and other substances in the artery wall lining causing it to narrow and harden.

Blood Clot (Clotting): Naturally occurs with bleeding where blood platelets clump together to stop bleeding. When a blockage breaks, clots can form inside the artery wall and stop blood flow or travel to the brain. This can cause a heart attack or stroke.

Diabetes: A disorder of metabolism where the body's natural response to managing sugar (glucose) in the blood no longer works. Too much sugar can lead to serious health problems. Formally called "Diabetes Mellitus."

Genotype: A specific form of a gene (or set of genes) of an individual cell. Different forms may be linked to changes in response to medications, diet or altered risk for health conditions or disease.

Heart Attack: Occurs when blood flow to a part of the heart is blocked for a long enough time that part of the heart muscle is damaged or dies. Formally called a "myocardial infarction," meaning death of heart muscle.

Heart Disease: Refers to health issues with the heart and blood vessels. These health issues can lead to blood clots, blocked arteries, chest pain, heart attack, stroke, acute heart failure, disability and even death.

Hormone: A chemical "message" released by a cell or a gland in one part of the body that travels through the blood and regulates processes such as growth and development, metabolism (how the body gets energy from foods), sexual function, reproduction and mood.

Lifestyle: Habits and behaviors that relate to diet, exercise, stress and unhealthy practices such as smoking that influence risk for heart attacks and strokes and overall well being.

Lipoprotein: Protein particles in blood that carry cholesterol and other substances throughout the body.

Prediabetes: Blood glucose levels higher than normal, but not yet high enough to be designated as diabetes.

Protein: "Worker" molecules in blood that build, maintain, and replace tissues and carry other substances throughout the body.

Risk: An indication if a person is more or less likely than another person of same age and gender to have a heart attack, stroke or diabetes based on blood tests, health conditions, family history or lifestyle habits.

Stroke: Occurs when blood flow to a part of the brain is blocked for a long enough time that part of the brain is damaged or dies.

Test descriptions

Adiponectin: Measures a hormone produced by subcutaneous fat cells that protects against developing heart disease and diabetes.

ApoA-I (apolipoprotein A-I): Measures a protein located on "good" HDL cholesterol.

ApoB (apolipoprotein B): Measures a protein located on "bad" LDL cholesterol.

ApoE (apolipoprotein E) genotype test: Identifies different forms (genotypes) of the apoE protein that provides useful information on the body's response to diet and statin therapy.

Boston Heart Cholesterol Balance® test: Boston Heart's unique test helps identify how the body produces and absorbs LDL cholesterol.

Boston Heart HDL Map® test: Boston Heart's unique test measures the amount of apoA-I in the five major HDL particles (alpha-1, alpha-2, alpha-3, alpha-4, and prebeta-1) related to heart disease.

Boston Heart Prediabetes Assessment®: Boston Heart's unique assessment of developing diabetes within the next 10 years.

C-Peptide: Measures a substance produced in the pancreas along with insulin. C-peptide levels can accurately show how much insulin is being made in the body, even in diabetics taking insulin and may aid in the diagnosis and treatment of abnormal insulin production.

CYP2C19 genotype test: Identifies how the body will process a medication called clopidogrel (Plavix®) and helps determine the likelihood of forming blood clots.

Factor II and Factor V genotype tests: Identifies specific genes that increase the likelihood of developing blood clots.

Fibrinogen: Measures a protein that helps in the formation of clots and is an indicator of inflammation in the body.

Glucose: Measures the amount of sugar in the blood.

GSP (Glycated Serum Protein): Measures the average amount of glucose in the blood over two to three weeks to monitor control of glucose levels.

HbA1c (hemoglobin A1c): Measures the average amount of glucose in the blood over three months.

HDL-C (high-density lipoprotein cholesterol): Measures the amount of good cholesterol in the blood.

hs-CRP (high-sensitivity C-reactive protein): Measures a protein produced in response to inflammation and excess build up of cholesterol and other fats.

Insulin: Measures a hormone produced by the pancreas that allows the body to utilize sugar in the blood.

Insulin resistance (HOMA-IR): Measures how effectively the body is responding to sugar in the blood.

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Test descriptions continued

LDL-C (low-density lipoprotein cholesterol): Measures the amount of bad cholesterol in the blood.

LDL-P (LDL particle number): Measures the number of LDL particles in the blood.

Lp(a) (lipoprotein (a)): Measures an inherited, bad cholesterol particle similar to LDL.

LpPLA$_2$ Activity (lipoprotein-associated phospholipase A2): Measures a special type of protein made by white blood cells that leads to inflammation and blockages in the artery wall lining.

MPO (Myeloperoxidase): Measures a special type of protein made by white blood cells that causes inflammation in the artery wall lining. High levels indicate a blockage may be ready to break.

MTHFR genotype test: Identifies how efficiently the body breaks down folate (vitamin B9) and removes homocysteine from the blood.

Non-HDL-C (non-high-density lipoprotein cholesterol): Measures the amount of cholesterol found in all cholesterol-carrying particles except HDL (good cholesterol).

sdLDL-C (small-dense LDL cholesterol): Measures the small, dense form of bad cholesterol.
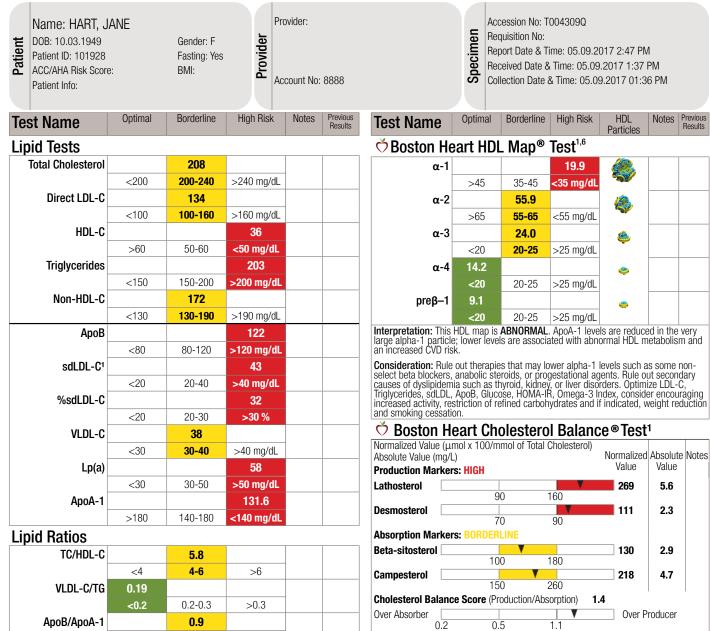
Statin Induced Myopathy (SLCO1B1) Genotype Test: Identifies how the body may process statins and the likelihood of experiencing muscle aches and pain.

Triglycerides (TG): Measures the main form of fat in the blood that is used to provide energy.

Total cholesterol (TC): Measures the total amount of good and bad cholesterol in the blood.

For additional test descriptions, visit mybostonheart.com

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FINAL REPORT

Patient	
Name: HART, JANE	
DOB: 10.03.1949	Gender: F
Patient ID: 101928	Fasting: Yes
ACC/AHA Risk Score:	BMI:
Patient Info:	

Provider	
Provider:	
Account No: 8888	

Specimen	
Accession No: T004309Q	
Requisition No:	
Report Date & Time: 05.09.2017 2:47 PM	
Received Date & Time: 05.09.2017 1:37 PM	
Collection Date & Time: 05.09.2017 01:36 PM	

Test Name	Optimal	Borderline	High Risk	Notes	Previous Results
Lipid Tests					
Total Cholesterol		**208**			
	<200	**200-240**	>240 mg/dL		
Direct LDL-C		**134**			
	<100	**100-160**	>160 mg/dL		
HDL-C			**36**		
	>60	50-60	**<50 mg/dL**		
Triglycerides			**203**		
	<150	150-200	**>200 mg/dL**		
Non-HDL-C		**172**			
	<130	**130-190**	>190 mg/dL		
ApoB			**122**		
	<80	80-120	**>120 mg/dL**		
sdLDL-C[1]			**43**		
	<20	20-40	**>40 mg/dL**		
%sdLDL-C			**32**		
	<20	20-30	**>30 %**		
VLDL-C		**38**			
	<30	**30-40**	>40 mg/dL		
Lp(a)			**58**		
	<30	30-50	**>50 mg/dL**		
ApoA-1			**131.6**		
	>180	140-180	**<140 mg/dL**		
Lipid Ratios					
TC/HDL-C		**5.8**			
	<4	**4-6**	>6		
VLDL-C/TG	**0.19**				
	<0.2	0.2-0.3	>0.3		
ApoB/ApoA-1		**0.9**			
	<0.6	**0.6-0.9**	>0.9		
HDL-C/TG			**0.18**		
	>0.5	0.25-0.5	**<0.25**		

Test Name	Optimal	Borderline	High Risk	HDL Particles	Notes	Previous Results
Boston Heart HDL Map® Test[1,6]						
α-1			**19.9**			
	>45	35-45	**<35 mg/dL**			
α-2		**55.9**				
	>65	**55-65**	<55 mg/dL			
α-3		**24.0**				
	<20	**20-25**	>25 mg/dL			
α-4	**14.2**					
	<20	20-25	>25 mg/dL			
preβ–1	**9.1**					
	<20	20-25	>25 mg/dL			

Interpretation: This HDL map is **ABNORMAL**. ApoA-1 levels are reduced in the very large alpha-1 particle; lower levels are associated with abnormal HDL metabolism and an increased CVD risk.

Consideration: Rule out therapies that may lower alpha-1 levels such as some non-select beta blockers, anabolic steroids, or progestational agents. Rule out secondary causes of dyslipidemia such as thyroid, kidney, or liver disorders. Optimize LDL-C, Triglycerides, sdLDL, ApoB, Glucose, HOMA-IR, Omega-3 Index, consider encouraging increased activity, restriction of refined carbohydrates and if indicated, weight reduction and smoking cessation.

Boston Heart Cholesterol Balance® Test[1]

Normalized Value (μmol x 100/mmol of Total Cholesterol)
Absolute Value (mg/L)

	Normalized Value	Absolute Value	Notes
Production Markers: HIGH			
Lathosterol (90 / 160)	**269**	**5.6**	
Desmosterol (70 / 90)	**111**	**2.3**	
Absorption Markers: BORDERLINE			
Beta-sitosterol (100 / 180)	**130**	**2.9**	
Campesterol (150 / 260)	**218**	**4.7**	

Cholesterol Balance Score (Production/Absorption) **1.4**

Over Absorber (0.2 / 0.5 / 1.1) Over Producer

Interpretation: Increased amounts of Lathosterol and Desmosterol and Beta-sitosterol and Campesterol may indicate an increased cellular production and intestinal absorption of cholesterol.

Consideration: Consider lifestyle modification, statin and ezetimibe therapy.

Notes

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Patient		Provider		Specimen	
Name: HART, JANE		Provider:		Accession No: T004309Q	
Patient ID: 101928	Gender: F	Account No: 8888		Report Date & Time: 05.09.2017 2:47 PM	

Test Name	Optimal	Borderline	High Risk	Notes	Previous Results

Inflammation Tests

Test Name	Optimal	Borderline	High Risk	Notes	Previous Results
Fibrinogen		**383**			
	<370	**370-470**	>470 mg/dL		
hs-CRP	**0.3**				
	<1.0	1.0-3.0	>3.0 mg/L		
LpPLA$_2$ Activity		**197**			
	<180	**180-224**	≥225 nmol/min/mL		
MPO[1]	**174**				
	<450	450-650	>650 pmol/L		

Interpretation: BORDERLINE LpPLA$_2$ may indicate vascular inflammation, plaque instability and may be associated with increased CVD risk.

Consideration: Consider evaluating potential contributing CVD risk factors. Identify and treat underlying causes such as atherogenic lipoproteins and metabolic markers. If indicated, control blood pressure, encourage smoking cessation, and weight reduction.

Metabolic Tests

Test Name	Optimal	Borderline	High Risk	Notes	Previous Results
HbA1c	**5.6**				
	<5.7	5.7-6.4	>6.4 %		
HOMA-IR			**3.5**		
	<2	2-3	**>3**		
Glucose[2]		**108**			
	70-99	**100-125**	<70 or >125 mg/dL		
GSP		**219**			
	<200	**200-250**	>250 µmol/L		
Adiponectin[1]			**8.9**		
	>13	9-13	**<9 µg/mL**		

Test Name	Low	Optimal	High	Notes	Previous Results
Insulin[3]		**13**			
	<5	**5-15**	>15 µU/mL		

Interpretation: BORDERLINE glucose indicates prediabetes as established by the ADA. Prediabetes is a major risk factor for metabolic syndrome and has been associated with increased risk of developing diabetes, hyperlipidemia, hypertension and CVD.

Consideration: Consider encouraging dietary modification supported by education and consider glucose lowering and/or insulin sensitizing medications. If indicated encourage weight reduction, smoking cessation, increased activity and control blood pressure.

♥ Boston Heart Prediabetes Assessment®

Low	Borderline	High Risk
0%	10% 20%	100%

Interpretation: Borderline (11.7%) or 1.6 times normal risk of developing diabetes within 10 years. Consider recommending a structured diet and exercise program. Prediabetes Assessment is limited due to lack of information on height, weight, parental history of diabetes and/or use of statins or niacin.

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Patient	
Name: HART, JANE	
Patient ID: 101928	Gender: F

Provider	
Provider:	
Account No: 8888	

Specimen	
Accession No: T004309Q	
Report Date & Time: 05.09.2017 2:47 PM	

Test Name	Test Result	Interpretation	Notes
Genetic Tests by Genotyping[1,4]			
Reported Date: 05.09.17			
♡ **Statin Induced Myopathy (SLCO1B1)**[7]	**T/C**	Decreased statin transporter. Patients with a T/C genotype have a decreased ability to transport statins; associated with reduced statin efficacy, and up to a 4.5-fold increased risk of developing muscle pain on statin therapy. Consider recommending moderate to low doses of water soluble statins (in order of solubility: pravastatin, pitavastatin, rosuvastatin or fluvastatin).	
Reported Date: 05.09.17			
ApoE	**E2/E4**	E2/E4 genotype. Consider recommending lifestyle modification and statin therapy.	

Test Name	Test Result	Interpretation	Notes
Reported Date: 05.09.17			
Factor II	**-/-**	Normal risk of clot formation.	
Reported Date: 05.09.17			
Factor V Leiden	**-/-**	Normal risk of clot formation.	

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Patient	Name: HART, JANE	
	Patient ID: 101928	Gender: F
Provider	Provider:	
	Account No: 8888	
Specimen	Accession No: T004309Q	
	Report Date & Time: 05.09.2017 2:47 PM	

Test Name	Optimal	Borderline	High Risk	Interpretation	Notes	Previous Results

♡ Boston Heart Fatty Acid Balance™ Test[1]

Test Name	Optimal	Borderline	High Risk	Interpretation	Notes	Previous Results
Saturated Fatty Acid Index	**28.8**			Saturated FA Index is OPTIMAL.		
	<30.0	30.0-33.0	>33.0 %			
Trans Fatty Acid Index			**0.85**	Trans FA Index is HIGH. Higher levels of plasma trans fatty acids are associated with an increased risk of CVD. Consider restricting dietary intake of fried foods, foods containing partially hydrogenated fats, shortening, or stick margarine, and replacing with plant based oils.		
	<0.50	0.50–0.80	**>0.80 %**			

Test Name	Optimal	Borderline	Low	Interpretation	Notes	Previous Results
Monounsaturated Fatty Acid Index			**16.9**	Monounsaturated FA Index is LOW. Higher plasma levels of MUFA have been associated with a lower risk of CVD. Consider increasing intake of almonds, avocado or plant based oils (including olive).		
	>22.0	19.0–22.0	**<19.0 %**			
Unsaturated/Saturated Ratio Index	**2.37**			Unsaturated/Saturated Ratio Index is OPTIMAL.		
	>2.25	2.00–2.25	<2.00			
Omega-3 Fatty Acid Index		**4.05**		Omega-3 FA Index is BORDERLINE. A lower Omega-3 FA index is associated with an increased risk for CVD. Eicosapentaenoic Acid (EPA) level is OPTIMAL. Docosahexaenoic Acid (DHA) level is OPTIMAL. The Omega-3 FA Index is the amount of EPA and DHA divided by total fatty acids. Consider recommending consumption of at least 2-3 meals of oily fish such as salmon, sardines, herring, tuna, and mackerel weekly or a fish oil supplement.		
	>4.50	**2.00–4.50 %**	<2.00 %			
EPA	**51.8**					
	>50.0	15.6-50.0	<15.6 µg/mL			
DHA	**100.8**					
	>100.0	45.0–100.0	<45.0 µg/mL			
ALA	**38.0**			Alpha Linolenic Acid (ALA) level is OPTIMAL. Maintain current level of dietary and/or supplemental intake of Omega-3 fatty acids.		
	>30.0	14.0–30.0	<14.0 µg/mL			

Test Name	Low	Mid	High	Interpretation	Notes	Previous Results
Omega-6 Fatty Acid Index			**47.5**	Values are reported according to the lowest, middle and highest thirds of our reference population. Some authorities have recommended a goal below the 10th percentile for the Omega-6/Omega-3 Ratio Index (a value of 9.0) and the AA/EPA Ratio Index (a value of 5.0).		
	<41.0	41.0–46.0	>46.0 %			
Linoleic Acid (LA)			**1248.8**			
	<825.0	825.0–1040.0	>1040.0 µg/mL			
Arachidonic Acid (AA)			**429.2**			
	<220.0	220.0–290.0	>290.0 µg/mL			
AA/EPA Ratio Index	**8.3**					
	<13.0	13.0–25.0	>25.0			
Omega-6/Omega-3 Ratio Index	**9.39**					
	<15.0	15.0–24.0	>24.0			

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BHD-REP-003.01

FINAL REPORT

Patient
Name: HART, JANE
Patient ID: 101928   Gender: F

Provider
Provider:
Account No: 8888

Specimen
Accession No: T004309Q
Report Date & Time: 05.09.2017 2:47 PM

Test Name	Optimal	Borderline	High Risk	Notes	Previous Results
Liver Tests					
AST	19				
	<40	40-120	>120 U/L		
ALT	15				
	<40	40-120	>120 U/L		
Alkaline Phosphatase	88				
	<130	130-200	>200 U/L		
Muscle Tests					
Creatine Kinase (CK)	88				
	<200	200-1000	>1000 U/L		
NT-proBNP		169			
	<125	125-450	>450 pg/mL		
Kidney Tests					
eGFR / Non-African American	88				
	>60	30-60	<30 mL/min/1.73 m²		
eGFR / African American	102				
	>60	30-60	<30 mL/min/1.73 m²		
BUN/Creatinine	15.8				
	<=23		>23		

Test Name	Low	Optimal	High	Notes	Previous Results
BUN		11.2			
	<3.0	3.0-25.0	>25.0 mg/dL		
Creatinine		0.71			
	<0.51	0.51-0.95	>.95 mg/dL		

Test Name	Low	Optimal	High	Notes	Previous Results
Thyroid and Other Tests					
Albumin		4.5			
	<3.5	3.5-5.2	>5.2 g/dL		
Vitamin D, 25-OH	26				
	<30	30-100	>100 ng/mL		

Test Name	Optimal	Borderline	High Risk	Notes	Previous Results
Homocysteine	7.6				
	<10	10-15	>15 µmol/L		
Uric Acid	4.4				
	<6	6-10	>10 mg/dL		

Patient	
Name: HART, JANE	
Patient ID: 101928	Gender: F

Provider	
Provider:	
Account No: 8888	

Specimen	
Accession No: T004309Q	
Report Date & Time: 05.09.2017 2:47 PM	

Test Name	05.09.2017 (Current)
Lipid Tests	
Total Cholesterol	208
Direct LDL-C	134
HDL-C	36
Triglycerides	203
Non-HDL-C	172
ApoB	122
sdLDL-C[1]	43
%sdLDL-C	32
VLDL-C	38
Lp(a)	58
ApoA-1	131.6
Lipid Ratios	
TC/HDL-C	5.8
VLDL-C/TG	0.19
ApoB/ApoA-1	0.9
HDL-C/TG	0.18
♥ Boston Heart HDL Map® Test[1,6]	
α-1	19.9
α-2	55.9
α-3	24.0
α-4	14.2
preβ–1	9.1
♥ Boston Heart Cholesterol Balance® Test[1]	
Lathosterol	269
Desmosterol	111
Beta-sitosterol	130
Campesterol	218
Inflammation Tests	
Fibrinogen	383
hs-CRP	0.3
LpPLA$_2$ Activity	197
MPO[1]	174

Test Name	05.09.2017 (Current)
Metabolic Tests	
HbA1c	5.6
HOMA-IR	3.5
Glucose[2]	108
GSP	219
Adiponectin[1]	8.9
Insulin[3]	13
♥ Boston Heart Prediabetes Assessment®	
Prediabetes Assessment (%)	11.7
♥ Boston Heart Fatty Acid Balance™ Test[1]	
Saturated Fatty Acid Index	28.8
Trans Fatty Acid Index	0.85
Monounsaturated Fatty Acid Index	16.9
Unsaturated/Saturated Ratio Index	2.37
Omega-3 Fatty Acid Index	4.05
EPA	51.8
DHA	100.8
ALA	38.0
Omega-6 Fatty Acid Index	47.5
Linoleic Acid (LA)	1248.8
Arachidonic Acid (AA)	429.2
AA/EPA Ratio Index	8.3
Omega-6/Omega-3 Ratio Index	9.39
Liver Tests	
AST	19
ALT	15
Alkaline Phosphatase	88
Muscle Tests	
Creatine Kinase (CK)	88
NT-proBNP	169

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Patient		Provider		Specimen	
Name: HART, JANE		Provider:		Accession No: T004309Q	
Patient ID: 101928	Gender: F	Account No: 8888		Report Date & Time: 05.09.2017 2:47 PM	

Test Name	05.09.2017 (Current)

Kidney Tests

eGFR / Non-African American	88
eGFR / African American	102
BUN/Creatinine	15.8
BUN	11.2
Creatinine	0.71

Thyroid and Other Tests

Albumin	4.5
Vitamin D, 25-OH	26
Homocysteine	7.6
Uric Acid	4.4

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Patient	Name: HART, JANE		**Provider**	Provider:	**Specimen**	Accession No: T004309Q
	Patient ID: 101928	Gender: F		Account No: 8888		Report Date & Time: 05.09.2017 2:47 PM

Notes

Footnotes

The intended use of this report is to provide an aid in the physician's treatment decisions. This report is intended for a physician or other qualified health care provider. Please consult with your physician regarding any questions.

[1] This test was developed and its performance characteristics determined by Boston Heart Diagnostics. It has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The FDA has determined that such clearance is not necessary. This test is used for clinical purposes. It should not be regarded as investigational or for research. Methods: HDL Map: Gel electrophoresis; Cholesterol Balance and Fatty Acid Balance: GC/MS; MPO: Immunoturbidometric; CoQ10: UPLC; sdLDL-C: Enzymatic colorimetric; Adiponectin: Latex turbidimetric immunoassay.

[2] A fasting glucose level of >125 mg/dL indicates the presence of diabetes mellitus, and a fasting glucose level of <70 mg/dL indicates hypoglycemia.

[3] A test result in the low range is normal in a non-diabetic, but low if a patient has diabetes (consistent with diabetes).

[4] Genetic analysis is performed by real time Polymerase Chain Reaction (PCR) using TaqMan® probes. Amplified gene nucleotide sites: APOE - Apolipoprotein E, T471C rs429358, C609T rs7412; F5 - Coagulation Factor V, G1746A rs6025; F2 - Coagulation Factor 2, G20210A rs1799963; CYP2C19 (Clopidogrel response) -Cytochrome P450 2C19, G681A rs4244275, G636A rs4986893, C-806T rs12248560; SLCO1B1 (Statin Myopathy) - Solute Carrier Organic Anion Transporter Family, Member 1B1, T625C rs4149056. MTHFR – Methylenetetrahydrofolate reductase, C677T rs1801133, A1298C rs1801131. Limitations: Other rare mutations not detected by these assays may be present in some individuals.

[6] Test performed at 175 Crossing Boulevard, Framingham, MA 01702. CLIA#: 22D1083041. NYSDOH: 8729.

[7] Other significant risk factors for statin induced myopathy include age > 65 years, female gender, diabetes, physical activity, creatinine levels > 1.0 mg/dL, hypothyroidism, and use of calcium channel blockers and amiodarone.

* Tests performed with alternative methodologies are not displayed for comparative purposes.

🛑 = Critical Value, ⚠️ = Alert Value, TNP = Test Not Performed, PEND = Test Result Pending, GSP = Glycated Serum Protein, ADA = American Diabetes Association

CLIA# 22D2100622	NYSDOH: 9021	200 Crossing Blvd.		Ernst J. Schaefer, MD	Page 8 of 8
BHD-REP-003.01		Framingham, MA 01702, 508.877.8711		Laboratory Director	

Notes and questions for my healthcare provider

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Notes and questions for my healthcare provider

Select references

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About this report

Boston Heart Diagnostics Corporation uses diagnostic information from your blood tests in combination with a comprehensive database of research findings to provide your potential risk of heart disease, stroke and diabetes. Many other factors that are not part of our heart health story may change your risk. These factors may include, but are not limited to, your family history (genetics), other health conditions, current level of exercise, dietary habits and environmental factors. This report does not account for these other factors.

Boston Heart intends for this report to provide you with guidance on your risk of a cardiovascular event occurring, given your laboratory results. Even if your test results fall within the "danger" or "caution" categories in this report, your results do not necessarily mean that you will suffer a heart attack, stroke, or develop diabetes or any other illness described in your report.

This report is not a substitute for information you receive from your healthcare provider. It is important for you to talk with your healthcare provider about these results, any questions that you have and possible actions that you may take to further lower your risk.

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too late
or early
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