



Cardiometabolic Panel

Health Action Plan

October 1, 2019

Demo Client

Kit #1234ABCD5678

Table of Contents

Understand Your Genetics	3
How These Traits Affect You	4
Recommendations	
Supplements	5
Diet	6
Lifestyle	7
Exercise	8
Further Testing	9
Traits	
Inflammation	11
Insulin Resistance	13
Oxidative Stress	15
Coronary Artery Disease	16
Diabetes	18
Hypertension	21
Lipid Impairment with Lp(a)	23
Recommendation Detailed Appendix	25

Understand Your Genetics

This report is broken down into three main sections: Trait Impact, Recommendations and Trait Detail. Depending on the number of traits being reviewed, your report will contain multiple trait and recommendation detail sections. Terms and sections of the report are defined below.

DNA

DNA is a long, ladder-shaped molecule. The rungs of the ladder are made of two amino acids pairing together, these are called bases. They always pair the same way, A (Adenine) with T (Thymine), and C (Cytosine) with G (Guanine). The body is constantly replicating DNA strands.

GENE

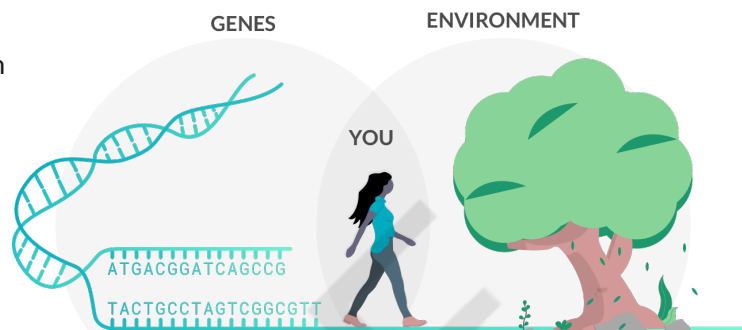
Genes are the basic units of heredity (passed down from generation to generation). They are made of DNA and provide the instructions for how our body works, what we look like, etc. Humans have between 20,000 - 25,000 genes. We inherit half of them from our mother and half from our father.

SNP

A SNP is a Single Nucleotide Polymorphism. SNPs occur when the amino acids making up the base pair do not come together in the same way as the original DNA strand. For example, the original strand may have had an A but the replicated strand has a G. SNPs are common and many of them have no impact to the individual, however, some can change how our body works.

VARIANT

Variants are how SNPs are referred to in this report. When the amino acid in the copied strand is different from the original, it is called a variant - it varies from the original. Variants are not necessarily 'good' or 'bad' they are simply different from the original. The depiction of variants is shown as: +/+ (both copies have different amino acids), +/- (one copy has a different amino acid), -/- (both copies have the same amino acid as the original) or U (one copy is indeterminate).



Reading This Report

Trait	Impact Score
Trait Name	

Gene	SNP/RSID	Variant
SMPL	ex1234567	+ -

Trait Recommendations

1 Trait Impact

This report focuses on traits. These are typically groups of SNPs that have a similar impact on the body's function. We use a proprietary algorithm to determine the impact a group of SNPs may have on a specific function in the body based on your individual test results.

2 Traits

The traits in our reports are typically grouped by body function, a symptom type, a disease, a nutrient need, or a response to environment. Within the trait pages, you will see the SNPs that are looked at for that trait, your variant type and recommendations to optimize health and minimize risk based on your individual results.

3 Recommendations

Your genes, and therefore your SNPs, will not change during your life. However, this report focuses on SNPs whose impact can be influenced by external factors like diet, exercise, supplements, and lifestyle changes.

Disclaimer - The recommendations in this report have been carefully prepared and reviewed for you by your health and wellness provider, based on his or her reasoned medical judgment about your personal health needs. Be sure that you have shared with your health and wellness provider all relevant information about your health, including any medications or dietary supplements you may be taking, and any medical conditions you may be experiencing, before you adopt any of these recommendations. This test is performed via DNA sequencing. As with all genetic testing with the highest possible standards, the data generated during the laboratory process will have a <99% sensitivity and specificity.

How These Traits Affect You

This page provides a high-level snapshot of the clinical significance of each trait within this panel. The results are in two categories: traits that are ranked high, medium or low impact as well as traits for which there is an explicit result (i.e. categorical such as "yes" or "no"). At the end of this page are a summary of any non-reportable (NR) traits. The results for these traits are unable to be determined from the sample submitted. Recommendations are made for traits with high or medium impact only.



Impact Traits	Impact	Learn More
1 Inflammation	HIGH	Page 11
2 Insulin Resistance	HIGH	Page 13
3 Oxidative Stress	HIGH	Page 15
4 Coronary Artery Disease	MEDIUM	Page 16
5 Diabetes	MEDIUM	Page 18
6 Hypertension	MEDIUM	Page 21
7 Lipid Impairment with Lp(a)	MEDIUM	Page 23
8 Metabolic Syndrome	LOW	

Supplements

Below is a list of the top recommended supplements curated specifically for you. These recommendations may represent a subset of the total recommendations found within the Supplement sections of your report. Recommendations are listed in order of importance based on your individual genetic results. These recommendations have been reviewed by your healthcare provider. Please contact your provider if you have any questions.

Recommendation Name	The Details	Linked Traits
1 Green Tea Extract (EGCG)	Supplement with 300 - 400 mg of green tea extract per day.	Diabetes, Hypertension, Insulin Resistance, Lipid Impairment with Lp(a)
2 Magnesium	Supplement with 300 - 500 mg of magnesium per day.	Coronary Artery Disease, Diabetes, Hypertension, Insulin Resistance
3 CoQ10	Supplement with 150 - 500 mg of CoQ10 per day.	Coronary Artery Disease, Hypertension, Lipid Impairment with Lp(a)
4 Curcumin	Supplement with 250 - 2,000 mg of curcumin extract per day.	Inflammation, Insulin Resistance, Lipid Impairment with Lp(a)
5 Garlic	Supplement with 400 - 1,200 mg of garlic extract per day.	Coronary Artery Disease, Diabetes, Hypertension
6 Vitamin D3	Supplement with 3,000 IUs of vitamin D3 per day.	Diabetes, Inflammation, Insulin Resistance
7 Zinc	Supplement with 10 - 40 mg of zinc per day.	Coronary Artery Disease, Hypertension, Oxidative Stress
8 Aloe Vera	Supplement with 300 - 1,000 mg of an aloe vera extract or drink 2 tablespoons of aloe vera juice per day.	Diabetes, Lipid Impairment with Lp(a)
9 Berberine	Supplement with 1,500 mg of berberine per day.	Diabetes, Insulin Resistance
10 Ginger	Supplement with 400 - 3,000 mg of dried ginger extract per day.	Diabetes, Lipid Impairment with Lp(a)

Note - If you are taking any medications, consult with your practitioner before starting any new supplements as they may have adverse effects with your medications.

Diet

Below is a list of the top dietary recommendations curated specifically for you. These recommendations may represent a subset of the total recommendations found within the Diet sections of your report. Recommendations are listed in order of importance based on your individual genetic results. These recommendations have been reviewed by your healthcare provider. Please contact your provider if you have any questions.

Recommendation Name	The Details	Linked Traits
1 Dark Chocolate (70-99%)	Eat approximately 1 oz of dark chocolate per day.	Coronary Artery Disease, Diabetes, Hypertension, Insulin Resistance, Lipid Impairment with Lp(a)
2 Mediterranean Diet	Adopt a Mediterranean-style diet that includes a variety of antioxidant-rich foods, heart healthy fats, and complex carbohydrates.	Coronary Artery Disease, Diabetes, Hypertension, Inflammation, Insulin Resistance
3 Dietary Fiber	Increase dietary fiber intake to recommended 25 g for females and 30 g for males.	Diabetes, Inflammation, Insulin Resistance
4 Omega-3 Rich Foods	Consume a diet rich in omega-3 fatty acids.	Coronary Artery Disease, Inflammation, Insulin Resistance
5 Almonds	Eat approximately 1 oz of almonds per day.	Coronary Artery Disease, Insulin Resistance
6 Apple Cider Vinegar	Consume 2 to 4 tsp of apple cider vinegar prior to eating.	Diabetes, Insulin Resistance
7 Calorie Restriction	Reduce overall calorie intake to create a calorie deficit.	Insulin Resistance, Oxidative Stress
8 Cinnamon	Add 1 to 2 tsp of cinnamon to your diet per day.	Diabetes, Insulin Resistance
9 Fruits and Vegetables	Include fruits and vegetables at every meal to increase levels of antioxidants in the body, especially strawberries, blueberries, broccoli, sprouts, and green leafy vegetables.	Inflammation, Oxidative Stress
10 Low Glycemic Index Foods	Choose low-glycemic index foods to avoid blood sugar spikes.	Diabetes, Insulin Resistance

Lifestyle

Below is a list of the top lifestyle recommendations curated specifically for you. These recommendations may represent a subset of the total recommendations found within the Lifestyle sections of your report. Recommendations are listed in order of importance based on your individual genetic results. These recommendations have been reviewed by your healthcare provider. Please contact your provider if you have any questions.

Recommendation Name	The Details	Linked Traits
1 Intermittent Fasting	Try intermittent fasting (fasting for 14+ hours daily) or alternate day fasting (fasting for 24 hours every other day).	Diabetes, Inflammation, Insulin Resistance, Lipid Impairment with Lp(a)
2 Meditation	Engage in 10 to 20 minutes of mindfulness meditation 2 or more times per week.	Coronary Artery Disease, Diabetes, Hypertension, Insulin Resistance
3 Adequate Sleep	Aim for the recommended 7 to 8 hours of sleep each night.	Coronary Artery Disease, Diabetes, Hypertension
4 Heat Therapy	Aim for 20 to 30 minutes per day of heat therapy treatments such as sauna, infrared, and hot tub sessions.	Coronary Artery Disease, Diabetes
5 Eat Larger Meals Earlier in the Day	Eat larger meals earlier in the day, preferably before 4 pm.	Insulin Resistance
6 Limit Alcohol	Avoid alcohol or limit alcohol to no more than 1 drink per day for women and 2 drinks per day for men.	Lipid Impairment with Lp(a)
7 Reduce Sedentary Behavior	Reduce sedentary behavior. Try to incorporate small bouts (~ 5 minutes) of standing or moving throughout the day.	Coronary Artery Disease
8 Reduce Stress	Engage in enjoyable hobbies such as gardening, sports, or other leisure activities to help reduce stress.	Oxidative Stress
9 Sleep Consistency	Stick to a consistent sleep routine that consists of going to sleep and waking up at approximately the same time each day.	Inflammation

Exercise

Below is a list of the top exercise recommendations curated specifically for you. These recommendations may represent a subset of the total recommendations found within the Exercise sections of your report. Recommendations are listed in order of importance based on your individual genetic results. These recommendations have been reviewed by your healthcare provider. Please contact your provider if you have any questions.

Recommendation Name	The Details	Linked Traits
1 Aerobic Activity	Aim for 20 to 30 minutes of aerobic physical activity most days of the week.	Coronary Artery Disease, Diabetes, Hypertension, Insulin Resistance, Oxidative Stress
2 Yoga	Incorporate at least 1 to 2 yoga sessions into your weekly exercise routine.	Diabetes, Hypertension, Oxidative Stress
3 Resistance Training	Engage in resistance training that targets all major muscle groups 2 to 3 times per week.	Coronary Artery Disease, Diabetes
4 Dancing	Incorporate 45 to 60 minutes of dance several times per week into your normal exercise routine.	Hypertension
5 Walk Hills	Incorporate walking hills into your exercise routine 3 times per week.	Diabetes

Further Testing

Below is a list of the top further testing recommendations curated specifically for you. These recommendations may represent a subset of the total recommendations found within the Further Testing sections of your report. Recommendations are listed in order of importance based on your individual genetic results. These recommendations have been reviewed by your healthcare provider. Please contact your provider if you have any questions.

Recommendation Name	The Details	Linked Traits
1 C-Reactive Protein (CRP) or hsCRP	Test levels of C-Reactive Protein (CRP) or hsCRP	Coronary Artery Disease, Inflammation, Lipid Impairment with Lp(a)
2 Fasting Insulin	Test fasting insulin levels	Coronary Artery Disease, Diabetes, Insulin Resistance
3 Fibrinogen	Test fibrinogen levels in the body	Coronary Artery Disease, Inflammation, Lipid Impairment with Lp(a)
4 Post-Meal Glucose	Test post-meal glucose levels	Coronary Artery Disease, Diabetes, Insulin Resistance
5 Fasting Glucose	Test fasting glucose levels	Diabetes, Insulin Resistance
6 Hemoglobin A1C (HbA1c)	Measure Hemoglobin A1C levels	Diabetes, Insulin Resistance
7 Lp(a)	Test Lipoprotein a (Lpa) Levels	Coronary Artery Disease, Lipid Impairment with Lp(a)
8 Magnesium	Test magnesium levels	Coronary Artery Disease, Hypertension
9 ApoB Test	Test ApoB (Apolipoprotein B)	Diabetes
10 Coenzyme Q10	Test serum CoQ10 levels	Coronary Artery Disease



Appendix 1

Cardiometabolic Panel

October 1, 2019

Demo Client

Kit #1234ABCD5678

Inflammation

People with similar genetic markers may be more likely to experience increased levels of inflammation, which is the body's natural response to an injury, wound, or infection.

Gene	SNP	Variant	Impact
TNF- α	rs1800629	+/+	High
IL6	rs1800795	+/+	High
TNF- α	rs1799724	+/-	Medium
PTPN22	rs2476601	+/-	Medium
IL-10	rs1800872	+/-	Low
TNF- α	rs1799964	-/-	Low
IL23R	rs2201841	+/-	Low
IL-10	rs3024505	-/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT

- Multivitamin
- Betaine Hydrochloride (HCl)
- Vitamin D3
- Folate
- Curcumin

DIET

- Anti-Inflammatory Diet
- Omega-3 Rich Foods
- Dietary Fiber
- Mediterranean Diet
- Nut Consumption
- Fruits and Vegetables

LIFESTYLE

- Sleep Consistency
- Intermittent Fasting

FURTHER TESTING

- Homocysteine Levels
- IL-6 Testing
- C-Reactive Protein (CRP) or hsCRP
- Erythrocyte Sedimentation Rate (ESR)
- Fibrinogen
- Folate Testing

- TNF-alpha

SAMPLE

Insulin Resistance

People with similar genetic markers may be at an increased risk for developing insulin resistance.

Gene	SNP	Variant	Impact
IGF1	rs35767	+/+	High
NAT2	rs1208	+/+	High
PPARG	rs13081389	+/+	High
SC4MOL	rs17046216	+/-	Medium
TCERG1L	rs7077836	-/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT

- Vitamin D3
- Magnesium
- Berberine
- Curcumin
- Vitamin K1
- Resistant Starch
- Resveratrol
- Green Tea Extract (EGCG)

DIET

- Almonds
- Dark Chocolate (70-99%)
- Omega-3 Rich Foods
- Low Glycemic Index Foods
- Cinnamon
- Apple Cider Vinegar
- Monounsaturated Fatty Acids (MUFAs)
- Calorie Restriction
- Dietary Fiber
- Mediterranean Diet

LIFESTYLE

- Meditation
- Intermittent Fasting
- Eat Larger Meals Earlier in the Day

EXERCISE

- Aerobic Activity

FURTHER TESTING

- Fasting Glucose
- Fasting Insulin
- Post-Meal Glucose
- Hemoglobin A1C (HbA1c)
- HOMA-IR

SAMPLE

Oxidative Stress

People with similar genetic markers may experience higher levels of oxidative stress due in part to antioxidant depletion.

Gene	SNP	Variant	Impact
UGT	rs1105879	+/+	High
CDKN	rs10811661	+/+	High
GSTP1	rs1695	-/-	Low
CYP1A1	rs1048943	-/-	Low
LRRK2	rs34637584	-/-	Low
SOD2	rs4880	+/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT	<ul style="list-style-type: none">ZincVitamin CVitamin E
DIET	<ul style="list-style-type: none">Calorie RestrictionFruits and Vegetables
LIFESTYLE	<ul style="list-style-type: none">Reduce Stress
EXERCISE	<ul style="list-style-type: none">Aerobic ActivityYoga
FURTHER TESTING	<ul style="list-style-type: none">Markers of Oxidative Stress

Coronary Artery Disease

People with similar genetic markers may be predisposed to Coronary Artery Disease (CAD).

Gene	SNP	Variant	Impact
APOA5	rs2075291	+/+	High
SORT1	rs599839	+/+	High
PPAP2B	rs17114036	+/+	High
APOB	rs515135	+/+	High
GUCY1A3	rs7692387	+/+	High
PHACTR1	rs9369640	+/-	Medium
LDLR	rs1122608	+/-	Medium
MTHFR	rs1801133	+/-	Medium
IL6R	rs4845625	+/-	Medium
FLT1	rs9319428	+/-	Medium
KCNK5	rs10947789	+/-	Medium
KCNE2	rs9982601	+/-	Medium
CDKN2B-AS1	rs1333049	+/-	Medium
ZC3HC1	rs11556924	+/-	Medium
VAMP5	rs1561198	+/-	Medium
TEX41	rs2252641	+/-	Medium
PLG	rs4252120	-/-	Low
LPL	rs264	-/-	Low
SLC22A4	rs273909	-/-	Low
PON1	rs662	-/-	Low
HDAC9	rs2023938	-/-	Low
CDKN2B-AS1	rs10757274	+/-	Low
WDR12	rs6725887	-/-	Low
ABO	rs579459	-/-	Low
FURIN	rs17514846	-/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT

- Garlic
- Omega-3
- Zinc
- CoQ10

- L-Carnitine
- Magnesium
- B-Vitamin Complex

DIET

- Almonds
- Dark Chocolate (70-99%)
- Olive Oil
- Magnesium Rich foods
- Omega-3 Rich Foods
- Mediterranean Diet
- Plant-Based Diet
- Consume Legumes
- Nut Consumption

LIFESTYLE

- Heat Therapy
- Reduce Sedentary Behavior
- Adequate Sleep
- Meditation

EXERCISE

- Aerobic Activity
- Resistance Training

FURTHER TESTING

- Coenzyme Q10
- C-Reactive Protein (CRP) or hsCRP
- Fasting Insulin
- Fibrinogen
- Post-Meal Glucose
- Magnesium
- Lp(a)

Diabetes

People with similar genetic markers may experience higher levels of blood sugar or greater irregularities with their glucose levels. As a result, you may have an increased risk of developing type 2 diabetes.

Gene	SNP	Variant	Impact
KFL14	rs972283	+/+	High
CDKN	rs10811661	+/+	High
HHEX	rs1111875	+/+	High
ZBED3	rs4457053	+/+	High
KCNQ1	rs2237892	+/+	High
PPARG	rs13081389	+/+	High
HHEX	rs7923837	+/+	High
IGF2BP2	rs4402960	+/-	Medium
ADIPOQ	rs266729	+/-	Medium
CDKAL1	rs7756992	+/-	Medium
KCNQ1	rs2237895	+/-	Medium
CDKAL1	rs10946398	+/-	Medium
ABCB11	rs478333	+/-	Medium
LEPR	rs1137101	+/-	Medium
TCF7L2	rs7903146	+/-	Medium
GCKR	rs780094	+/-	Medium
SLC30A8	rs13266634	+/-	Medium
KCNQ1	rs231362	+/-	Medium
TFAP2B	rs987237	+/-	Medium
GCK	rs1799884	+/-	Medium
TCF7L2	rs12255372	-/-	Low
LIPC	rs2070895	+/-	Low
ARL15	rs4311394	-/-	Low
NOTCH2	rs10923931	-/-	Low
KCNJ11	rs5219	-/-	Low
IGF2BP2	rs1470579	+/-	Low
MC4R	rs12970134	-/-	Low
MTNR1B	rs10830963	-/-	Low
IRS1	rs2943641	-/-	Low
G6PC2	rs16856187	-/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT

- Garlic
- Vitamin D3
- Cinnamon
- Berberine
- Chromium
- Vitamin K2 (Menaquinone)
- Vanadium
- Green Tea Extract (EGCG)
- Omega-3
- Magnesium
- Thiamine (Vitamin B1)
- Fenugreek
- Aloe Vera
- Biotin (Vitamin B7)
- Ginger

DIET

- Limit Coffee Intake
- Low Glycemic Index Foods
- Apple Cider Vinegar
- Protein Intake
- Mediterranean Diet
- Eat Small, Healthy Snacks
- Dark Chocolate (70-99%)
- Cinnamon
- Dietary Fiber
- Add Spices to Food
- Choose Complex Carbohydrates

LIFESTYLE

- Heat Therapy
- Meditation
- Adequate Sleep
- Intermittent Fasting

EXERCISE

- Walk Hills
- Yoga
- Aerobic Activity
- Resistance Training

FURTHER TESTING

- ApoB Test
- Fasting Glucose

-
- Fasting Insulin
 - Post-Meal Glucose
-
- Hemoglobin A1C (HbA1c)
-

SAMPLE

Hypertension

People with similar genetic markers may be predisposed to developing high blood pressure (hypertension).

Gene	SNP	Variant	Impact
ALDH2	rs671	+/+	High
SULT1C3	rs6722745	+/+	High
MTHFR	rs1801133	+/-	Medium
ADD1	rs4961	+/-	Medium
ACE	rs4343	-/-	Low
GALNT2	rs4846914	-/-	Low
CYP11B2	rs1799998	+/-	Low
AGT	rs699	-/-	Low
AGT	rs4762	-/-	Low
AGT	rs5051	-/-	Low
NOS3	rs2070744	-/-	Low
AGTR1	rs5186	-/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT	<ul style="list-style-type: none">GarlicCoQ10L-ArginineGrape Polyphenols	<ul style="list-style-type: none">ZincQuercetinMagnesiumGreen Tea Extract (EGCG)
DIET	<ul style="list-style-type: none">Dark Chocolate (70-99%)Limit Sweetened BeveragesReduce Sodium (Salt) IntakeMediterranean Diet	<ul style="list-style-type: none">Olive OilPotassium Rich FoodsLimit Fructose and FructansFlax Seeds
LIFESTYLE	<ul style="list-style-type: none">Adequate Sleep	<ul style="list-style-type: none">Meditation

EXERCISE

- Dancing
- Aerobic Activity
- Yoga

FURTHER TESTING

- Electrolyte Levels
- Potassium
- Magnesium
- Home Blood Pressure Cuff

Lipid Impairment with Lp(a)

People with similar genetic markers may have elevated levels of cholesterol, cholesterol sub-types and/or triglycerides.

Gene	SNP	Variant	Impact
FADS2	rs1535	+/+	High
CETP	rs5882	+/+	High
APOB	rs693	+/-	Medium
TCF7L2	rs7903146	+/-	Medium
GCKR	rs780094	+/-	Medium
LPA	rs10455872	-/-	Low
APOA5	rs662799	-/-	Low
APOA5	rs3135506	-/-	Low
TCF7L2	rs12255372	-/-	Low
APOE	rs964184	NR	Not Reportable

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT

- CoQ10
- Vitamin C
- Curcumin
- Citrus Bioflavanoids and Tocotrienols
- Green Tea Extract (EGCG)
- L-Carnitine
- Probiotics
- Aloe Vera
- Ginger

DIET

- Dark Chocolate (70-99%)
- Folate Rich Foods
- Eggs

LIFESTYLE

- Limit Alcohol
- Intermittent Fasting

FURTHER TESTING

- C-Reactive Protein (CRP) or hsCRP
- Fibrinogen

- Lp(a)

SAMPLE



Recommendation Detailed Appendix



Appendix 2

Cardiometabolic Panel

October 1, 2019

Demo Client

Kit #1234ABCD5678

Supplements

Recommendation Name	The Details	Linked Traits
Green Tea Extract (EGCG)	Supplement with 300 - 400 mg of green tea extract per day.	Diabetes, Hypertension, Insulin Resistance, Lipid Impairment with Lp(a)
Magnesium	Supplement with 300 - 500 mg of magnesium per day.	Coronary Artery Disease, Diabetes, Hypertension, Insulin Resistance
CoQ10	Supplement with 150 - 500 mg of CoQ10 per day.	Coronary Artery Disease, Hypertension, Lipid Impairment with Lp(a)
Curcumin	Supplement with 250 - 2,000 mg of curcumin extract per day.	Inflammation, Insulin Resistance, Lipid Impairment with Lp(a)
Garlic	Supplement with 400 - 1,200 mg of garlic extract per day.	Coronary Artery Disease, Diabetes, Hypertension
Vitamin D3	Supplement with 3,000 IUs of vitamin D3 per day.	Diabetes, Inflammation, Insulin Resistance
Zinc	Supplement with 10 - 40 mg of zinc per day.	Coronary Artery Disease, Hypertension, Oxidative Stress
Aloe Vera	Supplement with 300 - 1,000 mg of an aloe vera extract or drink 2 tablespoons of aloe vera juice per day.	Diabetes, Lipid Impairment with Lp(a)
Berberine	Supplement with 1,500 mg of berberine per day.	Diabetes, Insulin Resistance
Ginger	Supplement with 400 - 3,000 mg of dried ginger extract per day.	Diabetes, Lipid Impairment with Lp(a)
L-Carnitine	Supplement with 500 mg - 4 g of L-carnitine per day.	Coronary Artery Disease, Lipid Impairment with Lp(a)
Omega-3	Supplement with 2 - 5 g of omega-3 fatty acid supplement that contains essential fatty acids DHA and EPA.	Coronary Artery Disease, Diabetes
Vitamin C	Supplement with 500 - 1,000 mg of vitamin C per day.	Lipid Impairment with Lp(a), Oxidative Stress
B-Vitamin Complex	Supplement with 50 mg of a vitamin B-complex per day.	Coronary Artery Disease
Betaine Hydrochloride (HCl)	Supplement with 1 - 2 g of betaine hydrochloride (HCl) with meals for at least 6 months.	Inflammation
Biotin (Vitamin B7)	Supplement with 8 - 16 mg of biotin per day.	Diabetes
Chromium	Supplement with 200 - 800 mcg of chromium per day with meals.	Diabetes
Cinnamon	Supplement with 250 mg of cinnamon per day.	Diabetes
Citrus Bioflavonoids and Tocotrienols	Supplement with a combination of 270 mg of citrus bioflavonoids and 30 mg of tocotrienols per day.	Lipid Impairment with Lp(a)

Fenugreek	Supplement with 90 mg of fenugreek per day.	Diabetes
Folate	Supplement with 400 - 800 mcg of methyl-folate per day.	Inflammation
Grape Polyphenols	Supplement with grape polyphenols from grape seed extract at doses ranging from 150 mg - 1,000 mg per day.	Hypertension
L-Arginine	Supplement with 500 mg - 4 g of L-arginine per day.	Hypertension
Multivitamin	Supplement with a multivitamin that includes activated B vitamins.	Inflammation
Probiotics	Supplement with a 10 - 50 billion CFU probiotic per day.	Lipid Impairment with Lp(a)
Quercetin	Supplement with 500 - 1,000 mg of quercetin daily.	Hypertension
Resistant Starch	Supplement with 40 g of resistant starch per day.	Insulin Resistance
Resveratrol	Supplement with 150 - 2,000 mg of resveratrol per day.	Insulin Resistance
Thiamine (Vitamin B1)	Supplement with 30 - 100 mg up to 3 times per day.	Diabetes
Vanadium	Supplement with 100 mg of vanadium per day.	Diabetes
Vitamin E	Supplement with 100 - 400 IUs of vitamin E per day.	Oxidative Stress
Vitamin K1	Supplement with 500 mcg of vitamin K1 per day.	Insulin Resistance
Vitamin K2 (Menaquinone)	Supplement with 100 - 200 mcg of vitamin K2 per day.	Diabetes

Diet

Recommendation Name	The Details	Linked Traits
Dark Chocolate (70-99%)	Eat approximately 1 oz of dark chocolate per day.	Coronary Artery Disease, Diabetes, Hypertension, Insulin Resistance, Lipid Impairment with Lp(a)
Mediterranean Diet	Adopt a Mediterranean-style diet that includes a variety of antioxidant-rich foods, heart healthy fats, and complex carbohydrates.	Coronary Artery Disease, Diabetes, Hypertension, Inflammation, Insulin Resistance
Dietary Fiber	Increase dietary fiber intake to recommended 25 g for females and 30 g for males.	Diabetes, Inflammation, Insulin Resistance
Omega-3 Rich Foods	Consume a diet rich in omega-3 fatty acids.	Coronary Artery Disease, Inflammation, Insulin Resistance
Almonds	Eat approximately 1 oz of almonds per day.	Coronary Artery Disease, Insulin Resistance
Apple Cider Vinegar	Consume 2 to 4 tsp of apple cider vinegar prior to eating.	Diabetes, Insulin Resistance
Calorie Restriction	Reduce overall calorie intake to create a calorie deficit.	Insulin Resistance, Oxidative Stress

Cinnamon	Add 1 to 2 tsp of cinnamon to your diet per day.	Diabetes, Insulin Resistance
Fruits and Vegetables	Include fruits and vegetables at every meal to increase levels of antioxidants in the body, especially strawberries, blueberries, broccoli, sprouts, and green leafy vegetables.	Inflammation, Oxidative Stress
Low Glycemic Index Foods	Choose low-glycemic index foods to avoid blood sugar spikes.	Diabetes, Insulin Resistance
Nut Consumption	Consume a variety of nuts including almonds, walnuts, macadamia nuts, and brazil nuts.	Coronary Artery Disease, Inflammation
Olive Oil	Choose olive oil as the main source of fat in the diet by replacing vegetable cooking oils with olive oil and using olive oil-based dressings.	Coronary Artery Disease, Hypertension
Add Spices to Food	Add spices such as red pepper, cayenne, or turmeric each day to snacks and meals.	Diabetes
Anti-Inflammatory Diet	Consume a diet rich in anti-inflammatory foods.	Inflammation
Choose Complex Carbohydrates	Replace foods that are heavy in sugar or refined carbohydrates with complex carbohydrates.	Diabetes
Consume Legumes	Include 1 cup of legumes per day or approximately 6 cups per week into the diet.	Coronary Artery Disease
Eat Small, Healthy Snacks	Eat small healthy snacks that are rich in complex carbohydrates and protein.	Diabetes
Eggs	Include 1 whole egg in the daily diet.	Lipid Impairment with Lp(a)
Flax Seeds	Add 2 tbsp of flaxseeds to your daily diet.	Hypertension
Folate Rich Foods	Consume a diet rich in folate.	Lipid Impairment with Lp(a)
Limit Coffee Intake	Drink no more than 3 cups of coffee per day.	Diabetes
Limit Fructose and Fructans	Avoid fructose or limit fructose to no more than 75 g per day.	Hypertension
Limit Sweetened Beverages	Limit or eliminate sugar-sweetened beverages and fruit juices to no more than 12 oz daily.	Hypertension
Magnesium Rich foods	Consume a diet rich in magnesium.	Coronary Artery Disease
Monounsaturated Fatty Acids (MUFAs)	Consume a diet rich in monounsaturated fatty acids, sources include avocados and olive oil.	Insulin Resistance
Plant-Based Diet	Consume a diet that is focused on whole, unprocessed plant-based foods and whole grains.	Coronary Artery Disease
Potassium Rich Foods	Consume a diet rich in potassium.	Hypertension
Protein Intake	Focus on high quality protein sources.	Diabetes
Reduce Sodium (Salt) Intake	Reduce sodium intake or adhere to a low-salt diet limiting sodium to 1,500 mg per day.	Hypertension

Lifestyle

Recommendation Name	The Details	Linked Traits
Intermittent Fasting	Try intermittent fasting (fasting for 14+ hours daily) or alternate day fasting (fasting for 24 hours every other day).	Diabetes, Inflammation, Insulin Resistance, Lipid Impairment with Lp(a)
Meditation	Engage in 10 to 20 minutes of mindfulness meditation 2 or more times per week.	Coronary Artery Disease, Diabetes, Hypertension, Insulin Resistance
Adequate Sleep	Aim for the recommended 7 to 8 hours of sleep each night.	Coronary Artery Disease, Diabetes, Hypertension
Heat Therapy	Aim for 20 to 30 minutes per day of heat therapy treatments such as sauna, infrared, and hot tub sessions.	Coronary Artery Disease, Diabetes
Eat Larger Meals Earlier in the Day	Eat larger meals earlier in the day, preferably before 4 pm.	Insulin Resistance
Limit Alcohol	Avoid alcohol or limit alcohol to no more than 1 drink per day for women and 2 drinks per day for men.	Lipid Impairment with Lp(a)
Reduce Sedentary Behavior	Reduce sedentary behavior. Try to incorporate small bouts (~ 5 minutes) of standing or moving throughout the day.	Coronary Artery Disease
Reduce Stress	Engage in enjoyable hobbies such as gardening, sports, or other leisure activities to help reduce stress.	Oxidative Stress
Sleep Consistency	Stick to a consistent sleep routine that consists of going to sleep and waking up at approximately the same time each day.	Inflammation

Exercise

Recommendation Name	The Details	Linked Traits
Aerobic Activity	Aim for 20 to 30 minutes of aerobic physical activity most days of the week.	Coronary Artery Disease, Diabetes, Hypertension, Insulin Resistance, Oxidative Stress
Yoga	Incorporate at least 1 to 2 yoga sessions into your weekly exercise routine.	Diabetes, Hypertension, Oxidative Stress
Resistance Training	Engage in resistance training that targets all major muscle groups 2 to 3 times per week.	Coronary Artery Disease, Diabetes
Dancing	Incorporate 45 to 60 minutes of dance several times per week into your normal exercise routine.	Hypertension
Walk Hills	Incorporate walking hills into your exercise routine 3 times per week.	Diabetes

Further Testing

Recommendation Name	The Details	Linked Traits
C-Reactive Protein (CRP) or hsCRP	Test levels of C-Reactive Protein (CRP) or hsCRP	Coronary Artery Disease, Inflammation, Lipid Impairment with Lp(a)
Fasting Insulin	Test fasting insulin levels	Coronary Artery Disease, Diabetes, Insulin Resistance
Fibrinogen	Test fibrinogen levels in the body	Coronary Artery Disease, Inflammation, Lipid Impairment with Lp(a)
Post-Meal Glucose	Test post-meal glucose levels	Coronary Artery Disease, Diabetes, Insulin Resistance
Fasting Glucose	Test fasting glucose levels	Diabetes, Insulin Resistance
Hemoglobin A1C (HbA1c)	Measure Hemoglobin A1C levels	Diabetes, Insulin Resistance
Lp(a)	Test Lipoprotein a (Lpa) Levels	Coronary Artery Disease, Lipid Impairment with Lp(a)
Magnesium	Test magnesium levels	Coronary Artery Disease, Hypertension
ApoB Test	Test ApoB (Apolipoprotein B)	Diabetes
Coenzyme Q10	Test serum CoQ10 levels	Coronary Artery Disease
Electrolyte Levels	Test for electrolyte levels	Hypertension
Erythrocyte Sedimentation Rate (ESR)	Test erythrocyte sedimentation rate (ESR) in blood	Inflammation
Folate Testing	Test folate levels	Inflammation
HOMA-IR	Calculate HOMA-IR	Insulin Resistance
Home Blood Pressure Cuff	Use a home blood pressure cuff to monitor your daily blood pressure	Hypertension
Homocysteine Levels	Check blood homocysteine levels	Inflammation
IL-6 Testing	Test for levels of IL-6	Inflammation
Markers of Oxidative Stress	Test markers of oxidative stress	Oxidative Stress
Potassium	Test serum potassium levels	Hypertension
TNF-alpha	Test for TNF-alpha	Inflammation