

Dear Sylvia,

NutriSync™ has developed the following Action Plan for you, based on an analysis of your genetics and lifestyle.



EXECUTIVE SUMMARY

Your NutriSync™ Diet Focus: **Cardiovascular Support**

Your genetic diet focuses on foods known to support normal levels of fats in the blood. Your diet should be high in dietary fiber from legumes, whole grains, nuts, fruits, and vegetables. Your diet suggests soy protein, plant phytosterols and Omega-3 fats from cold-water fish and from plant sources. Your diet minimizes the amount of meats high in saturated fats and is generous in fruits and vegetables.

Your NutriSync™ Exercise Focus: **40% Power / 60% Endurance**

Endurance is the ability of athletes to exert themselves for relatively long periods of time. The definition of endurance varies according to the type of physical activity the athlete is engaged in. Power athletes exert high amounts of energy in short bursts. High intensity power activity may be measured in minutes, whereas low intensity endurance activities may be measured in hours. Understanding your genetic background can help you determine what type of exercise regimen may be the most appropriate for you. Athletes at the very top of their "game" tend to have a specific set of genetic variations that are characteristic of endurance and power activities.

Endurance activities: distance running, mountain climbing and distance cycling.

Power Activities: short distance sprint runs, short distance swimming and power lifting.



YOUR NUTRISYNC™ ASSESSMENT SUMMARY

This Assessment Summary is designed to help you understand your unique NutriSync™ Assessment results. We have analyzed a specific set of genes, which research has shown may be impacted by your diet, exercise and lifestyle choices. We've looked for small changes in your own genetic code that can affect the functioning of these genes, and we've analyzed your Online Lifestyle Survey. By combining your DNA results with your Online Lifestyle Survey information, we're able to give you a diet and exercise program, with specific recommendations related to your unique nutritional needs.

We recommend that you share your NutriSync™ Action Plan with your health care professional who will have a more complete picture of your health needs and your medical history. While the dietary, exercise and lifestyle goals in your NutriSync™ Action Plan are formulated from many research studies that relate to the genetic variations tested, your health care professional may recommend differing amounts of nutrients and exercises based on other health parameters that are not tested or taken into account in your NutriSync™ Action Plan. Your goals or upper limits set by your genetics serve as guidelines for you and your health care professional to optimize your levels. These goals and upper limits are set for adults only and may not be suitable for anyone under 18 years of age because there are not enough studies for children yet.

Based on our analysis, here's how you're doing with your current lifestyle:

Lifestyle Today: 59%



The Lifestyle Bar measures the percent towards your overall goal of diet and lifestyle choices that NutriSync™ has set for you based on your unique genetic profile. The optimum range is at 90 - 100%.

BMI: 100.00%



Your goal with the BMI tracker is to be within a healthy range between 19 and 25. Your BMI is currently 21.7. You are 100% towards the goal that NutriSync™ has set for you based on your unique genetic profile.

BMI (Body Mass Index) is calculated using your height and weight. The optimal range of 19 and 25 is based on the average populations so you may fall outside this range for some factors such as muscle mass, age and gender which are not taken into account in the formula.



GENE GUIDE

This table of genetic variations is a list of only the variations of your unique gene profile that may have an impact on your nutrition, exercise and lifestyle. See all the genetic variations tested in the full report.



Body Function	Genes with Impact	What you can do to support your genetic potential
Exercise Performance	ACE, ADRB2, NOS3, PPARGC1A	Endurance Activities: Your exercise program is designed to complement your genetic potential by focusing on endurance activities.
B Vitamin Metabolism	MTHFR, CBS, MTR, MTRR	Ensure you have adequate B Vitamins in your diet: Folic Acid: 400 mcg / day B ₆ : 1.3 mg / day B ₁₂ : 2.4 mcg / day
Cholesterol Metabolism	APOC3, CETP, LIPC, LPL	Keep saturated fats below 16 g / day Maintain: 4 tsp Olive Oil / day in your diet
Phase I Detoxification	CYP1A2*1F, CYP1A2*1B	Limit consumption of smoked, well-done meats to no more than 1 servings / week and avoid exposure to tobacco smoke.
Phase II Detoxification	GSTP1	Include in your diet at least 5 servings / week of cruciferous vegetables, such as broccoli and cauliflower, and at least 7 servings / week of allium vegetables, such as onion and garlic.
Antioxidant Function	PON1, SOD2, EPHX1	Ensure you have adequate antioxidants in your diet: Vitamin A: 5000 IU / day Vitamin C: 250 mg / day Vitamin E: 200 IU / day Also include 4 tsp olive oil / day
Bone Integrity	VDR	Ensure adequate calcium and Vitamin D in your diet: Calcium: 1300 mg / day Vitamin D: 800 IU / day
Glucose Balance	ACE, CRP, IL6, LIPC, PON1, PPARG, PPARGC1A, TNFA, VDR, ADRB2	Fiber: 25 g / day Glycemic load: keep below 80 Exercise: 45-60 minutes at least 5 days a week
Inflammatory Response	IL6, TNFA	Maintain healthy eating habits – include 3000 mg / day of Omega-3 fatty acids in your diet.
Salt Metabolism	ACE, AGT	Keep salt consumption within safe limits, below 2300 mg / day.
Alcohol Metabolism	CETP	Moderate consumption (1 serving / day) may help support HDL levels.
Exercise Recovery	CRP, IL6	Include Omega 3 fatty acids and berries and nuts to support recovery from exercise.

ONLINE SURVEY RESULTS, GOALS & DIFFERENCE

Analysis of your Online Lifestyle Survey answers determine how much of a particular nutrient or lifestyle factor is in your current daily routine. The survey results are displayed under **Your Estimated Current Intake** (column 2). NutriSync™ estimates **Your Daily Goals or Upper Limits** (column 3) – these goals are based only on your genetic assessment. These goals will remain the same for you until new research dictates different levels because they were calculated on your unique genetic profile. You CAN change your diet and lifestyle. The difference between **Your Estimated Current Intake** and **Your Daily Goals or Upper Limits** is displayed under **Your Daily Goals Difference** (column 4) to help you see what changes may bring you closer to your Daily Goals using the NutriSync™ Program. In this Difference column, **Green** indicates beneficial or at goal levels. **Blue** represents levels of nutrients or factors that are in excess but not at high enough levels to be detrimental. **Red** indicates that you may need to take more of that particular nutrient or make appropriate lifestyle changes to achieve your unique genetic goal.

Dietary/Lifestyle Factors	Your Estimated Current Intake	Your Daily Goals or Upper Limits	Your Daily Goals Difference
Folate (mcg)	277 mcg / day	400 mcg / day	-123 mcg / day
Vitamin B ₆ (mg)	1 mg / day	1.3 mg / day	-0.3 mg / day
Vitamin B ₁₂ (mcg)	5 mcg / day	2.4 mcg / day	2.6 mcg / day
Vitamin A (IU)*	5481 IU / day	5000 IU / day	481 IU / day
Beta-Carotene (mcg)	2662 mcg / day	4200 mcg / day	-1538 mcg / day
Vitamin C (mg)	103 mg / day	250 mg / day	-147 mg / day
Vitamin E (IU)	0 IU / day	200 IU / day	-200 IU / day
Selenium (mcg)	68 mcg / day	100 mcg / day	-32 mcg / day
Vitamin D (IU)	751 IU / day	800 IU / day	-49 IU / day
Calcium (mg)	235 mg / day	1300 mg / day	-1065 mg / day
Salt Consumption (mg)	1698 mg / day	2300 mg / day	-602 mg / day
Omega-3 Fatty Acids (mg)	1965 mg / day	3000 mg / day	-1035 mg / day
Saturated Fat (g)	21 g / day	16 g / day	5 g / day
Carbohydrates: Glycemic Load (GL)	63	80	-17
Cruciferous Vegetables	3 servings / week	5 servings / week	-2 servings / week
Allium Vegetables	1 servings / week	7 servings / week	-6 servings / week
Fiber (g)	14 g / day	25 g / day	-11 g / day
Olive oil (tsp)	1 tsp / day	4 tsp / day	-3 tsp / day
Caffeine (mg)	65 mg / day	200 mg / day	-135 mg / day
Alcohol (oz)	0.58 oz / day	0.6 oz / day	-0.02 oz / day
Smoked Meats	0 servings / week	1 servings / week	-1 servings / week
Body Mass Index (BMI)	21.7	19 - 25	At Goal
Physical Activity	Below	45-60 minutes at least 5 days a week	Below Goal
Tobacco	Non Smoker	No Smoking	At Goal

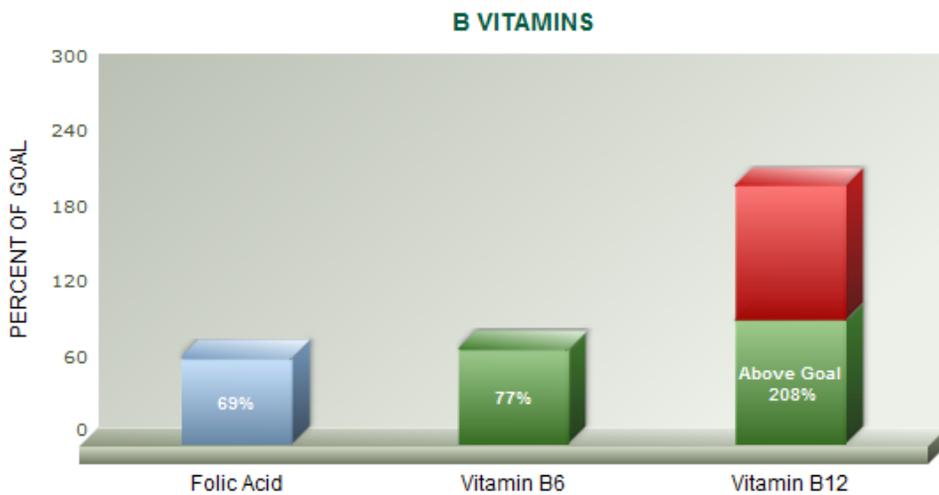
*Vitamin A level is calculated from intake of both retinol and mixed carotenes in the diet. Carotenes are a form of provitamin A found in colorful fruits and vegetables – they can be converted to Vitamin A in the body as required.

YOUR NUTRITIONAL & LIFESTYLE GOALS

Remember that the GOALS and the Upper Limits in the graphs are set by your own genetic results. Your genetic Goals and Upper Limits are set at **100 PERCENT OF GOAL** on the vertical axis below. The results from your Online Survey are represented as percentages of your genetic Goals or Upper Limits.

B VITAMINS

Folic Acid (Folate), Vitamin B6 and Vitamin B12 – these vitamins promote healthy growth and renewal of tissues and are involved in many functions of your body. Your graph shows that you are meeting your goal for Vitamin B12, but you may wish to increase your Folic Acid and Vitamin B6 intake to achieve your goal for these important vitamins. Excess levels of Vitamin B6 have been associated with adverse effects, so be careful to keep to safe limits for this vitamin.



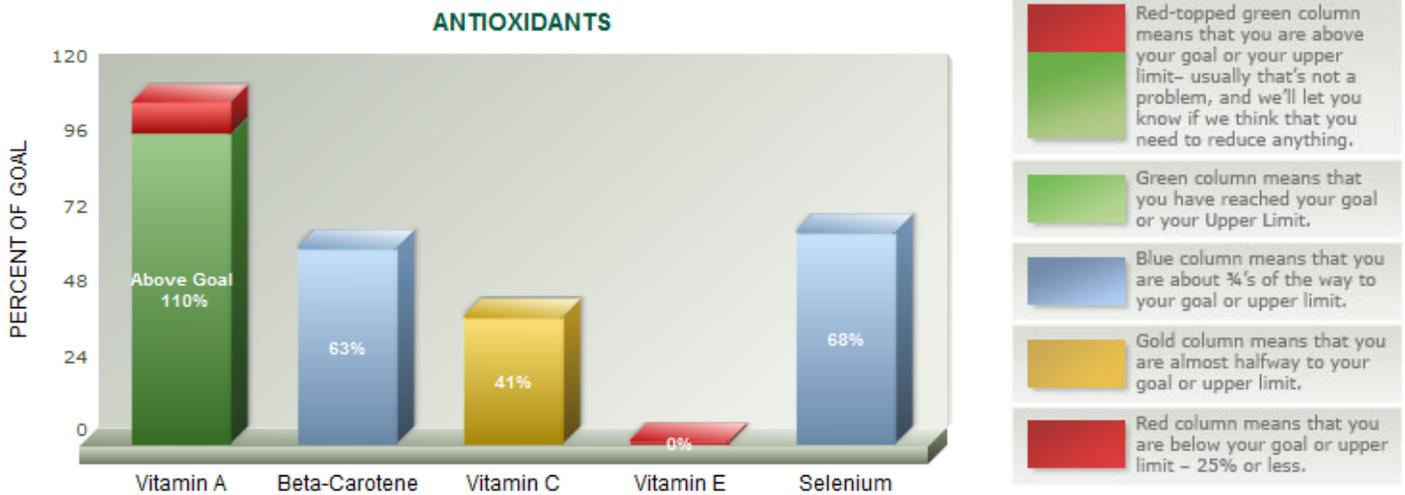
-  Red-topped green column means that you are above your goal or your upper limit- usually that's not a problem, and we'll let you know if we think that you need to reduce anything.
-  Green column means that you have reached your goal or your Upper Limit.
-  Blue column means that you are about ¾'s of the way to your goal or upper limit.
-  Gold column means that you are almost halfway to your goal or upper limit.
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ANTIOXIDANTS

Vitamin A (retinol), Beta-Carotene, Vitamin C, Vitamin E and Selenium – these vitamins help to support your body’s natural antioxidant defenses and help remove free radicals. Your Vitamin A level includes and assumes conversion of all of your beta-carotene levels to retinol equivalents. Your graph shows that you may wish to increase your intake of Beta Carotene and Vitamins C and E to support your antioxidant defenses, however keep within safe limits of your goals. Your assessment indicates that you are below your goal of Selenium at this time.

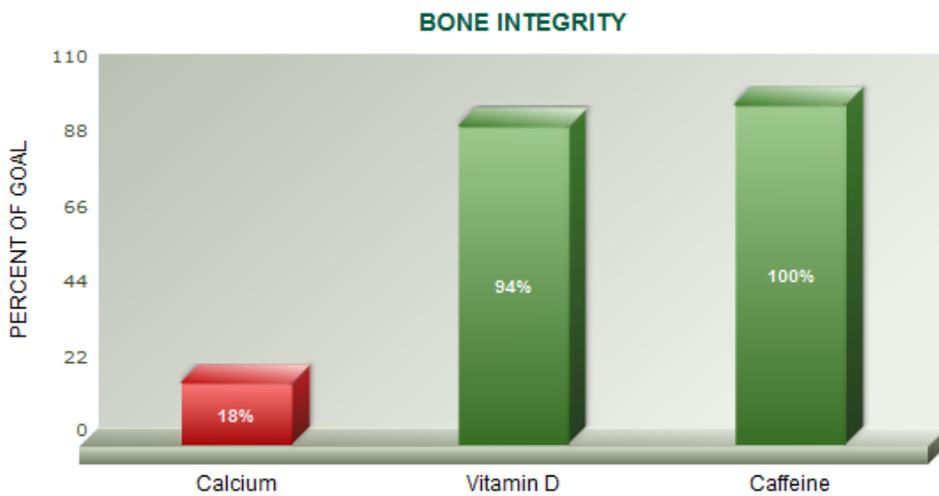


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BONE INTEGRITY

Calcium and Vitamin D are important for healthy bone structure. Your graph shows that you may wish to increase your Calcium intake. To ensure that you use your Calcium efficiently you need to increase your Vitamin D intake. Your Caffeine intake is within your maximum limit; continue to stay within limit. Excess Caffeine consumption can increase the rate of bone loss.



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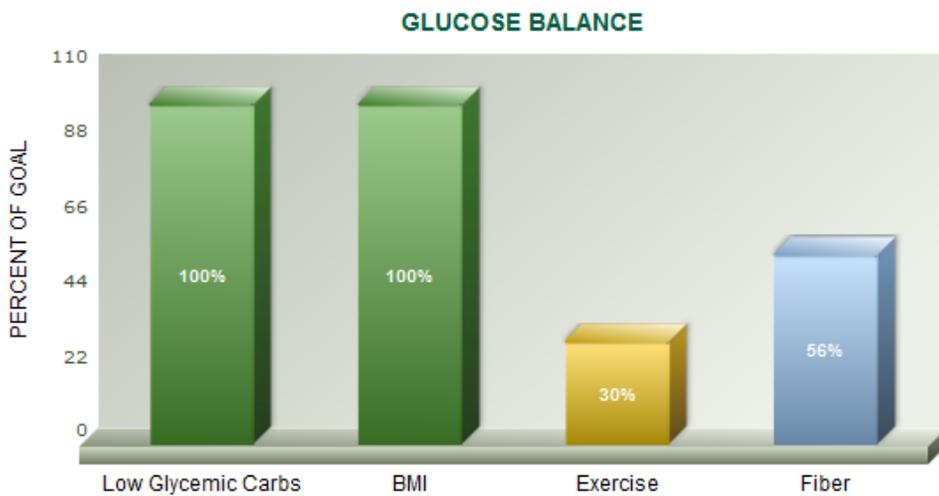


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GLUCOSE BALANCE

Consuming Low Glycemic Index Carbohydrates, engaging in regular physical activity and consuming adequate levels of fiber can help to balance blood glucose levels. Your graph indicates you are within your goal limit of high glycemic load carbohydrates in your diet. Increase your levels of physical activity to meet your goal and increase the amount of fiber in your daily diet.



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Red-topped green column means that you are above your goal or your upper limit- usually that's not a problem, and we'll let you know if we think that you need to reduce anything.
- 

Green column means that you have reached your goal or your Upper Limit.
- 

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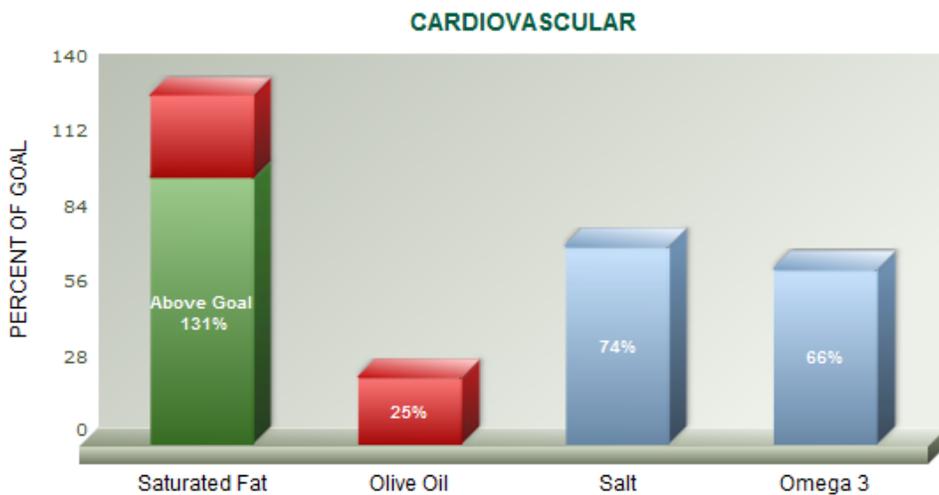
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CARDIOVASCULAR FUNCTION

Limiting levels of saturated fats and salt can have an impact on cardiovascular function while consuming adequate amounts of Omega-3 fatty acids and olive oil can be beneficial for cardiovascular function. Your graph indicates that you are exceeding your limit of saturated fats, and below your goal for olive oil. Increase your intake of Omega-3 fatty acids to meet your goal, however, the combination of unsaturated and saturated fat should be 30% or less of your total calories per day. Maintain your level of intake of salt.



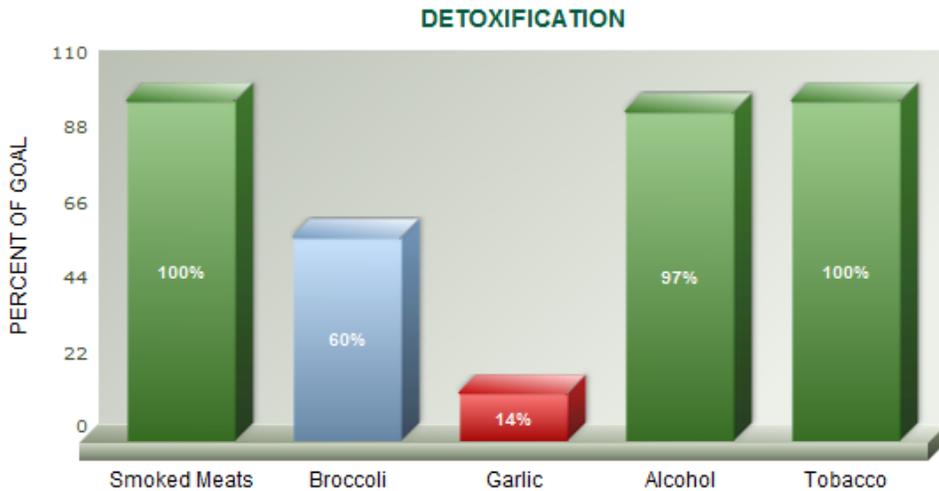
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DETOXIFICATION

Consuming too much smoked or well-done meats, alcohol and exposure to tobacco products can put a strain on your body’s detoxification systems. Remember that if you have a green Tobacco bar, it means that you have met your goal not to smoke and not to partake in tobacco products. Cruciferous vegetables, such as broccoli and cauliflower, and allium vegetables, such as garlic and onion, are great sources of natural compounds that can support your body’s own detoxification systems. Keep within your limit smoked meats to no more than 1 servings / week and continue not to use tobacco products and stay clear of all passive second-hand smoke. You have one or more variations that have been associated with benefits of red wine on HDL levels, but continue to stay within your limit of alcohol consumption. Your graph shows that you are below your goal for consumption of broccoli and other cruciferous vegetables and are below your goal for garlic and allium vegetables.

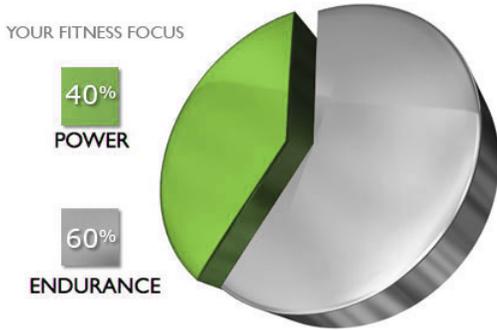


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FITNESS REPORT

This is your Endurance/Power profile – by analyzing your genes, NutriSync™ has calculated which activities are best suited for you. Your genetic fitness profile is almost equally balanced between power and endurance activities, based on variations in your [ACE, ADRB2, CNTF, CRP, NOS3, PPARGC1A, VDR] gene(s).



Training only for endurance can have a negative impact on the ability to exert strength unless an individual also undertakes resistance training to support the cause and effect of focused endurance training. Training solely for power activities can have a negative impact on the ability to sustain exercise for longer lengths of time, so it's important to balance these types of exercise with cross-training.

POWER SPORTS

Weight lifting	Karate
Judo	Gymnastics
Diving	Cheerleading
Wrestling	Track & Field
High jump	Hurdling
Long jump	Shotput
Discus	Sprinting
Sumo wrestling	Baseball

MIX OF POWER AND ENDURANCE

Football	Basketball
Soccer	Lacrosse
Ice hockey	Rugby
Racquetball	Tennis
Volleyball	Skating
Rowing	Swimming
Boxing	Rock climbing
Mountaineering	Figure skating
Speed skating	

ENDURANCE SPORTS

Triathlon	Duathlon
Marathon	Cross country
Cycling	Soccer
Crew	Inline skating
Jogging	Running
Meter swimming	Speed Skating
Car racing	Water skiing
Dirtbike racing	Trail riding
Cross-country skiing	

MONITORING YOUR EXERCISE PROGRAM AND YOUR CARDIOVASCULAR FITNESS

Your heart rate is an easy way to monitor your exercise program while you are exercising and your recovery rate. To get your heart rate, simply count the number of heart beats per minute for 10 seconds and then multiply the number of beats counted by 6. The best time to measure your **Resting Heart Rate** is right after you wake up before your morning coffee.

Your Resting Heart Rate should be 77 beats per minute or less.

Understanding your **Maximum Heart Rate** and your **Target Heart Rate** will support your cardiovascular fitness program. To find your **Maximum Heart Rate**, subtract your age from 220.

220 – (50) = Your Maximum Heart Rate is 170

Your **Target Heart Rate** is usually between 60% and 80% of your **Maximum Heart Rate** which is the range of heart beats per minute that you should aim for when exercising for cardiovascular fitness.

Your Target Heart rate is 102 to 136

Your Action Plan has identified variations in your gene(s) [NOS3] that have been associated with beneficial effects of exercise on your blood circulation. Your Action Plan recommends that you monitor your heart rate and blood pressure during and after exercise due to variations in your [ACE, LPL, PPARGC1A] gene(s). Your Action Plan has also identified a variation in your [LPL] gene(s) that can lead to improved blood flow and HDL levels with exercise. Due to variations in your [MTHFR] gene, your Action Plan recommends that you ensure adequate intake of B Vitamins to support normal homocysteine levels, which tend to rise during exercise.

DNA PRIMER

Your DNA Primer below outlines the biological impact of each of the genes and the variations that NutriSync™ measured when designing your program. Some of the information is quite technical, but we wanted to give you a comprehensive analysis of your genetic profile. Note that some genes have more than one variation – or change in the DNA code. Some variations involve segments of the DNA either being present or absent and being inserted or deleted. The numbers refer to the position of a potential variation in the DNA sequence, and the three letter designations, such as Arg or Gly, refer to the amino acids that are coded for by the DNA. Changing the code in the DNA can sometimes change the amino acid that is chosen.

Sylvia's DNA Primer

Gene	Gene Function	Genetic Variation Detected	Do you have the variation?	What does this mean for you?	
ACE	The ACE gene produces Angiotensin-1 converting enzyme, which helps regulate vascular tone, blood flow, electrolyte balance. ACE is also involved in glucose balance and athletic performance.	Insertion/Deletion Other names for this variation: rs4646994	Yes Your result: (Insertion/Deletion)	Exercise performance:	Athletes with the same variation as you perform well in both power and endurance activities.
				Cardiovascular fitness:	You need to monitor heart rate during and immediately after exercise to ensure you remain within recommended limits.
				Glucose balance:	You need to focus on Low Glycemic Index foods in your diet for optimal glucose balance.
				Salt metabolism:	You may have increased salt sensitivity.
ADH1B	ADH, alcohol dehydrogenase gene, is involved in the metabolism of ethanol.	Arg47His Other names for this variation: 3169, 3170 G>A, rs1229984	No Your result: (G,G)	Alcohol consumption:	Your form of the gene has standard activity - no gene specific recommendations related to alcohol required.
		Arg369Cys Other names for this variation: 13471, 13472 C>T, rs2066702	No Your result: (C,C)	Alcohol consumption:	Your form of the gene has standard activity - no gene specific recommendations related to alcohol required. Keep within safe limits for alcohol consumption, [1] unit per day.



Sylvia's DNA Primer Continued				
Gene	Gene Function	Genetic Variation Detected	Do you have the variation?	What does this mean for you?
ADH1C	ADH, alcohol dehydrogenase gene, is involved in the metabolism of ethanol.	Ile349Val Other names for this variation: 13044 A>G, rs698	No Your result: (A,A)	Alcohol consumption: Your form of the gene has standard activity - no gene specific recommendations related to alcohol required. Keep within safe limits for alcohol consumption, [1] unit per day.
ADRB2	The ADRB2 gene produces receptors that are involved in energy balance, VO2 max and cardiovascular fitness.	Gly16Arg Other names for this variation: 45 G>A, rs1042713	Yes Your result: (G,A)	Exercise performance: You have one copy of the Arg variation, which has been associated with better performance in endurance activities. VO2 max, Aerobic capacity: Individuals like you with the Arg variation have a tendency for higher VO2 max levels, which can improve further with training.
		Gln27Glu Other names for this variation: 78C>G, rs1042714	Yes Your result: (C,G)	Exercise performance: You have variations at positions 45 and 78 of the ADRB2 gene, so you may have better performance in endurance activities. VO2 max, Aerobic capacity: You have variations at positions 45 and 78 of the ADRB2 gene, which has been associated with higher VO2 max levels. Body composition: Individuals with a variation at position 78 show better fat-burning efficiency when combining diet and exercise instead of exercise alone.
AGT	The AGT gene produces Angiotensin I, a chemical that regulates blood flow, electrolyte balance and is involved in physical performance.	Met235Thr Other names for this variation: 803 T>C, rs699	Yes Your result: (C,T)	Cardiovascular fitness: You need to monitor heart rate during and immediately after exercise to ensure you remain within recommended limits. Salt metabolism: You may have increased salt sensitivity; keep salt levels below 2300 mg / day.



Sylvia's DNA Primer Continued

Gene	Gene Function	Genetic Variation Detected	Do you have the variation?	What does this mean for you?	
ALDH2	ALDH2, aldehyde dehydrogenase 2, is involved in alcohol metabolism.	Glu487Lys Other names for this variation: 36979 G>A, rs671	No Your result: (G,G)	Alcohol metabolism:	Your form of the gene has no gene specific recommendations.
APOC3	APOC3, Apolipoprotein C-III, is involved in clearing triglyceride particles from the blood stream.	3175 C>G Other names for this variation: rs5128	Yes Your result: (C,G)	Triglyceride clearance:	You have one copy of the G variation, which means that you need to keep your saturated fat levels below 16 g/day to help modulate your triglyceride and LDL cholesterol levels.
CBS	CBS, Cystathione beta synthase, is involved in B Vitamin metabolism and proper balance of homocysteine levels.	699 C>T Other names for this variation: rs234706	No Your result: (C,C)	B Vitamin metabolism:	You should to monitor your B Vitamin levels in your diet, especially Folic Acid, and be sure that you have at least 400 mcg / day of this vitamin to help maintain healthy levels of homocysteine in your blood stream.
CETP	CETP, cholesterol ester transfer protein, is involved in the metabolism of cholesterol.	279 G>A Other names for this variation: rs708272	Yes Your result: (G,A)	Cholesterol metabolism:	You should keep your saturated fat levels below 16 g / day to support optimal HDL levels. Moderate alcohol consumption may further improve HDL levels for you.
				Body composition:	You have one copy of the A variation, therefore you may be more responsive to exercise in your weight management program.
CNTF	CNTF, the Ciliary Neurotrophic Factor gene produces a nerve growth factor that is involved in several functions including energy balance.	1276 G>A Other names for this variation: CNTF-6, rs1800169	No Your result: (G,G)	Endurance/ Power:	Your form of the gene has no gene specific recommendations.
COL1A1	Collagen type 1 forms the fibers in tendons, ligaments and bone.	2046 G>T Other names for this variation: Sp1, rs1800012	No Your result: (G,G)	Collagen formation and bone structure:	Your form of the gene has no gene specific recommendations related to collagen formation of bone structure.



Sylvia's DNA Primer Continued					
Gene	Gene Function	Genetic Variation Detected	Do you have the variation?	What does this mean for you?	
CRP	CRP, the C-reactive protein gene, produces a protein that increases its levels during inflammation.	(-732) A>G Other names for this variation: (-821)A>G, rs2794521	Yes Your result: (A,G)	<p>Exercise performance: You have one copy of the G variation, which has been associated with improved performance in endurance activities.</p> <p>VO2 max, aerobic capacity: The G variation has been associated with higher VO2 max levels, which can improve further with training.</p> <p>Glucose balance: The G variation has been associated with improved glucose balance. Exercise can be even more beneficial to improve glucose balance.</p> <p>Recovery: Regular exercise can help to improve your recovery time.</p>	
		219 G>A Other names for this variation: 2042 G/A, rs1205	No Your result: (G,G)	Recovery: Your form of the gene is associated with a longer time for recovery after exercise.	
		1059 G>C Other names for this variation: 837 G>C, rs1800947	No Your result: (G,G)	Recovery: Your form of the gene is associated with a longer time for recovery after exercise.	
CYP1A1	The cytochrome P450 1A1 gene is involved in detoxification, helping to make chemicals and toxins we ingest or inhale more easily removed from the body.	Ile462Val Other names for this variation: 2453 A>G, rs1048943	No Your result: (A,A)	Detoxification: Your form of the gene has no gene specific recommendations related to detoxification.	
CYP1A2	The cytochrome P450 1A2 gene is also involved in detoxification, helping to make chemicals and toxins we ingest or inhale more easily removed from the body, but acts on slightly different chemicals than CYP1A1.	CYP1A2*1E Other names for this variation: -739 T>G, rs2069526	No Your result: (T,T)	Detoxification: Your form of the gene has no gene specific recommendations related to detoxification.	
		CYP1A2*1F Other names for this variation: (-163) A>C, rs762551	Yes Your result: (A,C)	Detoxification: You have one copy of the *1F (C) variation which has been associated with reduced removal of chemicals formed in smoked and grilled meats.	
		CYP1A2*1B Other names for this variation: +5346 C>T, rs2470890	Yes Your result: (C,T)	Detoxification: You have one copy of the *1B (C) variation which has been associated with reduced removal of chemicals formed in smoked and grilled meats.	



Sylvia's DNA Primer Continued

Gene	Gene Function	Genetic Variation Detected	Do you have the variation?	What does this mean for you?	
EPHX1	The EPHX1 gene produces Microsomal Epoxide Hydrolase that makes chemicals called epoxides less reactive, however the activity of the genetic variants depends on the chemical.	EPHX1 Other names for this variation: Tyr113HIs 3202 T>C, rs1051740	Yes Your result: (T,C)	Detoxification:	You have one copy of the EPHX1 gene variant and may have reduced bioactivation depending on the chemical type.
GSTM1	The GSTM1 gene is involved in the second phase of detoxification, helping to remove toxins from the body through sweat and urine.	Deletion (Del)	No Your result: (Present)	Detoxification:	Your form of the gene has no gene specific recommendations related to detoxification.
GSTP1	The GSTP1 gene is another gene involved in the second phase of detoxification.	Ile105Val Other names for this variation: 313 A>G, rs1695	Yes Your result: (G,G)	Detoxification:	You have two copies of the Val variation, which changes the shape of your GSTP1 enzyme, reducing the efficiency of the enzyme.
		Ala114Val Other names for this variation: 341 C>T, rs1138272	Yes Your result: (C,T)	Detoxification:	You have one copy of the Val variation, which changes the shape of your GSTP1 enzyme, reducing the efficiency of the enzyme.
GSTT1	The GSTT1 gene is also involved in the second phase of detoxification.	Deletion (Del)	No Your result: (Present)	Detoxification:	Your form of the gene has no gene specific recommendations related to detoxification.



Sylvia's DNA Primer Continued

Gene	Gene Function	Genetic Variation Detected	Do you have the variation?	What does this mean for you?	
IL6	The IL6, Interleukin 6, gene produces inflammatory cytokines, which are important in the inflammatory process.	(-174) G>C Other names for this variation: rs1800795	Yes Your result: (C,C)	Inflammatory response and Recovery:	You have two copies of the (C) variation, which has been associated with increased cytokine production. Higher levels of IL6 have been linked with greater times for recovery following exercise.
				Bone Integrity:	You have two copies of the (C) variation, which can be beneficial for bone integrity.
				Glucose Balance:	You have two copies of the (C) variation, which can be beneficial for glucose balance.
				Vascular Flow:	You have two copies of the (C) variation, which has been associated with constriction of blood vessels.
LIPC	The LIPC gene produces the enzyme hepatic lipase, which is involved in triglyceride and cholesterol metabolism.	(-634) G>C Other names for this variation: rs1800796	No Your result: (G,G)	Inflammatory response and Recovery:	Your form of the gene has no gene specific recommendations related to inflammation.
				Bone Integrity:	Your form of the gene has no gene specific recommendations related to bone integrity.
LIPC	The LIPC gene produces the enzyme hepatic lipase, which is involved in triglyceride and cholesterol metabolism.	293 G>A Other names for this variation: 250 G>A, rs2070895	Yes Your result: (G,A)	Cholesterol Metabolism:	You have one copy of the A variation, which has been associated with elevated LDL cholesterol levels.
				Glucose Balance:	Blood glucose levels in people with at least one copy of the A variation, like you have, are more responsive to diet and exercise.
				Cholesterol Metabolism:	You have one copy of the T variation, which has been associated with elevated LDL cholesterol levels.
				Glucose Balance:	Having at least one copy of the T variation may help maintain blood glucose balance.
LIPC	The LIPC gene produces the enzyme hepatic lipase, which is involved in triglyceride and cholesterol metabolism.	(-557) C>T Other names for this variation: -557 C>T, rs1800588	Yes Your result: (C,T)	Cholesterol Metabolism:	You have one copy of the T variation, which has been associated with elevated LDL cholesterol levels.
				Glucose Balance:	Having at least one copy of the T variation may help maintain blood glucose balance.



Sylvia's DNA Primer Continued					
Gene	Gene Function	Genetic Variation Detected	Do you have the variation?	What does this mean for you?	
LPL	The LPL gene is involved in triglyceride clearance and cholesterol metabolism.	Ser474Stop Other names for this variation: 1595 C>G, rs328	No Your result: (C,C)	Cholesterol Metabolism:	Your form of the gene has been associated with elevated triglyceride levels and reduced HDL levels.
MTHFR	The MTHFR gene is involved in folic acid metabolism and has a central role in methylation processes like repair of and building new DNA in dividing cells.	Ala222Val Other names for this variation: 677 C>T, rs1801133	Yes Your result: (C,T)	B Vitamin metabolism:	You have one copy of the T variation at position 677, which changes the shape of the MTHFR enzyme, reduces the enzyme efficiency and has been associated with elevated homocysteine levels.
		Glu429Ala Other names for this variation: 1298 A>C, rs1801131	No Your result: (A,A)	B Vitamin metabolism:	Your form of the gene has no gene specific recommendations.
MTR	The MTR gene is involved in B Vitamin metabolism, especially folic acid and B12 to convert homocysteine into methionine.	Asp919Gly Other names for this variation: 2756 A>G, rs1805087	No Your result: (A,A)	B Vitamin metabolism:	You do not have a variation at position 2756. No variation here has been associated with elevated homocysteine.
MTRR	The MTRR gene is involved in maintaining levels of Vitamin B12 for use by the MTR enzyme.	Ile22Met Other names for this variation: 66 A>G, rs1801394	Yes Your result: (G,G)	B Vitamin metabolism:	You have two copies of the G variation, which decreases the efficiency of the MTRR enzyme, and has been associated with elevated homocysteine.
NOS3	The NOS3 gene is involved in the production of nitric oxide, which helps to relax the walls of your blood vessels.	Glu298Asp Other names for this variation: 894 G>T, rs1799983	No Your result: (G,G)	Cardiovascular function:	You do not have a variation at position 894. Your result is associated with increased relaxation of blood vessel walls with exercise.



Sylvia's DNA Primer Continued

Gene	Gene Function	Genetic Variation Detected	Do you have the variation?	What does this mean for you?	
PON1	The PON1 gene produces the enzyme paraoxonase, which helps prevent oxidative damage to lipids in your bloodstream.	Gln192Arg Other names for this variation: 16341 A>G, rs662	Yes Your result: (A,G)	Antioxidant Function:	You have one copy of the Arg variation, which can affect the concentration and activity of the PON1 enzyme in your bloodstream.
		Leu55Met Other names for this variation: 7703 T>A, rs854560	Yes Your result: (T,A)	Antioxidant Function:	You have one copy of the Met variation, which has been associated with protection from oxidation of lipids.
				Glucose balance:	This variation can help support normal blood glucose levels.
PPARG	The PPARG gene is involved with glucose and lipid metabolism, and is affected by fatty acids. The gene produces a nuclear transcription factor that acts on other genes.	Pro12Ala Other names for this variation: 33C>G, rs1801282	No Your result: (C,C)	Glucose balance:	You do not have a variation at position 33 of the PPARG gene, which means that the levels of expression of the gene may lead to glucose imbalance and disruption of lipid levels.
PPARGC1A	The PPARGC1A gene is involved with energy metabolism and affects the mitochondria (the powerhouse) of your cells, where fuel from your diet is turned into energy. PPARGC1A also produces a nuclear transcription factor that acts on other genes.	Gly482Ser Other names for this variation: 75918 G>A, rs819678	Yes Your result: (G,A)	Glucose balance:	You have one copy of the Ser variation, which reduces expression of the PPARGC1A gene, and can reduce the efficiency of the mitochondria where energy is produced in your cells. Reducing the energy production can affect your glucose balance.
				Exercise Performance:	The Ser variation has been associated with reduced fitness and endurance.



Sylvia's DNA Primer Continued				
Gene	Gene Function	Genetic Variation Detected	Do you have the variation?	What does this mean for you?
SOD2	The SOD2 gene produces an enzyme that has antioxidant activity inside your cells. SOD2 is also known as the MnSOD gene.	Ala16Val Other names for this variation: (-28) C>T, 47 C>T, rs4880	Yes Your result: (C,T)	Antioxidant Function: You have one copy of the Val variation, which reduces the activity of the SOD enzyme, and may lead to reduced oxidative stress. SOD2 is involved in oxidative stress because the enzyme produces hydrogen peroxide. Slowing down production of hydrogen peroxide can help reduce oxidative stress.
SOD3	The SOD3 gene produces an enzyme that works outside your cells, especially on the linings of your blood vessels.	Arg231Gly Other names for this variation: 760 C>G, rs1799895	No Your result: (C,C)	Antioxidant Function: Your form of the gene has no gene specific recommendations related to antioxidant levels.
TNFA	The TNFA gene produces a protein known as a cytokine that is involved in your inflammatory response.	(-308) G>A Other names for this variation: rs1800629	Yes Your result: (G,A)	Inflammatory Response: You have one copy of the A variation, which means that you may produce higher levels of cytokines.
				Bone Integrity: Your bones are constantly changing - breaking down and reforming. Having higher levels of cytokines can increase the level of bone turnover.
				Glucose Balance: Higher levels of TNFA have been associated with higher blood glucose levels.
				Cholesterol Metabolism: Higher levels of TNFA can affect LDL and HDL levels.



Sylvia's DNA Primer Continued				
Gene	Gene Function	Genetic Variation Detected	Do you have the variation?	What does this mean for you?
VDR	The VDR gene produces a receptor that binds Vitamin D, and helps to regulate many functions in the body, including bone formation, glucose balance, immune response, muscle formation and many others.	Taq I Other names for this variation: (t), 60058 T>C, rs732236	Yes Your result: (T,C)	Bone Integrity: You have one copy of the TaqI (t) variation, which has been associated with lower bone mineral density.
		BsmI Other names for this variation: (B), 58980 A>G, rs1544410	No Your result: (G,G)	Bone Integrity: Your form of the gene has no gene specific recommendations related to bone integrity. Glucose balance: Your form of the gene has no gene specific recommendations related to glucose balance.
		FokI Other names for this variation: (f), 25920 T>C, rs1073510	Yes Your result: (C,C)	Muscle strength: Individuals without the (B) variation may exhibit greater muscle strength and endurance. Bone Integrity: You have two copies of the FokI (F) variation. This genetic variation has been associated with lower levels of gene expression, lower bone mineral density and higher rates of bone turnover.
				Glucose balance: Having two copies of the (F) variation may be associated with better glucose balance.

This action plan is protected by Patent 7,054,758.

Genetic Test Results Report

PHYSICIAN		SPECIMEN		SUBMITTER	
Name: Sylvia M Skefich DC		Specimen Type: SWAB	Name: Sylvia M Skefich		
Address: 920 41ST AVE STE G SANTA CRUZ, CA 95062	Date Collected: 03/25/2015 06:15 AM		Date of Birth: 07/27/1964		
	Date Received: 03/27/2015		ID#: 2BHM9P		
	Date Reported: 04/15/2015		Gender: Female		

GENETIC TEST RESULTS:

Gene	Location/Genotype	Results	Gene	Location/Genotype	Results
ACE	Insertion/Deletion	Insertion/Deletion	GSTP1	Variation +341 C>T	C, T
ADH1B	Variation +3170 G>A	G, G	GSTT1	Present/Deletion	Present
ADH1B	Variation +13472 C>T	C, C	IL6	Variation -634 G>C	G, G
ADH1C	Variation +13044 A>G	A, A	IL6	Variation -174 G>C	C, C
ADRB2	Variation +45 G>A	G, A	LIPC	Variation -557 C>T	C, T
ADRB2	Variation +78 C>G	C, G	LIPC	Variation -293 G>A	G, A
AGT	Variation +803 T>C	C, T	LPL	Variation +1595 C>G	C, C
ALDH2	Variation +36979 G>A	G, G	MTHFR	Variation +677 C>T	C, T
APOC3	Variation +3175 C>G	C, G	MTHFR	Variation +1298 A>C	A, A
CBS	Variation +699 C>T	C, C	MTR	Variation +2756 A>G	A, A
CETP	Variation +279 G>A	G, A	MTRR	Variation +66 A>G	G, G
CNTF	Variation +1275 G>A	G, G	NOS3	Variation +894 G>T	G, G
COL1A1	Variation +2046 G>T	G, G	PON1	Variation +7704 T>A	T, A
CRP	Variation -821 A>G	A, G	PON1	Variation +16342 A>G	A, G
CRP	Variation +837 G>C	G, G	PPARG	Variation Pro12 Ala	C, C
CRP	Variation +2042 G>A	G, G	PPARGC1A	Variation +75918 G>A	G, A
CYP1A1	Variation +2454 A>G	A, A	SOD2	Variation +47 C>T	C, T
CYP1A2	Variation +5346 C>T	C, T	SOD3	Variation +760 C>G	C, C
CYP1A2	Variation -163 A>C	A, C	TNF	Variation -308 G>A	G, A
CYP1A2	Variation -739 T>G	T, T	VDR	Variation +25920 T>C	C, C
EPHX1	Variation +3202 T>C	T, C	VDR	Variation +58980 A>G	G, G
GSTM1	Present/Deletion	Present	VDR	Variation +60058 T>C	T, C
GSTP1	Variation +313 A>G	G, G			

Interpretation: These genetic variations are common in the human population. Such variations do not cause disease directly. Consult your health care professional for further information and appropriate lifestyle adjustments.

Limitations: This test will not detect large DNA rearrangements or deletions; however the genetic testing is greater than 95% accurate. Only rare polymorphisms will affect the outcome of this genotyping.

This test was developed and its performance characteristics determined by BodySync, Inc. The U.S. Food and Drug Administration (FDA) has not approved this test. This test was performed in compliance with the requirements for high complexity tests under the Clinical Laboratory Improvement Amendments and its implementing regulations. The test may use some reagents produced for research purposes only.

Hannis Thompson, MD, Laboratory Director:

Form #BSGTRR080908 CLIA Number: 06D1074358

BodySync, Inc., 12635 E. Montview Blvd. Ste. 224, Aurora, CO 80045

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