

# Genoplan My Book

Genoplan's genetic analysis results are not to be used for medical diagnostic purposes.  
This report is best used as a reference for disease prediction and lifestyle improvement.

# Content.

---

How to read This Report

**Full reports** 9

**Key reports** 25

About Our Service

Terminology

Frequently Asked Questions

Test Verification

---

Serial Key

**CAAC-THRM-XXZY**

Name

**Jacob Lee**

Issue Date

**2020-06-04**

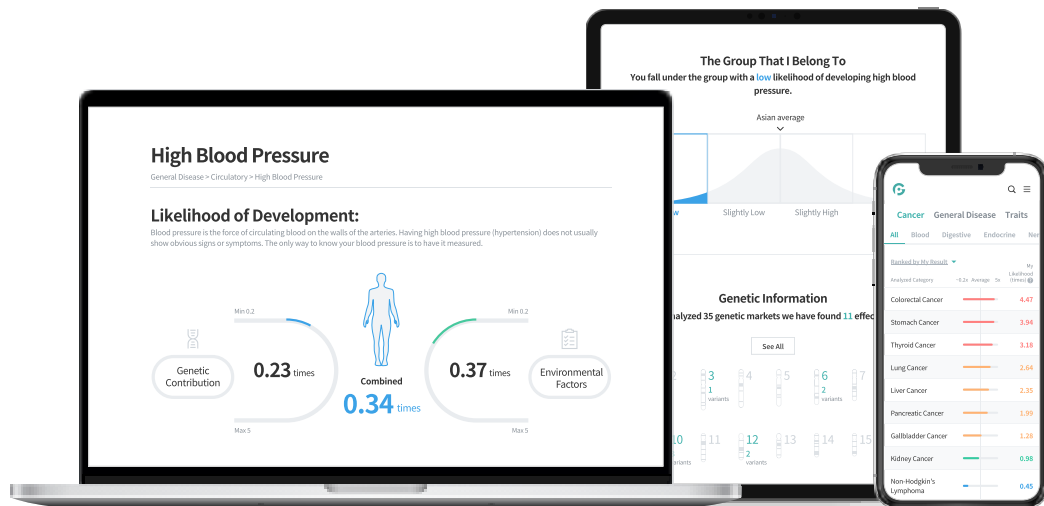
This report was last updated  
on 2021-01-23.

Analysis results may change if there are new updates after this date.

# www.genoplan.com

# Login to your DNA

You can explore deeper and broader of You through Genoplan.



Easy to connect whenever and wherever you want.

View your results via various devices such as PC, Tablet PC, mobile phone, and etc.



Connect to more Possibilities.

You can view up to 500 reports with detailed genetic analyses that reflect the latest research results.

## How to access your test report via QR code

1. Open your smartphone's camera application.
2. Scan QR code on your smartphone camera.
3. When your camera recognizes the QR code, proceed onto Genoplan website.  
(Based on your smartphone model, you might be automatically taken to the website.)
4. Login and view your report.

\*Depending on your smartphone's operating system, it may not recognize the QR code.



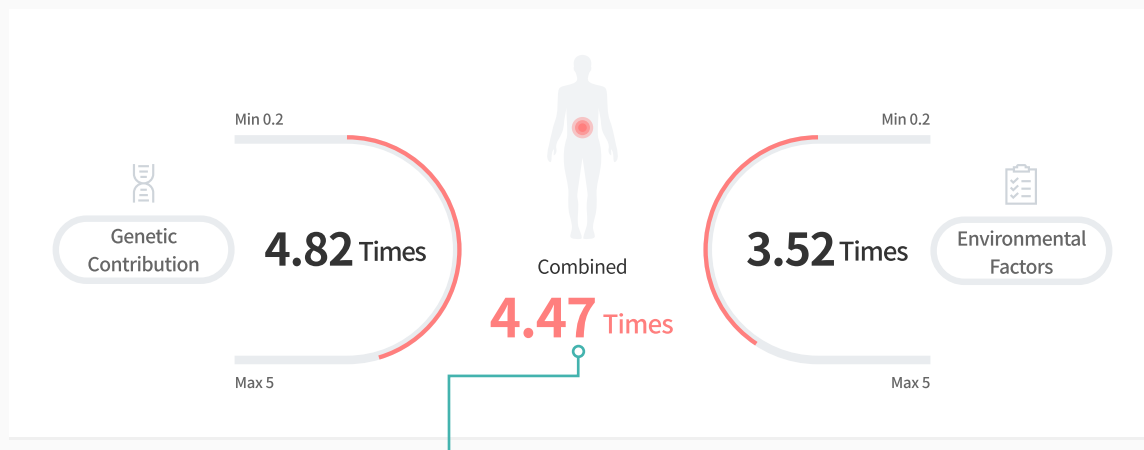
# How to Read This Report.

## Guide to Colors and Numbers

Cancer/General Diseases	Good	Slightly good	Slightly poor	Poor
Traits	Favorable	Slightly favorable	Slightly unfavorable	Unfavorable

- Your results are divided into 4 levels. ●●●●
- Easily interpret your results through these four color levels.
- Colored levels do not apply to reports with no specific advantage or disadvantage (e.g. Red wine preference).

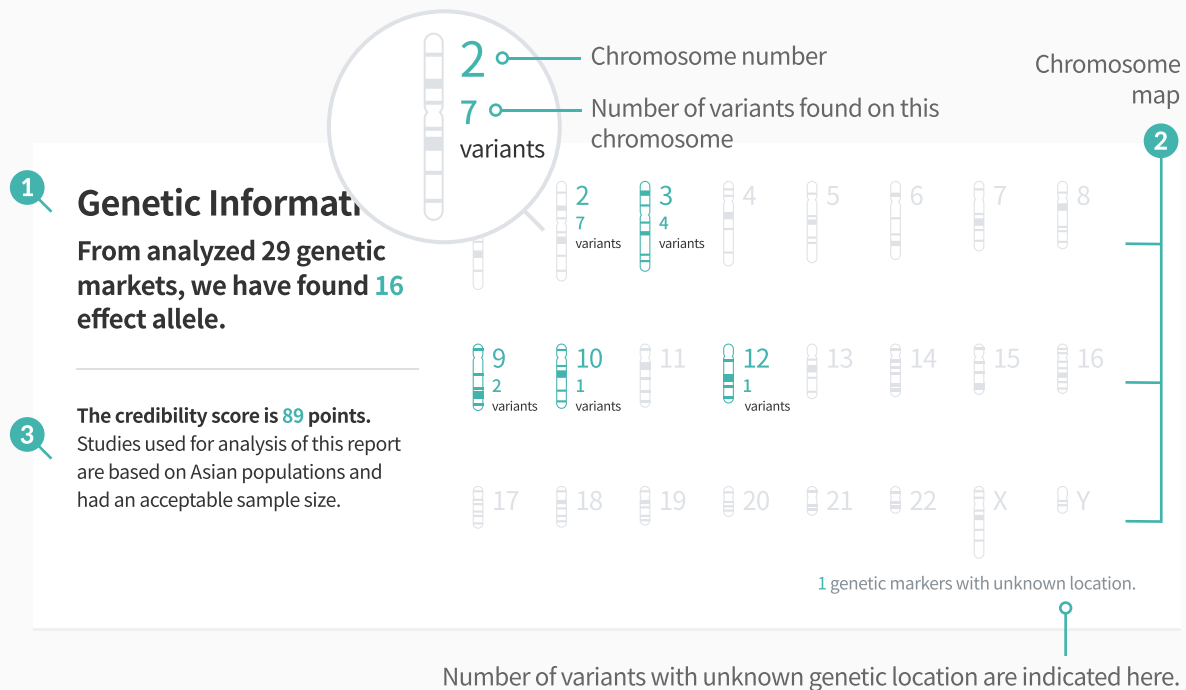
## Guide to Likelihood Score



- In this example, **4.47 times** is your likelihood score.
- It means that you are 4.47 times more likely to develop this condition compared to the population average.
- This score considers both genetic and Environmental Factors and is available for Cancer and some General Disease reports.
- Reports where there is insufficient statistical data in the research studies are marked “score unavailable.”

- Results on this page is an example and might differ from your results.

## Guide to Genetic Information



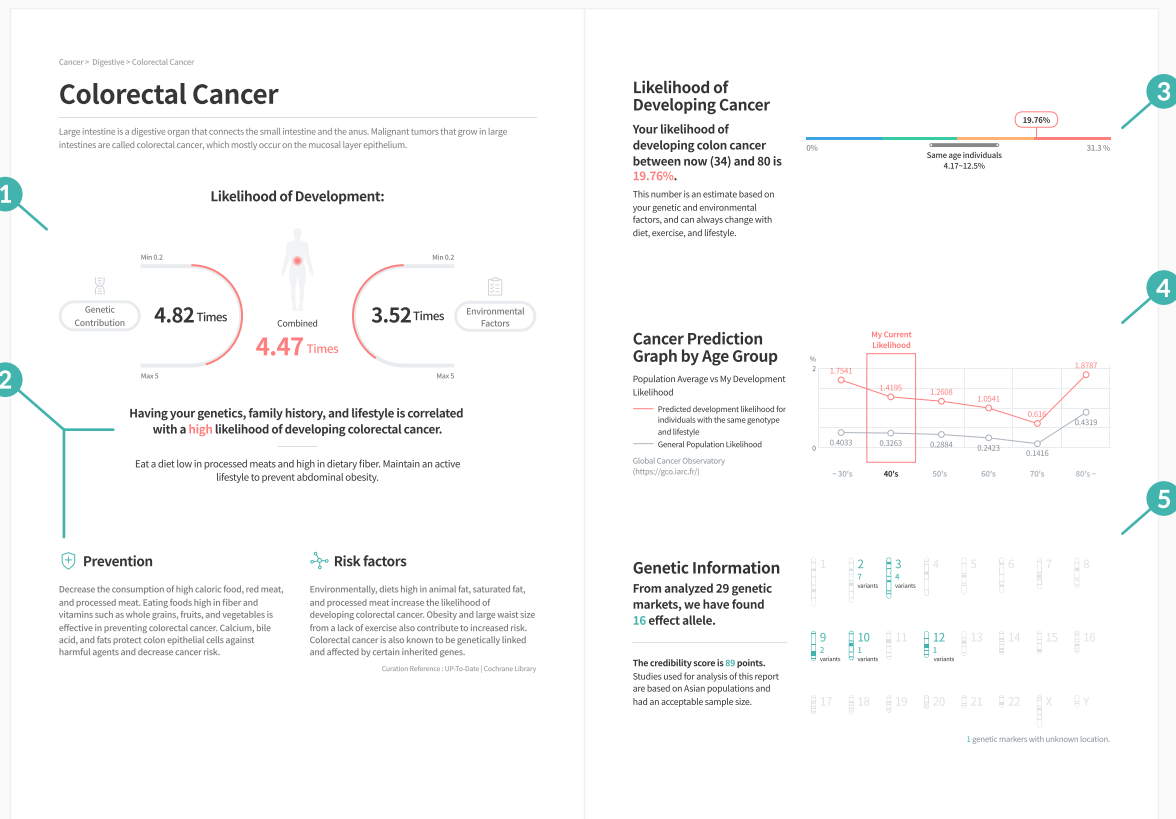
- 1 Number of genetic markers**
  - Total number of genetic markers that each report tested for, and number of genetic variants (effect alleles) found are shown.
  - Likelihood score increases with a larger number of genetic variants.
- 2 Chromosome map**

Human genome consists of 2 sets of 23 chromosomes, giving each chromosome a partner. For ease of understanding, only one set is shown. Chromosome number and number of genetic variants found on the chromosome are indicated next to each chromosome.
- 3 Credibility score**

It is a score that describes how well the selected markers describe the corresponding report. Based on race and size of population studied in the referenced research articles, its is calculated using an algorithm developed at Genoplan and the max score is 100.

- Results on this page is an example and might differ from your results.

## How to Read Cancer Report

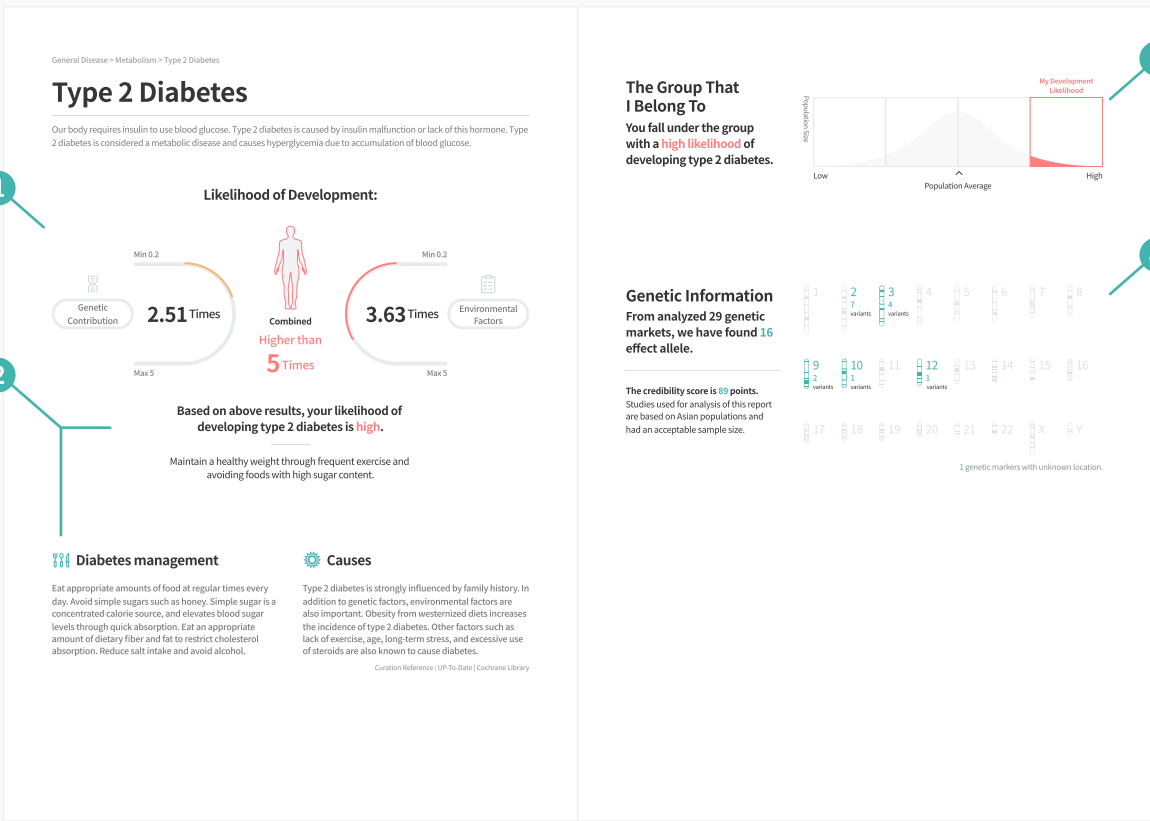


- Likelihood score** This section shows your overall likelihood of a cancer and individual genetic and non-genetic likelihood scores.
- Explanation and lifestyle tips** This section includes interpretation and/or explanation of the above results and provides lifestyle tips regarding each report.
- Likelihood of developing cancer** This graph shows your cumulative likelihood (%) of developing a specific cancer between now and age 80, given that your lifestyle does not change.
- Cancer prediction graph** This graph compares your predicted likelihood (%) with the global average, by age group.
- Genetic Information** This section informs about each report's credibility, and number and location of the analyzed genetic markers.

- Results on this page is an example and might differ from your results.

How to Read

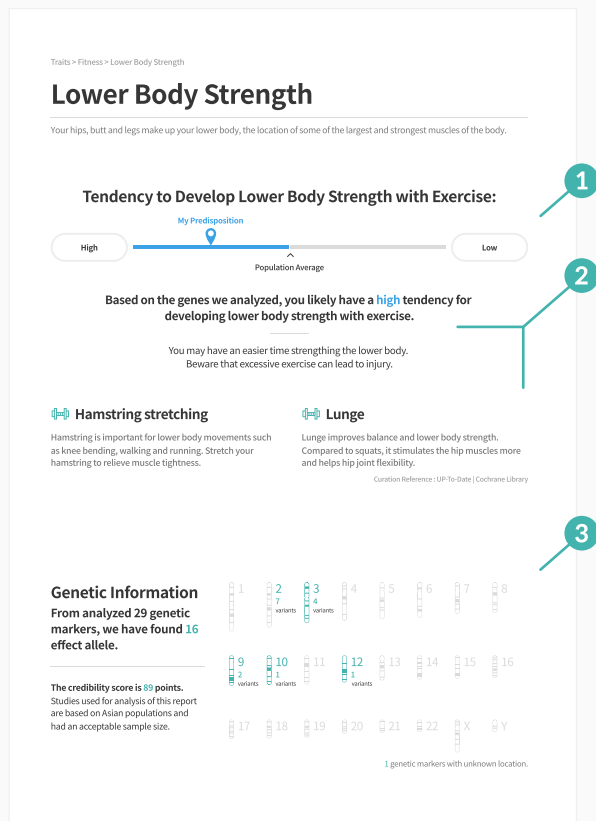
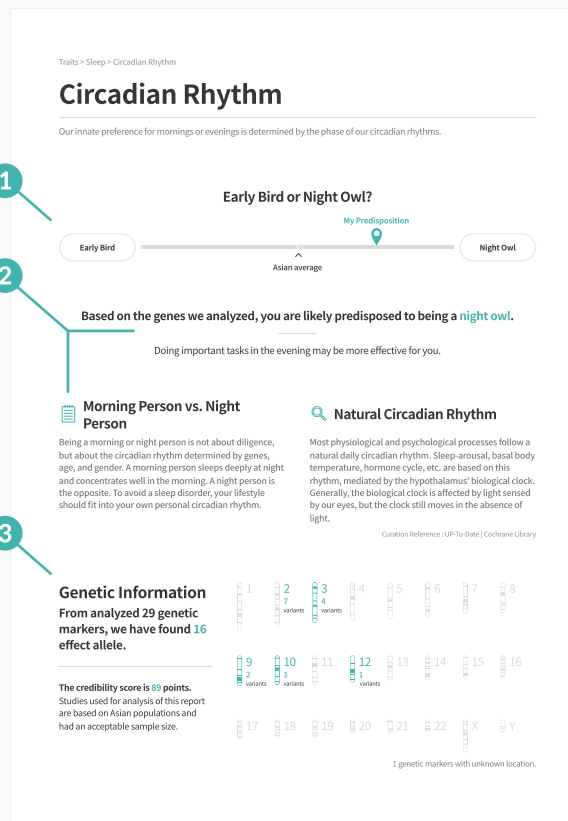
# General Diseases Report



- |   |                                       |                                                                                                                  |
|---|---------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 1 | <b>Likelihood score</b>               | This section shows your overall likelihood of a cancer and individual genetic and non-genetic likelihood scores. |
| 2 | <b>Explanation and lifestyle tips</b> | You may have higher likelihood score depending on the number of genetic variants you have.                       |
| 3 | <b>Group that I belong to</b>         | This shows your position on a distribution graph of all analyzed persons, divided into 4 groups.                 |
| 4 | <b>Genetic Information</b>            | This section informs about each report's credibility, and number and location of the analyzed genetic markers.   |

- Results on this page is an example and might differ from your results.

## How to Read Traits



- 1 My result** This section shows your traits based on the genetic test results.
- 2 Explanation and lifestyle tips** This section includes interpretation and/or explanation of the above results and provides lifestyle tips regarding each report.
- 3 Genetic Information** This section informs about each report's credibility, and number and location of the analyzed genetic markers.

### ! Precaution when interpreting results

- Traits > Biomarker Reports informing about levels do not reveal your actual levels, but rather your genetic tendencies.
- Traits > Drug Response Drug response reports do not test your actual response, but rather your genetic tendencies.
- Traits > Nutrition Nutrition reports show your genetic predisposition and not the actual concentration in blood.

- Results on this page is an example and might differ from your results.



# Full reports

Analysis results of 470 All Categories.

## Please Note

- Development likelihood higher than average is colored **red** or **orange**, and lower than average is colored **green** or **blue**.
- Color indication is not applied for results with no specific advantage or disadvantage.
- Reports that cannot be calculated are marked as 'No results'.

# Full reports

## Cancer > Respiratory

Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Lung Cancer	5 ●	0.7146%
Pharyngeal Cancer	3.31 ●	0.2134%

Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Laryngeal Cancer	4.08 ●	0.1203%

## Cancer > Digestive

Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Colorectal Cancer	5 ●	0.7295%
Pancreatic Cancer	1.23 ●	0.0351%
Oral Cancer	0.8 ●	0.0648%
Stomach Cancer	0.6 ●	0.0588%

Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Esophageal Cancer	1.6 ●	0.1016%
Gallbladder Cancer	1.2 ●	0.0123%
Liver Cancer	0.61 ●	0.0969%

## Cancer > Blood

Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Multiple Myeloma	4.87 ●	0.0589%
Hodgkin's Lymphoma	2.44 ●	0.0317%
Chronic Myeloid Leukemia	0.99 ●	0.0421%

Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Chronic Lymphocytic Leukemia	3.3 ●	0.0363%
Non-Hodgkin's Lymphoma	1.25 ●	0.0787%
Acute Lymphoblastic Leukemia	0.68 ●	0.0364%

## Cancer > Urogenital

Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Testicular Cancer	2.08 ●	0.0572%
Bladder Cancer	1.28 ●	0.0422%

Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Prostate Cancer	1.68 ●	0.0554%
Kidney Cancer	1.18 ●	0.0643%

# Full reports

## Cancer > Skin

Report Title	My Likelihood vs Population Avg (times)	My Likelihood	Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Basal Cell Carcinoma	1.77 ●	0.0496%	Melanoma	0.68 ●	0.0201%

## Cancer > Endocrine

Report Title	My Likelihood vs Population Avg (times)	My Likelihood	Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Thyroid Cancer	1.63 ●	0.0929%			

## Cancer > Male

Report Title	My Likelihood vs Population Avg (times)	My Likelihood	Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Male Breast Cancer	1.4 ●	0.0028%			

## Cancer > Nervous System

Report Title	My Likelihood vs Population Avg (times)	My Likelihood	Report Title	My Likelihood vs Population Avg (times)	My Likelihood
Meningioma	0.85 ●	0.0387%	Glioma	0.62 ●	0.0282%

## General Diseases > Metabolism

Report Title	My Likelihood vs Population Avg (times)		Report Title	My Likelihood vs Population Avg (times)	
Gout Likelihood of Joint Pain and Swelling:	5	High ●	Primary Biliary Cholangitis Likelihood of Developing Bile Duct Damage:	3.43	High ●
Hepatitis C Cirrhosis Likelihood of Liver Cirrhosis From Hepatitis C:	3.27	High ●	Graves' Disease Likelihood of Developing Overactive Thyroid:	2.92	Slightly High ●
IgA Nephropathy Likelihood of IgA Accumulation in Kidney:	2	Slightly High ●	Diabetic Kidney Disease Likelihood of Kidney Disease From Diabetes:	1.54	Slightly High ●
Pituitary Adenoma Likelihood of Pituitary Adenoma:	1.36	Slightly High ●	Kidney Stone Likelihood of Mineral Deposit in Kidney:	1.34	Slightly High ●
NAFLD Likelihood of Nonalcoholic Fatty Liver Disease:	1.17	Slightly High ●	Diabetic Retinopathy Likelihood of Retinal Damage Due to Diabetes:	1.17	Slightly High ●
Nephrotic Syndrome Likelihood of High Protein Excretion in Urine:	1.04	Slightly High ●	Gluten Sensitivity Likely Degree of Gluten Sensitivity:	1.01	Slightly High ●

# Full reports

## General Diseases > Metabolism

Report Title	My Likelihood vs Population Avg (times)	
<b>Hyperlipidemia</b> Likelihood of Lipid & Cholesterol Accumulation:	0.89	Slightly Low ●
<b>Hypothyroidism</b> Likelihood of Developing an Underactive Thyroid:	0.76	Slightly Low ●
<b>Type 2 Diabetes</b> Likelihood of Development:	0.64	Slightly Low ●
<b>Chronic Kidney Disease</b> Likelihood of Kidney Function Deteriorating:	0.46	Slightly Low ●
<b>Chronic Hepatitis C</b> Likelihood of Developing Long-term Hepatitis C:	0.45	Slightly Low ●

Report Title	My Likelihood vs Population Avg (times)	
<b>Obesity</b> Likelihood of Becoming Obese:	0.88	Slightly Low ●
<b>Autoimmune Hepatitis</b> Likelihood of Development:	0.71	Slightly Low ●
<b>Type 1 Diabetes</b> Likelihood of Development:	0.47	Slightly Low ●
<b>Alcoholic Liver Cirrhosis</b> Likelihood of Liver Cirrhosis From Drinking:	0.45	Slightly Low ●

## General Diseases > Circulatory

Report Title	My Likelihood vs Population Avg (times)	
<b>Atrial Fibrillation</b> Likelihood of Developing Abnormal Heart Rhythm:	1.84	Slightly High ●
<b>Coronary Artery Calcification</b> Likelihood of Coronary Arteries Hardening:	1.24	Slightly High ●
<b>Drug-resistant High BP</b> Likelihood of Resistance to High BP Drugs:	1.04	Slightly High ●
<b>Dilated Cardiomyopathy</b> Likelihood of Heart's Ventricle Weakening:	1.02	Slightly High ●
<b>Aortic Valve Calcification</b> Likelihood of Aortic Valve Narrowing:	0.99	Slightly Low ●
<b>Raynaud's Syndrome</b> Likelihood of Extremities Turning Pale:	0.96	Slightly Low ●
<b>Nocturnal High Blood Pressure</b> Likelihood of High Blood Pressure at Nighttime:	0.89	Slightly Low ●
<b>Abdominal Aortic Aneurysm</b> Likelihood of Abdominal Aorta Enlarging:	0.74	Slightly Low ●
<b>High BP Due to Salt Intake</b> Likelihood of High BP From Salt Intake:	0.49	Slightly Low ●

Report Title	My Likelihood vs Population Avg (times)	
<b>Myocardial Infarction</b> Likelihood of Heart Attack Occurring:	1.26	Slightly High ●
<b>Sudden Cardiac Arrest</b> Likelihood of Occurring:	1.11	Slightly High ●
<b>Varicose Veins</b> Likelihood of Enlarged Veins in Legs:	1.04	Slightly High ●
<b>Aortic Dissection</b> Likelihood of Aorta's Inner Layer Tearing:	1.01	Slightly High ●
<b>Atherosclerosis</b> Likelihood of Plaque Building Up in Arteries:	0.96	Slightly Low ●
<b>Pulse Pressure</b> Likely Difference Between Two BP Values:	0.9	Slightly Low ●
<b>High Blood Pressure</b> Likelihood of Development:	0.86	Slightly Low ●
<b>Heart Failure</b> Likelihood of Occurring:	0.61	Slightly Low ●
<b>Angina</b> Likelihood of Feeling Chest Pain or Discomfort:	0.44	Slightly Low ●

## General Diseases > Digestive

Report Title	My Likelihood vs Population Avg (times)	
<b>Alcoholic Chronic Pancreatitis</b> Likelihood of Chronic Pancreatitis From Alcohol:	2.99	Slightly High ●
<b>Crohn's Disease</b> Likelihood of Digestive Tract Inflammation:	1.99	Slightly High ●

Report Title	My Likelihood vs Population Avg (times)	
<b>Gastritis</b> Likelihood of Stomach Lining Inflammation:	2.74	Slightly High ●
<b>Eosinophilic Esophagitis</b> Likelihood of Eosinophil Buildup in Esophagus:	1.45	Slightly High ●

# Full reports

## General Diseases > Digestive

Report Title	My Likelihood vs Population Avg (times)	
Celiac Disease Likelihood of Immune Response to Gluten Intake:	1.2	Slightly High ●
Barrett's Esophagus Likelihood of Development:	1.12	Slightly High ●
Ulcerative Colitis Likelihood of Colon Inflammation and Ulcers:	0.99	Slightly Low ●
Gallstones Likelihood of Hard Deposits in Gallbladder:	0.95	Slightly Low ●
Indigestion Tendency to Feel Full or Bloating:	0.68	Slightly Low ●

Report Title	My Likelihood vs Population Avg (times)	
Duodenal Ulcer Likelihood of Ulcer in Small Intestine:	1.15	Slightly High ●
Acid Reflux Disease Likelihood of Experiencing Heartburn:	1.04	Slightly High ●
Lactose Intolerance Likelihood of Lactose Digestive Inability:	0.99	Slightly Low ●
Irritable Bowel Syndrome Likelihood of Development:	0.91	Slightly Low ●
Collagenous Colitis Likelihood of Developing Colon Inflammation:	0.2	Low ●

## General Diseases > Respiratory

Report Title	My Likelihood vs Population Avg (times)	
COPD Likelihood of Developing COPD:	1.66	Slightly High ●
Aging Lung Function Degree of Lung Function Declining From Aging:	1.18	Slightly High ●
Silicosis Likelihood of Silica Dust Accumulation in Lungs:	1.01	Slightly High ●
AHR Likelihood of Having Airway Hyperresponsiveness:	0.9	Slightly Low ●
Chronic Rhinosinusitis Likelihood of Development:	0.66	Slightly Low ●

Report Title	My Likelihood vs Population Avg (times)	
Interstitial Lung Disease Likelihood of Developing Scarring of The Lungs:	1.34	Slightly High ●
Asthma Likelihood of Airway Swelling and Narrowing:	1.17	Slightly High ●
Allergic Rhinitis Likelihood of Development:	0.96	Slightly Low ●
Chronic Mucus Hypersecretion Likelihood of Development:	0.68	Slightly Low ●
Response to Fine Dust Likelihood of Inflammation Due to Fine Dust:	0.56	Slightly Low ●

## General Diseases > Brain

Report Title	My Likelihood vs Population Avg (times)	
Alzheimer's Disease Likelihood of Brain Cells Degenerating:	5	High ●
Frontotemporal Dementia Likelihood of Development:	2.64	Slightly High ●
Cerebral Ischemia Likelihood of Cerebral Ischemia Occurring:	1.52	Slightly High ●
Stroke Likelihood of Stroke Occuring:	1.04	Slightly High ●
Corticobasal Degeneration Likelihood of Development:	0.89	Slightly Low ●
Parkinson's Disease Likelihood of Development:	0.85	Slightly Low ●

Report Title	My Likelihood vs Population Avg (times)	
Amyotrophic Lateral Sclerosis Likelihood of Losing Muscle Control:	4.81	High ●
Lewy Body Dementia Likelihood of Lewy Bodies Depositing in Brain:	2.06	Slightly High ●
Small Vessel Stroke Likelihood of Stroke From Small Vessel Disease:	1.1	Slightly High ●
Cerebral Aneurysm Likelihood of Brain Blood Vessel Ballooning:	0.95	Slightly Low ●
Cerebral Hemorrhage Likelihood of Arterial Bleeding in Brain:	0.86	Slightly Low ●
Onset Age of FTD Likely Age of Frontotemporal Dementia Onset:	0.66	Slightly Late ●

# Full reports

## General Diseases > Brain

Report Title	My Likelihood vs Population Avg (times)	
Moyamoya Disease Likelihood of Artery Blockage in Brain:	0.43	Slightly Low ●

## General Diseases > Nervous System

Report Title	My Likelihood vs Population Avg (times)	
Multiple Sclerosis Likelihood of Development:	3.56	High ●
Restless Leg Syndrome Likelihood of Development:	1.32	Slightly High ●
Cervical Dystonia Likelihood of Development:	1.12	Slightly High ●
Headache Likelihood of Headaches Occurring:	0.95	Slightly Low ●
Guillain-Barré Syndrome Likelihood of Peripheral Nervous System Damage:	0.67	Slightly Low ●
Tremor Likelihood of Body Parts Moving Uncontrollably:	0.64	Slightly Low ●

Report Title	My Likelihood vs Population Avg (times)	
Polymyositis Likelihood of Muscle Weakening and Inflammation:	1.46	Slightly High ●
Epilepsy - Generalized Seizure Likelihood of Development:	1.3	Slightly High ●
Epilepsy - Partial Seizure Likelihood of Development:	0.97	Slightly Low ●
Migraine Likelihood of Having Throbbing Headache:	0.84	Slightly Low ●
Myasthenia Gravis Likelihood of Skeletal Muscles Weakening:	0.65	Slightly Low ●
Cluster Headache Likelihood of Extreme Headaches Occurring:	0.54	Slightly Low ●

## General Diseases > Skeletal

Report Title	My Likelihood vs Population Avg (times)	
Rheumatoid Arthritis Likelihood of Developing Joint Inflammation:	5	High ●
Idiopathic ONFH Likelihood of Development:	1.17	Slightly High ●
Scoliosis Likelihood of Developing a Curved Spine:	1.12	Slightly High ●
Chronic Back Pain Likelihood of Chronic Back Pain Occurring:	1.06	Slightly High ●
Spinal Disc Herniation Likelihood of Occurring:	0.91	Slightly Low ●
Paget's Disease Likelihood of Certain Bones Becoming Fragile:	0.69	Slightly Low ●
OPLL Likelihood of Development:	0.56	Slightly Low ●

Report Title	My Likelihood vs Population Avg (times)	
Osteoarthritis Likelihood of Developing Arthritis From Aging:	1.38	Slightly High ●
Bunions Likelihood of Developing Bunions:	1.17	Slightly High ●
Ankylosing Spondylitis Likelihood of Spine Becoming Stiff:	1.12	Slightly High ●
Psoriatic Arthritis Likelihood of Development Due to Psoriasis:	0.92	Slightly Low ●
Osteoporosis Likelihood of Developing Weak and Brittle Bones:	0.8	Slightly Low ●
Temporomandibular Arthrosis Likelihood of Developing Arthrosis in Jaw Joint:	0.65	Slightly Low ●

# Full reports

## General Diseases > Immune System

Report Title	My Likelihood vs Population Avg (times)	
Shrimp Allergy Likelihood of Development:	5	High ●
Food Allergy Likelihood of Allergy to Certain Foods:	1.78	Slightly High ●
Behcet's Disease Likelihood of Blood Vessel Inflammation:	1.24	Slightly High ●
Pollen Allergy Likelihood of Allergy to Pollen Exposure:	1.16	Slightly High ●
Selective IgA Deficiency Likelihood of Developing Low IgA Antibody Level:	1.09	Slightly High ●
Egg Allergy Likelihood of Development:	0.92	Slightly Low ●
Sjogren's Syndrome Likelihood of Developing Dry Eyes and Mouth:	0.61	Slightly Low ●

Report Title	My Likelihood vs Population Avg (times)	
Peanut Allergy Likelihood of Development:	1.94	Slightly High ●
Peach Allergy Likelihood of Development:	1.49	Slightly High ●
Sarcoidosis Likelihood of Inflammatory Cell Growth:	1.17	Slightly High ●
GPA Likelihood of Granulomatosis with Polyangitis:	1.16	Slightly High ●
Sun Allergy Likelihood of Allergy to Sun Exposure:	1.02	Slightly High ●
Vogt-Koyanagi-Harada Disease Likelihood of Melanocyte Inflammation:	0.77	Slightly Low ●
Systemic Lupus Erythematosus Likelihood of Development:	0.53	Slightly Low ●

## General Diseases > Blood

Report Title	My Likelihood vs Population Avg (times)	
Thrombosis Likelihood of Developing Blood Clot:	1.53	Slightly High ●
ANCA Vasculitis Likelihood of Development:	1.46	Slightly High ●
Iron Deficiency Anemia Likelihood of Anemia Due to Insufficient Iron:	1.15	Slightly High ●

Report Title	My Likelihood vs Population Avg (times)	
Amyloidosis Likelihood of Amyloid Buildup in Organs:	1.5	Slightly High ●
Venous Thromboembolism Likelihood of Blood Clot in Deep Vein:	1.39	Slightly High ●
Peripheral Vascular Disease Likelihood of Peripheral Blood Vessel Narrowing:	0.81	Slightly Low ●

## General Diseases > Skin

Report Title	My Likelihood vs Population Avg (times)	
Psoriasis Likelihood of Development:	1.7	Slightly High ●
Dupuytren's Contracture Likelihood of Fingers Becoming Bent and Stiff:	1.39	Slightly High ●
Nickel Contact Dermatitis Likelihood of Skin Dermatitis From Nickel:	1.02	Slightly High ●
Atopic Dermatitis Likelihood of Development:	0.72	Slightly Low ●

Report Title	My Likelihood vs Population Avg (times)	
Systemic Sclerosis Likelihood of Developing Hardened Skin:	1.57	Slightly High ●
Vitiligo Likelihood of Losing Skin Color in Blotches:	1.21	Slightly High ●
Dermatomyositis Likelihood of Muscle Inflammation and Weakness:	0.96	Slightly Low ●
Keloid Likelihood of Scar Tissue After Skin Injury:	0.52	Slightly Low ●

# Full reports

## General Diseases > Eye/Ear/Mouth

Report Title	My Likelihood vs Population Avg (times)		
Exfoliation Syndrome Likelihood of Fibrillar Protein Buildup in Eye:	2.98	Slightly High	●
Astigmatism Likelihood of Imperfection in Eye Curvature:	1.57	Slightly High	●
Keratoconus Likelihood of The Cornea Forming a Cone Shape:	1.44	Slightly High	●
Angle-closure Glaucoma Likelihood of Eye and Headache from Glaucoma:	1.29	Slightly High	●
Open Angle Glaucoma Likelihood of Glaucoma From Eye Fluid Blockage:	1.1	Slightly High	●
Stomatitis Susceptibility to Stomatitis:	1.04	Slightly High	●
Macular Degeneration Likelihood of The Eye's Macula Degenerating:	0.99	Slightly Low	●
Birdshot Uveitis Likelihood of Oval-shaped Spots in Retina:	0.92	Slightly Low	●
Cataract Likelihood of Developing Clouded Vision:	0.77	Slightly Low	●
Dental Caries (Cavity) Likelihood of Development:	0.65	Slightly Low	●

Report Title	My Likelihood vs Population Avg (times)		
Periodontal Disease Likelihood of Development:	1.61	Slightly High	●
Rhegmatogenous Retinal Detachment Likelihood of Detachment From Underlying Tissue:	1.48	Slightly High	●
Normal Tension Glaucoma Likelihood of Glaucoma From High Eye Pressure:	1.41	Slightly High	●
Nearsightedness (Myopia) Likelihood of Development:	1.26	Slightly High	●
Otosclerosis Likelihood of Development:	1.06	Slightly High	●
Farsightedness (Hyperopia) Likelihood of Development:	0.99	Slightly Low	●
Dry Eye Syndrome Likelihood of Development:	0.99	Slightly Low	●
Hyperacusis Likelihood of Development:	0.87	Slightly Low	●
Hearing Loss Likelihood of Development:	0.69	Slightly Low	●
Wisdom Tooth Likelihood of Growing Wisdom Teeth:	0.6	Slightly Low	●

## General Diseases > Sex

Report Title	My Likelihood vs Population Avg (times)		
Inguinal Hernia Likelihood of Intestine Bulging into Groin Area:	1.09	Slightly High	●
Erectile Dysfunction Likelihood of Development:	0.99	Slightly Low	●

Report Title	My Likelihood vs Population Avg (times)		
Benign Prostatic Hyperplasia Likelihood of Developing an Enlarged Prostate:	1.06	Slightly High	●
Azoospermia Likelihood of Having Absence of Sperm:	0.4	Slightly Low	●

## General Diseases > Infection

Report Title	My Likelihood vs Population Avg (times)		
Helicobacter pylori Infection Susceptibility to Helicobacter pylori Infection:	5	High	●
Aspergillus Infection Susceptibility to Aspergillus Infection:	2.68	Slightly High	●
Tuberculosis Infection Susceptibility to Tuberculosis Infection:	1.12	Slightly High	●
Candida Infection Susceptibility to Candida Yeast Infection:	0.99	Slightly Low	●

Report Title	My Likelihood vs Population Avg (times)		
Coronavirus (SARS-CoV) Infection Susceptibility to Coronavirus (SARS) Infection:	2.87	Slightly High	●
Staph. aureus Infection Susceptibility to Staph. aureus Infection:	1.8	Slightly High	●
Mumps Infection Susceptibility to Mumps Infection:	1.03	Slightly High	●
Shingles Infection Susceptibility to Shingles Infection:	0.81	Slightly Low	●



# Full reports

## General Diseases > Infection

Report Title	My Likelihood vs Population Avg (times)		
Hansen's Disease Susceptibility to Hansen's Disease:	0.8	Slightly Low	●
Severity of Coronavirus (SARS-CoV) Symptoms Likely Severity of Coronavirus (SARS) Symptoms:	0.6	Slightly Mild	●
EBV Antibody Response Susceptibility to Epstein Barr Virus Infection:	Score unavailable	Slightly Low	●

Report Title	My Likelihood vs Population Avg (times)		
Dengue Virus Infection Susceptibility to Dengue Virus Infection:	0.63	Slightly Low	●
AIDS Progression Likely AIDS Progression Rate With HIV Infection:	Score unavailable	Slightly Slow	●

## General Diseases > Mental Health

Report Title	My Likelihood vs Population Avg (times)		
Bipolar Disorder Likelihood of Developing Extreme Mood Swings:	5	High	●
Depression Likelihood of Development:	1.34	Slightly High	●
Anorexia Nervosa Likelihood of Severely Restricting Food Intake:	0.99	Slightly Low	●
Panic Disorder Likelihood of Having Panic Attacks:	0.92	Slightly Low	●
Schizophrenia Likelihood of Development:	0.78	Slightly Low	●
Eating Disorder Likelihood of Unhealthy Eating Behavior:	0.75	Slightly Low	●

Report Title	My Likelihood vs Population Avg (times)		
Obsessive-compulsive Disorder Likelihood of Repeating a Certain Behavior:	3	Slightly High	●
Chronic Fatigue Syndrome Likelihood of Development:	1.01	Slightly High	●
Age and Cognitive Function Likely Decline of Cognitive Ability From Aging:	0.99	Slightly Low	●
Autism Likelihood of Development:	0.91	Slightly Low	●
Tourette Syndrome Likelihood of Having Uncontrollable Tics:	0.78	Slightly Low	●
ADHD Likelihood of Developing ADHD:	0.71	Slightly Low	●

## Traits > Weight Management

Report Title	My Predisposition
Resting Metabolic Rate Energy Consumption During Rest	High ●
Waist to Hip Ratio Indicator of Obesity	Low ●
Lower Body Obesity Likelihood of Fat Accumulation in Lower Body:	Low ●
Cellulite Formation Likelihood of Dimply Skin Forming:	Low ●
Snacking Frequency Likely Frequency of Eating Snacks:	Low ●
Yo-Yo Effect Likelihood of Regaining Lost Weight:	Low ●
High Fat Diet Likely Response to High Fat Diet:	Good ●

Report Title	My Predisposition
Lean Body Mass Likely Lean Body Mass:	High ●
Abdominal Obesity Likelihood of Abdominal Fat Accumulating:	Low ●
Leptin Level Indicator of Appetite Control	High ●
Appetite Control Likely Ability to Tolerate Hunger:	Good ●
Bulimia Nervosa Likelihood of Overeating Before Vomiting:	Low ●
Calorie Restriction Diet Likely Response to Calorie Restriction Diet:	Good ●
High Protein Diet Likely Response to High Protein Diet:	Good ●

# Full reports

## Traits > Nutrition

Report Title	My Predisposition	Report Title	My Predisposition
Fat Level Indicator of Fat Metabolism	Low ●	Saturated Fat Level Indicator of Saturated Fat Metabolism	Low ●
Stearate Level Indicator of Stearate Metabolism	High ●	DHA Level Indicator of DHA Metabolism	Low ●
EPA Level Indicator of EPA Metabolism	High ●	Alpha-Linolenic Acid Level Indicator of Alpha-Linolenic Acid Metabolism	High ●
Gamma-Linolenic Acid Level Indicator of Gamma-Linolenic Acid Metabolism	Low ●	Linoleic Acid Level Indicator of Linolenic Acid Metabolism	High ●
Arachidonic Acid Level Indicator of Arachidonic Acid Metabolism	Low ●	Palmitoleic Acid Level Indicator of Palmitoleic Acid Metabolism	Low ●
Oleic Acid Level Indicator of Oleic Acid Metabolism	Low ●	Trans Fat Level Indicator of Trans Fat Metabolism	Low ●
Vitamin A Level Indicator of Vitamin A Metabolism	High ●	Vitamin B6 Level Indicator of Vitamin B6 Metabolism	High ●
Folate Level Indicator of Folate Metabolism	High ●	Vitamin B12 Level Indicator of Vitamin B12 Metabolism	High ●
Vitamin C Level Indicator of Vitamin C Metabolism	High ●	Vitamin D Level Indicator of Vitamin D Metabolism	High ●
Vitamin E Level Indicator of Vitamin E Metabolism	High ●	Vitamin K Level Indicator of Vitamin K Metabolism	High ●
Calcium Level Indicator of Calcium Metabolism	Low ●	Iron Level Indicator of Iron Metabolism	High ●
Zinc Level Indicator of Zinc Metabolism	High ●	Magnesium Level Indicator of Magnesium Metabolism	Low ●
Phosphorous Level Indicator of Phosphorus Metabolism	Low ●	Potassium Level Indicator of Potassium Metabolism	High ●
Betaine Level Indicator of Betaine Metabolism	High ●	Coenzyme Q10 Level Indicator of Coenzyme Q10 Metabolism	High ●
Selenium Level Indicator of Selenium Metabolism	High ●	Arginine Level Indicator of Arginine Metabolism	Low ●
Unsaturated Fat Triglyceride Reduction From Unsaturated Fat:	High ●	Lutein and Zeaxanthin Likely Response to Lutein and Zeaxanthin:	Good ●
Colorectal Cancer and Meat Colorectal Cancer From Eating Processed Meat:	High ●	Trp / Phe Metabolism Likely Ability of Blood Tryptophan / Phenylalanine Metabolism:	High ●

## Traits > Metabolism

Report Title	My Predisposition	Report Title	My Predisposition
Triglyceride Level Index for Heart Health	High ●	LDL Cholesterol Level Likely LDL Cholesterol Level:	Low ●
HDL Cholesterol Level Likely HDL Cholesterol Level:	Low ●	Alcohol Metabolism Likely Ability to Metabolize Alcohol:	Good ●

# Full reports

## Traits > Metabolism

Report Title	My Predisposition	Report Title	My Predisposition
<b>Nicotine Metabolism</b> Likely Ability to Metabolize Nicotine:	Good ●	<b>Caffeine Metabolism</b> Likely Ability to Metabolize Caffeine:	Good ●
<b>Antioxidation</b> Likely Ability to Remove Reactive Oxygen:	Poor ●	<b>Postural Hypotension</b> Likelihood of Low BP Occurring When Standing Up:	Low ●
<b>Insulin Resistance</b> Likelihood of Losing Blood Glucose Regulation:	High ●		

## Traits > Skin Care

Report Title	My Predisposition	Report Title	My Predisposition
<b>Skin Hydration</b> Likely Ability to Retain Skin Moisture:	Good ●	<b>Skin Elasticity</b> Likely Ability to Maintain Elastic Skin:	Good ●
<b>Crow's Feet</b> Likelihood of Developing Crow's Feet:	Low ●	<b>Photoaging</b> Likely Rate of Skin Aging From UV Rays:	Slow ●
<b>Glycation and Aging</b> Likely Rate of Skin Aging From Eating Sugar:	Slow ●	<b>Acne</b> Likelihood of Development:	Low ●
<b>Stretch Marks</b> Likelihood of Development:	Low ●	<b>Skin Pigmentation</b> Likelihood of Developing Darker Skin Spots:	Low ●
<b>Freckles and Age Spots</b> Likelihood of Developing Freckles or Age Spots:	Low ●	<b>Skin Tone</b> Likelihood of Naturally Light Skin Tone:	High ●
<b>Response to Sun Tanning</b> Likelihood of Tanning Easily:	Low ●		

## Traits > Sleep

Report Title	My Predisposition	Report Title	My Predisposition
<b>Deep Sleep</b> Likely Ability to Sleep Deeply:	Good ●	<b>Sleep Latency</b> Likely Time You Require to Fall Asleep:	Long ●
<b>Obstructive Sleep Apnea</b> Likelihood of Breathing Issue During Sleep:	High ●	<b>Insomnia</b> Likelihood of Having Insomnia:	Low ●
<b>Narcolepsy</b> Likelihood of Development:	High ●	<b>Hypersomnia</b> Likelihood of Development:	High ●
<b>Excessive Sleepiness</b> Likelihood of Feeling Sleepy All Day:	Low ●	<b>Daytime Nap</b> Likelihood of Taking Daytime Naps or Breaks:	Low ●
<b>Circadian Rhythm</b> Early Bird or Night Owl?	Early Bird ●		

# Full reports

## Traits > Hair Loss

Report Title	My Predisposition	Report Title	My Predisposition
Androgenetic Alopecia Likelihood of Patterned Hair Loss:	High ●	Spot Baldness Likelihood of Development:	High ●
Hair Thickness Likely Thickness of Hair:	Thick ●	Response to Finasteride Likely Effect of Finasteride:	Good ●

## Traits > Fitness

Report Title	My Predisposition	Report Title	My Predisposition
Muscular Growth Tendency to Develop Muscle:	High ●	Lower Body Strength Tendency to Develop Lower Body Strength:	High ●
Grip Likely Grip Strength:	Strong ●	Explosive Strength Likely Muscle Strength and Power:	Stronger ●
Muscular Endurance Tendency to Develop Muscular Endurance:	High ●	Cardiovascular Endurance Likely Maximum Oxygen Uptake:	Good ●
Heart Rate Recovery Likely Heart Rate Recovery After Exercising:	Slow ●	Flexibility Likely Flexibility of Joints and Muscles:	Flexible ●
Rotator Cuff Injury Likelihood of Injury:	Low ●	ACL Injury Likelihood of Anterior Cruciate Ligament Injury:	Low ●
Achilles Tendon Injury Likelihood of Injury:	Low ●	Ankle Injury Likelihood of Injury:	Low ●

## Traits > Sense

Report Title	My Predisposition	Report Title	My Predisposition
Sweetness Sensitivity Likely Sensitivity to Sweet Tastes:	Sensitive ●	Bitterness Sensitivity Likely Sensitivity to Bitter Tastes:	Sensitive ●
Saltiness Sensitivity Likely Sensitivity to Salty Tastes:	Sensitive ●	Red Wine Preference Likely Preference of Red Wine:	Not Prefer ●
White Wine Preference Likely Preference of White Wine:	Not Prefer ●	Cilantro Preference What is My Likely Preference to Cilantro?	Prefer ●
Absolute Pitch How Likely Am I to Having Absolute Pitch?	Need Effort ●	Smell Detection Ability Likely Odor Detection Ability:	Sensitive ●
Drink Smell Sensitivity Likely Sensitivity to Drink Smell:	Sensitive ●	Sensitivity to Asparagus Smell Likely Sensitivity to Asparagus Smell in Urine:	Sensitive ●
Fear of Pain Likelihood of Being Fearful of Pain:	Low ●		

# Full reports

## Traits > Interest

Report Title	My Predisposition	Report Title	My Predisposition
<b>Skipping Breakfast</b> Do I Tend to Skip Breakfast?	Skip ●	<b>Dairy Consumption Frequency</b> Likely Dairy Consumption Frequency:	Frequent ●
<b>Protein Consumption Frequency</b> Likely Protein Consumption Frequency:	Frequent ●	<b>Living Longer Than 90</b> Likelihood of Living Longer than 90 Years:	Higher ●
<b>Telomere Length and Aging</b> Cellular Aging Based on Telomere Length	Shorter ●	<b>Alcohol Flush Reaction</b> Turning Red with Alcohol Consumption:	Unlikely to Flush ●
<b>Alcohol Consumption Frequency</b> Likely Drinking Frequency:	Infrequent ●	<b>Cerebral Cortex Volume</b> Indicator of Cognitive Performance	Larger ●
<b>Hippocampus Volume</b> Indicator of Memory Ability	Larger ●	<b>Mosquito Bite Itchiness</b> How Itchy Are My Mosquito Bites?	More Itchy ●
<b>Mosquito Bite Swelling</b> How Much Do My Mosquito Bites Swell?	Swell More ●	<b>Mosquito Bite Frequency</b> Would I Get More Mosquito Bites Than Others?	Infrequent ●
<b>Endorphin Level</b> Likelihood of My Natural Endorphin Level?	High ●	<b>Reflexive Response Speed</b> Likely Speed of My Reflexes:	Faster ●
<b>Motion Sickness</b> Do I Tend to Get Motion Sickness in Car Rides?	More Likely ●	<b>Hypnosis Susceptibility</b> How Easily Can I Be Hypnotized?	More Likely ●
<b>Emotion Detection</b> Likely Ability of My Emotion Detection:	Poor ●	<b>Obsessive Cleaning</b> How Tolerant Am I to Dirty Surroundings?	Tolerant ●
<b>Photic Sneeze Reflex</b> Do I Sneeze When Exposed to a Bright Light?	Unlikely to Sneeze ●	<b>Sedentary Lifestyle</b> Do You Enjoy Having a Sedentary Lifestyle?	Do not Enjoy ●
<b>Active Lifestyle</b> Inclination Towards Being Physically Active:	Less Active ●	<b>Short Term Number Memory</b> Am I Good at Remembering Numbers?	Good ●
<b>Visuospatial Short Term Memory</b> Am I Good at Remembering Visual Info?	Good ●	<b>Long-Term Memory</b> Am I Good at Storing Info for a Long Time?	Good ●
<b>Aging and Memory</b> Will I Have Good Memory Even When I'm Old?	Poor ●	<b>Exercise and Memory Improvement</b> Would Exercise Improve My Memory?	Mildly Improve ●
<b>Mathematical Confidence</b> Do I Have Confidence in Math?	High ●	<b>Reading Comprehension Skills</b> Can I Comprehend Information Well?	Good ●
<b>Persistence</b> Do I Tend to Persevere Through Difficulties?	Low ●	<b>Creativity</b> Am I a Creative Person?	High ●
<b>Extraversion</b> Are You a Social Butterfly?	More Likely ●	<b>Openness to Experience</b> Do I Accept Change With an Open Mind?	Less Likely ●
<b>Agreeableness</b> Am I a Generally Sociable Person?	More Likely ●	<b>Conscientiousness</b> Am I Responsible and Hard Working?	More Likely ●
<b>Risk Taking Tendencies</b> Am I an Adventurer?	More Likely ●	<b>Solitary Personality</b> Am I a Lone Wolf?	Less Likely ●
<b>Risk Aversion Personality</b> Do I Avoid Risks and Uncertainties?	Less Likely ●	<b>Reward Dependency</b> Am I Sensitive to How Others Judge Me?	Less Likely ●
<b>Psychological Resilience</b> How Resilient Am I?	High ●	<b>Health Literacy</b> Can I Understand Health Information Well?	High ●

# Full reports

## Traits > Biomarker

Report Title	My Predisposition	Report Title	My Predisposition
Albumin : Globulin Ratio Indicator of Protein Synthesis Function in Liver	High ●	ALP Level Indicator of Liver Disease	Low ●
ALT Level Indicator of Liver Disease	Low ●	GGT Level Indicator of Liver Disease	Low ●
Bilirubin Level Indicator of Liver Disease	Low ●	Thyroid Hormone Level Indicator of Thyroid Function	Low ●
Albumin:Creatinine Ratio Indicator of Kidney Disease	Low ●	BUN Level Indicator of Kidney Function	Low ●
GFR Indicator of Kidney Function	High ●	SDMA Level Indicator of Kidney Function	Low ●
Plasma Renin Activity Indicator of Blood Pressure Abnormality	Low ●	Homocysteine Level Risk Factor of Cardiovascular Disease	Low ●
Resistin Level Indicator of Metabolic Syndrome	Low ●	Adiponectin Level Indicator of Obesity and Diabetes	High ●
Lipase Level Indicator of Pancreatic Disease	Low ●	Parathyroid Hormone Level Indicator of Calcium Homeostasis:	Low ●
Aortic Root Diameter Indicator of Aorta's Condition:	Low ●	Troponin T Level Indicator of Cardiomyocyte Damage	Low ●
PAI-1 Level Index for Cardiovascular Disease Risk	Low ●	ST2 Level Index for Cardiovascular Disease Risk	Low ●
Lp-PLA2 Level Index for Cardiovascular Disease Risk	Low ●	VIP Level Index for Cardiovascular Disease Risk	Low ●
OPG Level Index for Cardiovascular Disease Risk	Low ●	Retinal Vessel Thickness Index for Cardiovascular Disease Risk	Thin ●
Heart Rate Likely Heart Beats Per Minute:	Low ●	PR Interval Indicator of Heart Disease	Short ●
QRS Interval Indicator of Heart Disease	Short ●	QT Interval Indicator of Heart Disease	Short ●
FVC Indicator of Lung Functionality	High ●	FEV Indicator of Lung Functionality	Large ●
FEV1/FVC Ratio Indicator of Lung Functionality	High ●	IgG Level Indicator of Immune System Health	Low ●
IgM Level Indicator of Immune System Health	Low ●	IL-18 Level Indicator of Immune System Health	Low ●
CRP Level Indicator of Immune System Health	Low ●	Complement C3, C4 Levels Indicator of Immune System Health	High ●
Calcineurin Level Indicator of Immune System Health	Low ●	Monocyte Count Indicator of Immune System Health	Low ●
Eosinophil Count Indicator of Immune System Health	Low ●	Erythrocyte Sedimentation Rate Indicator of Immune System Health	Low ●
Erythrocyte Count Indicator of Anemia and Iron Nutrition	High ●	Hemoglobin Level Indicator of Anemia and Iron Nutrition	High ●
Ferritin Level Indicator of Anemia and Iron Nutrition	High ●	Hematocrit Level Indicator of Anemia and Iron Nutrition	High ●

# Full reports

## Traits > Biomarker

Report Title	My Predisposition	Report Title	My Predisposition
<b>Platelet Count</b> Index of Blood Coagulation Function	High ●	<b>Mean Platelet Volume</b> Index of Blood Coagulation Function	High ●
<b>Prothrombin Time</b> Index of Blood Coagulation Function	Short ●	<b>APTT</b> Index of Blood Coagulation Function	Short ●
<b>Fibrinogen Level</b> Index of Blood Coagulation Function	Low ●	<b>Protein C Level</b> Index of Blood Coagulation Function	High ●
<b>D-dimer Level</b> Indicator of Thrombosis Risk	Low ●	<b>Intraocular Pressure</b> Likelihood of Intraocular Pressure Increasing:	Low ●
<b>Optic Disc Area</b> Risk Factor for Glaucoma	Small ●	<b>Corneal Thickness</b> Likely Thickness of Cornea:	Thick ●
<b>Corneal Curvature</b> Likely Curvature of Cornea:	Flatter ●	<b>Visual Axial Length</b> Likely Distance From Cornea to Retina:	Short ●
<b>FSH Level</b> Likely FSH (Follicle Stimulating Hormone) Level:	Low ●	<b>Testosterone Level</b> Likely Testosterone Level:	Low ●
<b>AFP Level</b> Cancer Risk Factor	Low ●	<b>CA19-9 Level</b> Cancer Risk Factor	Low ●
<b>CEA Level</b> Cancer Risk Factor	Low ●	<b>PSA Level</b> Prostate Cancer Risk Factor	Low ●
<b>5-HIAA Level</b> Cancer Risk Factor	Low ●		

## Traits > Drug Response

Report Title	My Predisposition	Report Title	My Predisposition
<b>Alcohol Use Disorder</b> Likelihood of Withdrawal and Addiction Symptoms:	Low ●	<b>Nicotine Dependence</b> Likelihood of Withdrawal and Addiction Symptoms:	High ●
<b>Alcohol and Nicotine Co-dependence</b> Likelihood of Alcohol & Nicotine Co-dependence:	Low ●	<b>Caffeine Dependence</b> Likelihood of Withdrawal and Addiction Symptoms:	Low ●
<b>Response to Sunitinib</b> Likely Response to Sunitinib Anticancer Drugs:	Good ●	<b>Response to Cetuximab</b> Likely Response for Colorectal Cancer Treatment:	Low ●
<b>Response to Platinum-Based Drugs</b> Likely Response for NSCLC Treatment:	Good ●	<b>Response to Metoprolol</b> Likely Response for Treating Angina:	Good ●
<b>Response to Hydrochlorothiazide</b> Likely Response for Treating High BP:	Good ●	<b>Response to Irbesartan</b> Likely Response for Hypertension Treatment:	Low ●
<b>Response to Dobutamine</b> Likely Response to Heart Stimulant:	Good ●	<b>Response to Metformin</b> Likely Response for Lowering Blood Sugar Level:	Good ●
<b>Response to Repaglinide</b> Likely Response to Antidiabetic Drugs:	Good ●	<b>Response to Sulfonylurea</b> Likely Response for Lowering Blood Glucose:	Low ●
<b>Response to Statin (1)</b> Likely Response for Lowering Lipid Levels:	Good ●	<b>Response to Statin (2)</b> Likely Response for Increasing HDL Levels:	Good ●
<b>Response to Warfarin</b> Likely Response for Inhibiting Blood Clotting:	Good ●	<b>Response to Clopidogrel</b> Likely Response for Antiplatelet Therapy:	Good ●

# Full reports

## Traits > Drug Response

Report Title	My Predisposition	Report Title	My Predisposition
Response to Methotrexate Likely Response to Rheumatoid Arthritis Drugs:	Good ●	Response to Rituximab Likely Response to Rheumatoid Arthritis Drugs:	Good ●
Response to Sulfasalazine Likely Response to Rheumatoid Arthritis Drugs:	Good ●	Response to TNF Inhibitors Likely Response for Rheumatoid Arthritis:	Good ●
Response to Tocilizumab Likely Response to Rheumatoid Arthritis Drugs:	Low ●	Response to Interferon Beta Likely Response for Treating Multiple Sclerosis:	Good ●
Response to Lamotrigine Likely Response to Epilepsy Treatment:	Good ●	Response to Valproic Acid Likely Response to Epilepsy Treatment:	Good ●
Response to Allopurinol Likely Response for Treating Gout:	Good ●	Response to Inhaled Corticosteroid Likely Response for Treating Asthma:	Good ●
Response toTamsulosin Likely Response for Prostatic Hyperplasia:	Good ●	Response to Opioid Analgesics Likely Response to Opioid Analgesics:	Good ●
Response to Tacrolimus Likely Response for Immunosuppression:	Good ●	Response to Ribavirin Likely Response for Treating Hepatitis C:	Good ●
Response to Hepatitis B Vaccine Likely Response to Hepatitis B Vaccine:	Good ●	Response to Whooping Cough Vaccine Likelihood of Forming Antibodies:	Good ●
Response to Olanzapine Likely Response to Schizophrenia Treatment:	Good ●	Response to Antidepressants Likely Response to SSRI for Treating Depression:	Good ●
Response to Lithium Treatment Likely Response for Treating Bipolar Disorder:	Good ●	Response to Venlafaxine Likely Response for Treating Anxiety Disorder:	Good ●
Bevacizumab-Induced High BP Likelihood of Drug Side Effect:	High ●	Irinotecan-Induced Diarrhea Likelihood of Drug Side Effect:	High ●
Irinotecan-Induced Neutropenia Likelihood of Drug Side Effect:	Low ●	Fluorouracil-Induced Leukopenia Likelihood of Drug Side Effect:	High ●
Methotrexate-Induced Stomach Pain Likelihood of Drug Side Effect:	Low ●	Vincristine-Induced Nerve Damage Likelihood of Drug Side Effect:	Low ●
ACE Inhibitor-Induced Coughing Likelihood of Drug Side Effect:	Low ●	Simvastatin-Induced Muscle Pain Likelihood of Drug Side Effect:	Low ●
Apixaban-Induced Kidney Dysfunction Likelihood of Drug Side Effect:	Low ●	Antithyroid-Induced Agranulocytosis Likelihood of Drug Side Effect:	Low ●
NSAID-Induced Bowel Disorder Likelihood of Drug Side Effect:	Low ●	NSAID-Induced Angioedema and Hives Likelihood of Drug Side Effect:	Low ●
Aspirin-Induced Asthma Likelihood of Drug Side Effect:	High ●	Acetaminophen-Induced Liver Toxicity Likelihood of Drug Side Effect:	Low ●
Thiopurine-Induced Hair Loss Likelihood of Drug Side Effect:	Low ●	Thiopurine-Induced Leukopenia Likelihood of Drug Side Effect:	Low ●
AIDS Treatment-Induced Side Effect Likelihood of Drug Side Effect:	Low ●	Interferon-Induced Depression Likelihood of Drug Side Effect:	High ●
Antidepressant-Induced SD Likelihood of Drug Side Effect:	Low ●	Antipsychotic-Induced Weight Gain Likelihood of Drug Side Effect:	High ●
Antipsychotic-Induced Agranulocytosis Likelihood of Drug Side Effect:	Low ●		



# Key reports

Analysis results of 79 key categories

## General Diseases

1

High Blood Pressure

## Traits

78

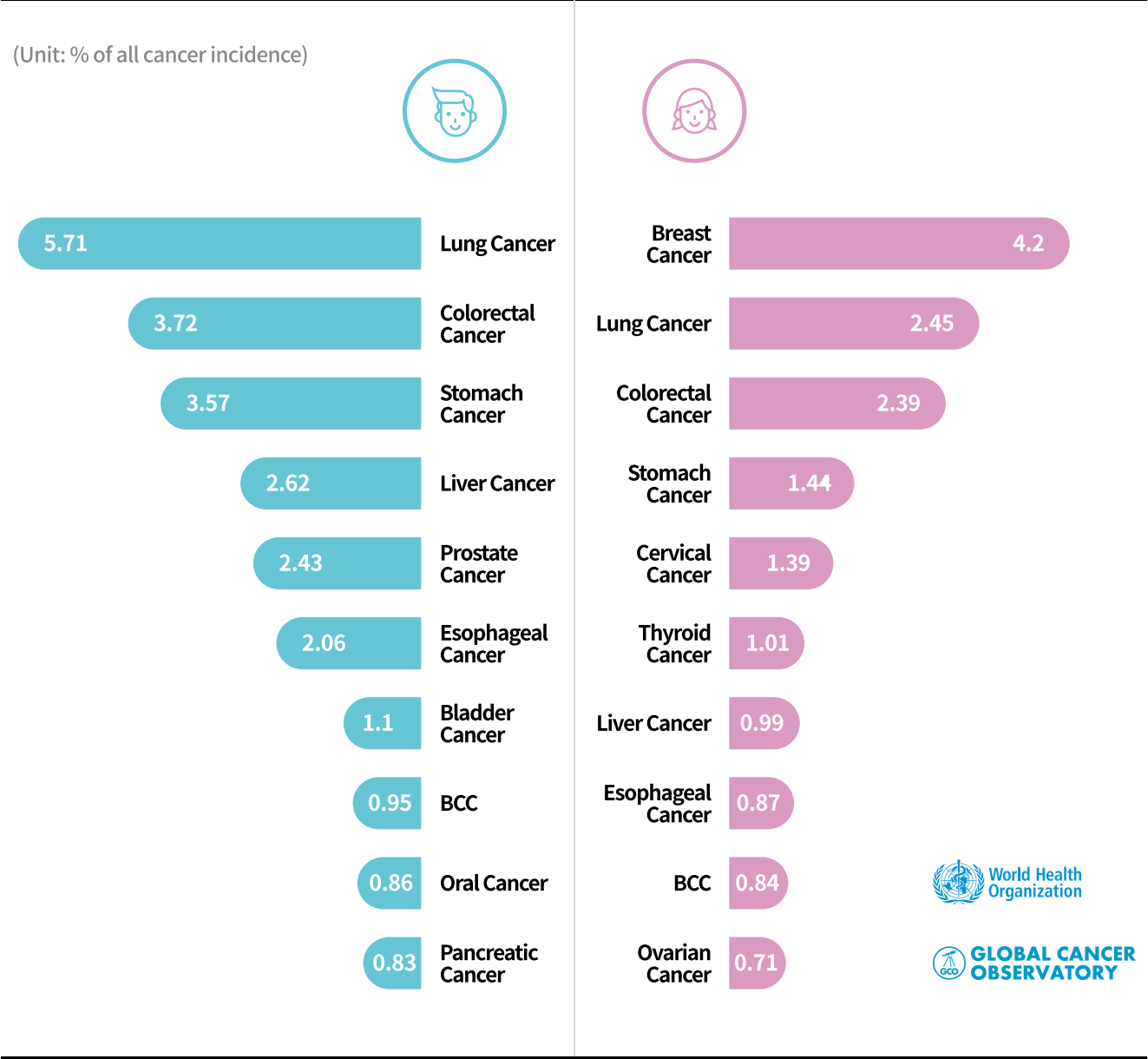
Resting Metabolic Rate  
Lean Body Mass  
Waist to Hip Ratio  
Abdominal Obesity  
Lower Body Obesity  
Leptin Level  
Cellulite Formation  
Appetite Control  
Snacking Frequency  
Yo-Yo Effect  
Calorie Restriction Diet  
High Fat Diet  
High Protein Diet  
Fat Level  
Saturated Fat Level  
Stearate Level  
DHA Level  
EPA Level  
Alpha-Linolenic Acid Level  
Gamma-Linolenic Acid Level and  
58more

### ⚠ Please Note

- Development likelihood higher than average is colored red or orange, and lower than average is colored green or blue.
- Color indication is not applied for results with no specific advantage or disadvantage.
- Reports that cannot be calculated are marked as 'No results'.

# Cancer Incidence Rates.

Of all the new cancer incidents in 2018, the top 5 cancer types for men and women were:  
Male – lung, colorectal, stomach, liver, and prostate cancer.  
Female – breast, lung, colorectal, stomach, and cervical cancer.  
(Statistics based on 2018 cumulative cancer incidence between ages 30 and 80)

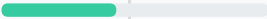


Based on current knowledge, avoiding key risk factors could prevent between 30% and 50% of cancer deaths. These factors include avoiding tobacco products, decreasing alcohol consumption, exercising regularly, maintaining a healthy body weight, and being careful of infection that can increase cancer risk (reference: World Health Organization).

Results in this report consider both genetic and non-genetic (environmental, lifestyle) factors and present a combined risk score for specific diseases and traits. By knowing this information, individuals can make lifestyle adjustments according to their results and decrease likelihood of developing diseases.

# General Diseases

Ranked by My Result

Report Title	~0.2 times	Average	5~ times	My Likelihood vs Population Avg (times)	
<b>High Blood Pressure</b> Likelihood of Development:				0.86	Slightly Low ●

Report Title	My Predisposition
<b>Resting Metabolic Rate</b> Energy Consumption During Rest	High ●
<b>Lean Body Mass</b> Likely Lean Body Mass:	High ●
<b>Waist to Hip Ratio</b> Indicator of Obesity	Low ●
<b>Abdominal Obesity</b> Likelihood of Abdominal Fat Accumulating:	Low ●
<b>Lower Body Obesity</b> Likelihood of Fat Accumulation in Lower Body:	Low ●
<b>Leptin Level</b> Indicator of Appetite Control	High ●
<b>Cellulite Formation</b> Likelihood of Dimply Skin Forming:	Low ●
<b>Appetite Control</b> Likely Ability to Tolerate Hunger:	Good ●
<b>Snacking Frequency</b> Likely Frequency of Eating Snacks:	Low ●
<b>Yo-Yo Effect</b> Likelihood of Regaining Lost Weight:	Low ●
<b>Calorie Restriction Diet</b> Likely Response to Calorie Restriction Diet:	Good ●
<b>High Fat Diet</b> Likely Response to High Fat Diet:	Good ●
<b>High Protein Diet</b> Likely Response to High Protein Diet:	Good ●
<b>Fat Level</b> Indicator of Fat Metabolism	Low ●
<b>Saturated Fat Level</b> Indicator of Saturated Fat Metabolism	Low ●
<b>Stearate Level</b> Indicator of Stearate Metabolism	High ●
<b>DHA Level</b> Indicator of DHA Metabolism	Low ●
<b>EPA Level</b> Indicator of EPA Metabolism	High ●
<b>Alpha-Linolenic Acid Level</b> Indicator of Alpha-Linolenic Acid Metabolism	High ●

Report Title	My Predisposition
<b>Gamma-Linolenic Acid Level</b> Indicator of Gamma-Linolenic Acid Metabolism	Low <span></span>
<b>Linoleic Acid Level</b> Indicator of Linolenic Acid Metabolism	High <span></span>
<b>Arachidonic Acid Level</b> Indicator of Arachidonic Acid Metabolism	Low <span></span>
<b>Palmitoleic Acid Level</b> Indicator of Palmitoleic Acid Metabolism	Low <span></span>
<b>Oleic Acid Level</b> Indicator of Oleic Acid Metabolism	Low <span></span>
<b>Trans Fat Level</b> Indicator of Trans Fat Metabolism	Low <span></span>
<b>Vitamin A Level</b> Indicator of Vitamin A Metabolism	High <span></span>
<b>Vitamin B6 Level</b> Indicator of Vitamin B6 Metabolism	High <span></span>
<b>Folate Level</b> Indicator of Folate Metabolism	High <span></span>
<b>Vitamin B12 Level</b> Indicator of Vitamin B12 Metabolism	High <span></span>
<b>Vitamin C Level</b> Indicator of Vitamin C Metabolism	High <span></span>
<b>Vitamin D Level</b> Indicator of Vitamin D Metabolism	High <span></span>
<b>Vitamin E Level</b> Indicator of Vitamin E Metabolism	High <span></span>
<b>Vitamin K Level</b> Indicator of Vitamin K Metabolism	High <span></span>
<b>Calcium Level</b> Indicator of Calcium Metabolism	Low <span></span>
<b>Iron Level</b> Indicator of Iron Metabolism	High <span></span>
<b>Zinc Level</b> Indicator of Zinc Metabolism	High <span></span>
<b>Magnesium Level</b> Indicator of Magnesium Metabolism	Low <span></span>
<b>Phosphorous Level</b> Indicator of Phosphorus Metabolism	Low <span></span>

Report Title	My Predisposition
<b>Potassium Level</b> Indicator of Potassium Metabolism	High ●
<b>Betaine Level</b> Indicator of Betaine Metabolism	High ●
<b>Coenzyme Q10 Level</b> Indicator of Coenzyme Q10 Metabolism	High ●
<b>Selenium Level</b> Indicator of Selenium Metabolism	High ●
<b>Arginine Level</b> Indicator of Arginine Metabolism	Low ●
<b>Unsaturated Fat</b> Triglyceride Reduction From Unsaturated Fat:	High ●
<b>Lutein and Zeaxanthin</b> Likely Response to Lutein and Zeaxanthin:	Good ●
<b>Trp / Phe Metabolism</b> Likely Ability of Blood Tryptophan / Phenylalanine Metabolism:	High ●
<b>Triglyceride Level</b> Index for Heart Health	High ●
<b>LDL Cholesterol Level</b> Likely LDL Cholesterol Level:	Low ●
<b>HDL Cholesterol Level</b> Likely HDL Cholesterol Level:	Low ●
<b>Alcohol Metabolism</b> Likely Ability to Metabolize Alcohol:	Good ●
<b>Nicotine Metabolism</b> Likely Ability to Metabolize Nicotine:	Good ●
<b>Caffeine Metabolism</b> Likely Ability to Metabolize Caffeine:	Good ●
<b>Antioxidation</b> Likely Ability to Remove Reactive Oxygen:	Poor ●
<b>Postural Hypotension</b> Likelihood of Low BP Occurring When Standing Up:	Low ●
<b>Insulin Resistance</b> Likelihood of Losing Blood Glucose Regulation:	High ●
<b>Glycation and Aging</b> Likely Rate of Skin Aging From Eating Sugar:	Slow ●
<b>Deep Sleep</b> Likely Ability to Sleep Deeply:	Good ●

Report Title	My Predisposition
<b>Sleep Latency</b> Likely Time You Require to Fall Asleep:	Long ●
<b>Obstructive Sleep Apnea</b> Likelihood of Breathing Issue During Sleep:	High ●
<b>Insomnia</b> Likelihood of Having Insomnia:	Low ●
<b>Narcolepsy</b> Likelihood of Development:	High ●
<b>Hypersomnia</b> Likelihood of Development:	High ●
<b>Excessive Sleepiness</b> Likelihood of Feeling Sleepy All Day:	Low ●
<b>Daytime Nap</b> Likelihood of Taking Daytime Naps or Breaks:	Low ●
<b>Circadian Rhythm</b> Early Bird or Night Owl?	Early Bird ●
<b>Muscular Growth</b> Tendency to Develop Muscle:	High ●
<b>Lower Body Strength</b> Tendency to Develop Lower Body Strength:	High ●
<b>Grip</b> Likely Grip Strength:	Strong ●
<b>Explosive Strength</b> Likely Muscle Strength and Power:	Stronger ●
<b>Muscular Endurance</b> Tendency to Develop Muscular Endurance:	High ●
<b>Cardiovascular Endurance</b> Likely Maximum Oxygen Uptake:	Good ●
<b>Heart Rate Recovery</b> Likely Heart Rate Recovery After Exercising:	Slow ●
<b>Flexibility</b> Likely Flexibility of Joints and Muscles:	Flexible ●
<b>Rotator Cuff Injury</b> Likelihood of Injury:	Low ●
<b>ACL Injury</b> Likelihood of Anterior Cruciate Ligament Injury:	Low ●
<b>Achilles Tendon Injury</b> Likelihood of Injury:	Low ●

Report Title	My Predisposition
<b>Ankle Injury</b> Likelihood of Injury:	Low ●
<b>Apixaban-Induced Kidney Dysfunction</b> Likelihood of Drug Side Effect:	Low ●





# High Blood Pressure

Blood pressure is the force that circulating blood exerts on the arterial walls. High blood pressure is when systolic blood pressure is over 140 mmHg, and diastolic blood pressure is over 90 mmHg, damaging blood vessels.

## Likelihood of Development:



Based on above results, your likelihood of developing high blood pressure is **slightly low**.

Even if your risk is low, it is still a good idea to limit alcohol and maintain a healthy body weight.

### Dietary guide

Excessive salt ingestion is a major cause of high blood pressure. Having a low-salt eating habit is recommended. Avoid cholesterol-containing foods and eat fresh vegetables and fruits. As your weight increases, blood pressure also increases, and this can lead to various vascular diseases. Hence weight control is important!

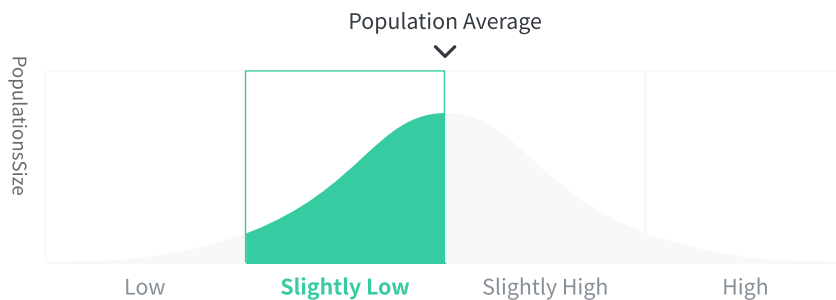
### Lifestyle guide

Overworking and excessive stress increases blood pressure, so make sure to get sleep and rest if you are tired. 30 minutes per day, 3~4 times a week of consistent exercises is recommended rather than a single intensive work out. Intense outdoor exercises in cold weather can also increase blood pressure.

UP-To-Date, Cochrane Library

## The Group That I Belong To

You fall under the group with a **slightly low likelihood** of developing high blood pressure.

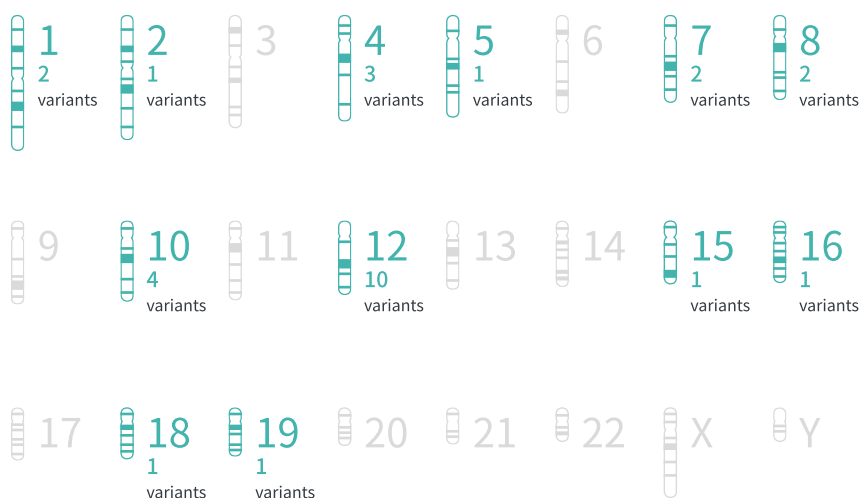


General Disease

## Genetic information

From analyzed 55 genetic markets, we have found **29** effect allele.

The credibility score is **81** points.  
because studies used for the analysis of this test item's genes are based on a big sample size.

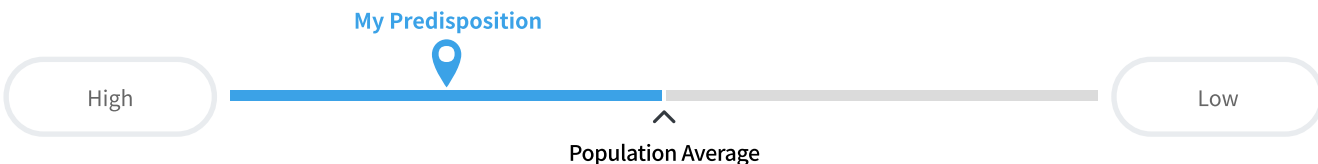


0 genetic markers with unknown location.

# Resting Metabolic Rate

Resting metabolic rate (RMR) is the rate at which your body burns energy when it is at complete rest. From the RMR, you can determine your daily calorie needs.

## Energy Consumption During Rest



Based on the genes we analyzed, you are likely predisposed to having a **slightly high** resting metabolic rate.

Even with this positive result, it is still important to eat a balanced diet and do weight lifting exercises.

### **Balanced meals**

It is important to have a balanced diet of essential nutrients. Make sure to include grain, meat, vegetable, fruit, and dairy into each meal.

### **Squat**

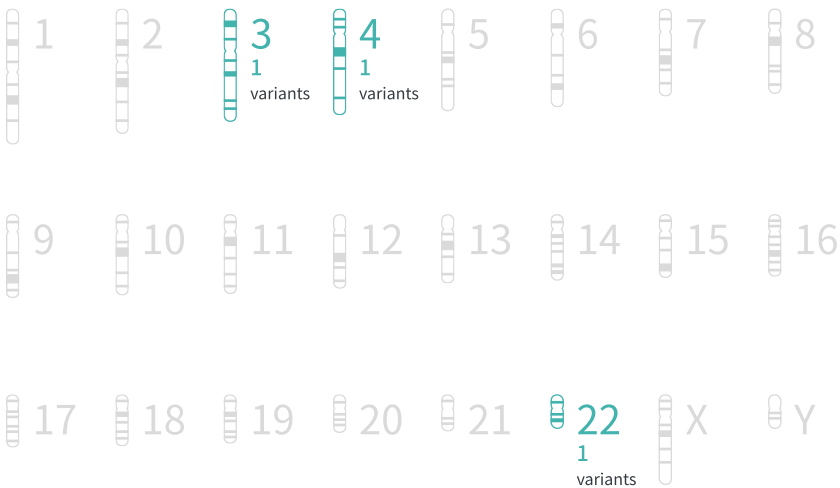
Increasing muscle mass increases basal metabolic rate. Squat 3 sets of 8~12 reps a day. It is good to increase by 2 reps each day.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 9 genetic markets, we have found **3** effect allele.

The credibility score is **53** points. because studies used for the analysis of this test item's genes are based on a small sample size.

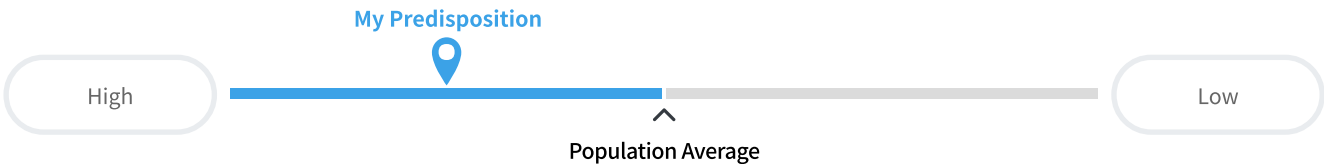


0 genetic markers with unknown location.

# Lean Body Mass

Lean body mass, or fat-free mass, is a component of body composition calculated by subtracting body fat weight from total body weight.

## Likely Lean Body Mass:



Based on the genes we analyzed, you are likely predisposed to having a **high** lean body mass.

Even if you have a positive predisposition, it is still important to consume high quality protein and exercise regularly to increase muscle mass.

### Vitamin B6 and protein

A high-protein diet for building muscle requires vitamin B6. Consume vitamin B6 through bananas, brown rice, garlic, etc.

### Plank

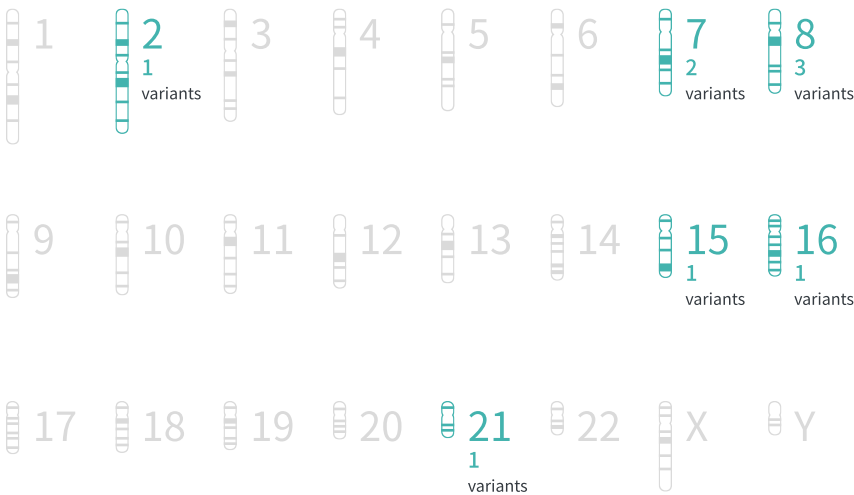
Laying on your stomach, make a bridge using elbows and feet. Straighten your body and work to increase the duration of this position.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 25 genetic markets, we have found **9** effect allele.

The credibility score is **74** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

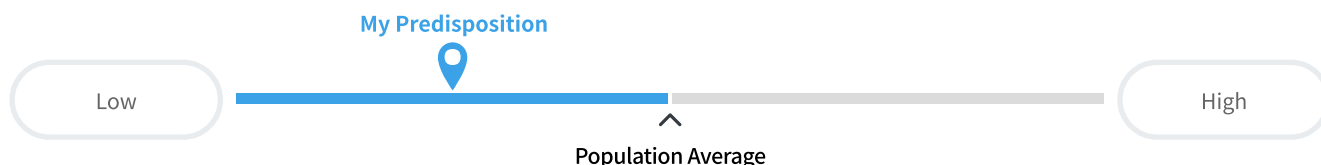


0 genetic markers with unknown location.

# Waist to Hip Ratio

Waist-to-hip ratio is one of several measurements your doctor can use to see if you're overweight, and if that excess weight is putting your health at risk.

## Indicator of Obesity



Based on the genes we analyzed, you are likely predisposed to having a **low** waist to hip ratio.

Although your likelihood is low, be conscious of your body weight and make regular exercise a habit.

### Limit your alcohol

Foods eaten with excessive drinking are caloric and increase risk for abdominal obesity. Limit to 2 and 1 drinks for men and women.

### Abdominal exercise

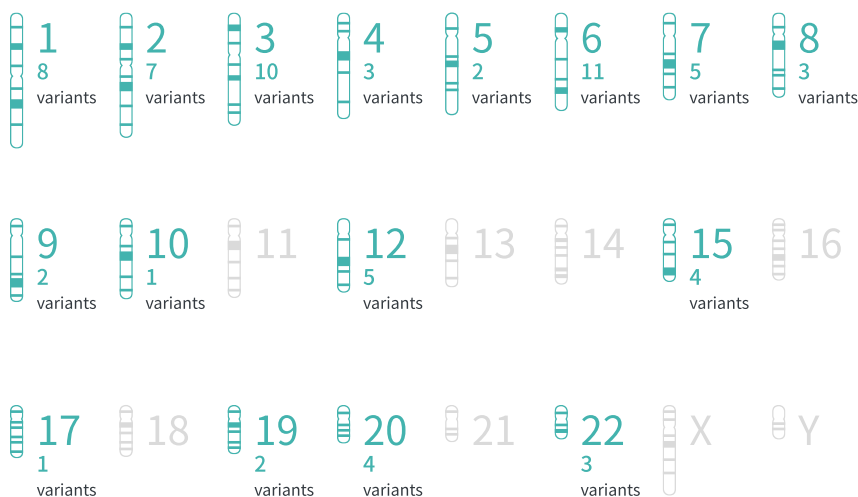
Sit properly, straighten your spine, and tilt your upper body backwards for 8~10 seconds. Repeat this 5 times to strengthen your abdomen.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 104 genetic markets, we have found **71** effect allele.

The credibility score is **85** points.  
because studies used for the analysis of this test item's genes are based on a big sample size.

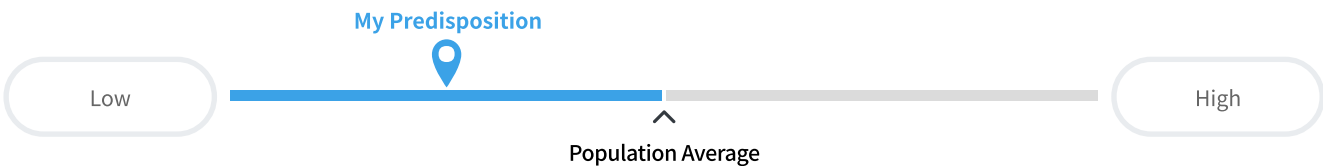


0 genetic markers with unknown location.

# Abdominal Obesity

Although overall obesity confers a significant threat to health, the distribution of body fat is crucial in determining this threat. Abdominal fat accumulation is strongly associated with an increased risk of type 2 diabetes and cardiovascular disease.

## Likelihood of Abdominal Fat Accumulating:



Based on the genes we analyzed, your likelihood of developing abdominal obesity is **low**.

Lower your risk even further by having a physically active lifestyle.

### Tea

Have a cup of warm tea. Green, pu’er, and mate tea are rich in catechins and tannins which help reduce abdominal fat.

### Cycling

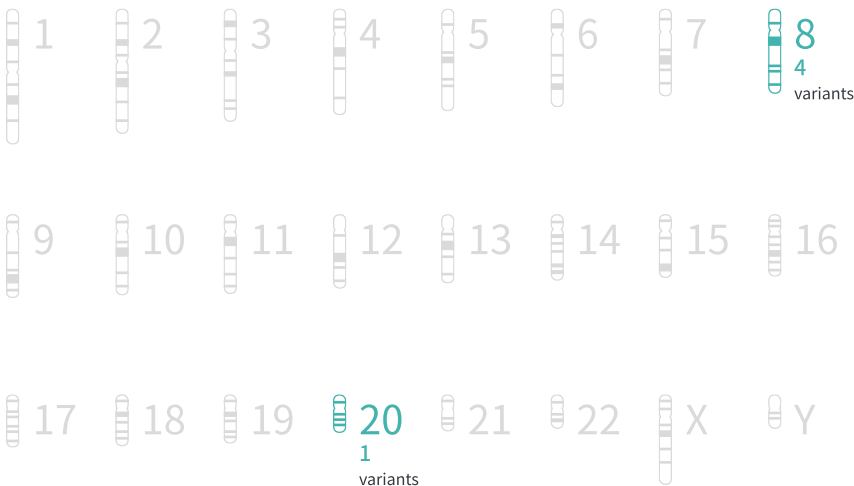
Abdominal fat responds rapidly to exercise. 40~60 minutes of daily cycling can burn calories effectively and reduce abdominal fat.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 7genetic markets, we have found 5 effect allele.

The credibility score is 69 points. because studies used for the analysis of this test item’s genes are based on an acceptable sample size.

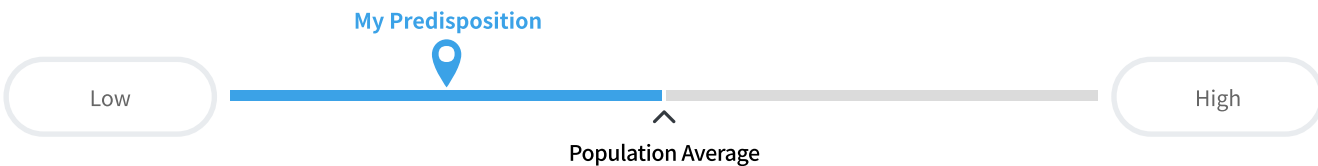


0 genetic markers with unknown location.

# Lower Body Obesity

Accumulation of fat in the areas below the waist can lead to lower body obesity. It can be corrected with the right exercise and posture.

## Likelihood of Fat Accumulation in Lower Body:



Based on the genes we analyzed, your likelihood of developing lower body obesity is **low**.

Try exercises such as squats and lunges to maintain a lean and healthy lower body.

### Overly provocative foods

Try to avoid overly provocative and salty foods. They are often high in calories and can interrupt with your diet by raising your appetite.

### Lower body blood circulation

Avoid eating salty foods and take foot or lower-body baths to encourage blood circulation. Evening leg massage can also loosen your muscles.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 3 genetic markets, we have found no effect allele.

The credibility score is **75 points**. because studies used for the analysis of this test item's genes are based on an acceptable sample size.



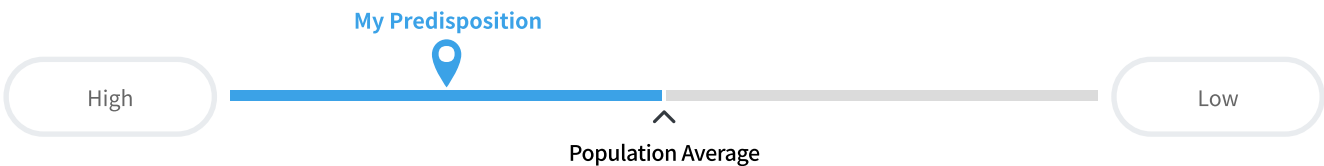
0 genetic markers with unknown location.



# Leptin Level

Leptin is an appetite suppressing hormone secreted by fat cells. It tells the brain that the body has enough reserve, so appetite does not increase.

## Indicator of Appetite Control



Based on the genes we analyzed, you are likely predisposed to have a **high** leptin level.

You may find it easier to control your appetite, but it is still important to avoid overeating by sticking to a regular eating schedule.

### Cinnamon tea

Add 30 g of cinnamon into 1 L of water, boil for more than 20 minutes, and enjoy after a meal. It reduces appetite and fat in blood vessels.

### No quitting

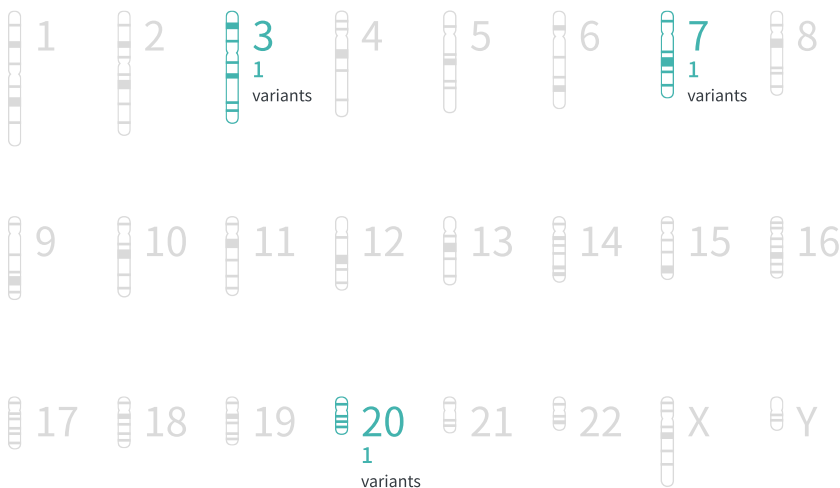
Exercise regularly for two weeks or more. Continuing any exercise for this amount of time reduces leptin resistance and helps hormone function.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 4genetic markets, we have found **3** effect allele.

The credibility score is **81** points. because studies used for the analysis of this test item's genes are based on a big sample size.

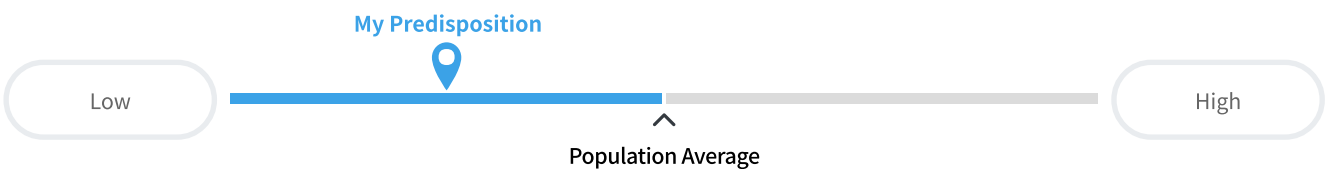


0 genetic markers with unknown location.

# Cellulite Formation

Cellulite is a condition where the skin looks dimpled and lumpy. It occurs when fat deposits push through the connective tissue beneath the skin.

## Likelihood of Dimplly Skin Forming:



According to the genes we analyzed, your cellulite formation is likely **low**.

It is still a good idea to drink enough water to facilitate blood circulation.

### Hydration

Sufficient hydration prevents waste from binding to fat and ultimately cellulite accumulation. Drink 8~10 cups of warm water every day.

### Plie squat

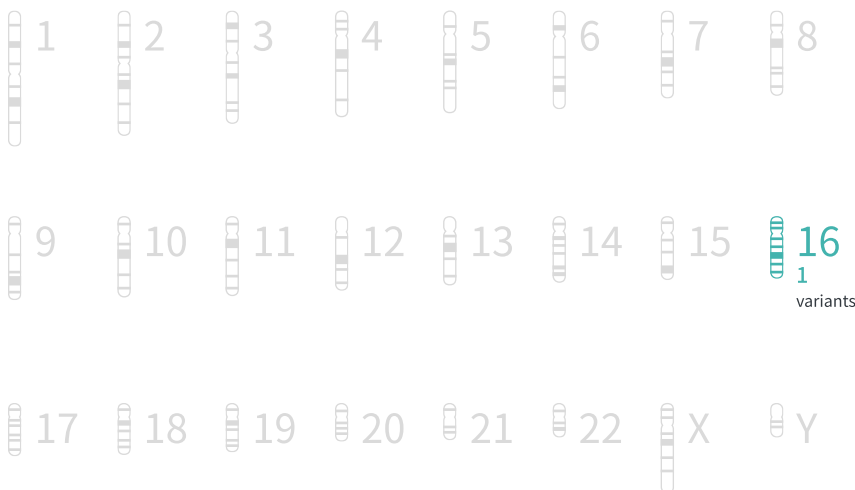
Standing with your feet pelvis-width apart, squat down keeping your knees behind your toes. Perform 3 sets of 15~20 reps per day.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 5genetic markets, we have found **1** effect allele.

The credibility score is **50** points. because studies used for the analysis of this test item's genes are based on a very small sample size.

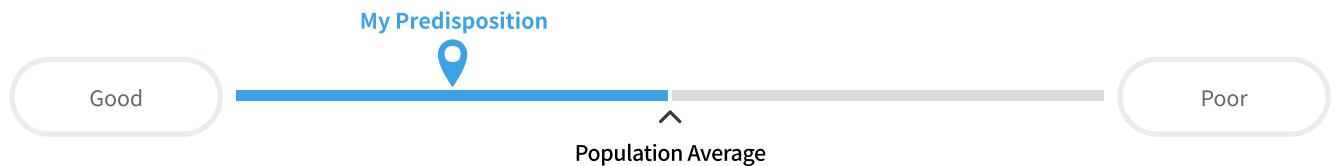


0 genetic markers with unknown location.

# Appetite Control

The ability to not give in to hunger is a psychological warfare. There is also a genetic and biological side to it.

## Likely Ability to Tolerate Hunger:



According to the genes we analyzed, your likely ability to tolerate hunger is **good**.

Even though you may have high tolerance for hunger, try your best to avoid overeating and binge eating.

### Dietary fiber

Dietary fiber passes through the GI tract and absorbs water to expand in size. It helps to make you feel full for longer periods of time.

### Squat

With your feet shoulder-width apart, bend your knees like sitting on a transparent chair, then stand up. Repeat 15~20 times per set, 3 sets.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 1 genetic markets, we have found **1** effect allele.

The credibility score is **55** points. because studies used for the analysis of this test item's genes are based on a small sample size.

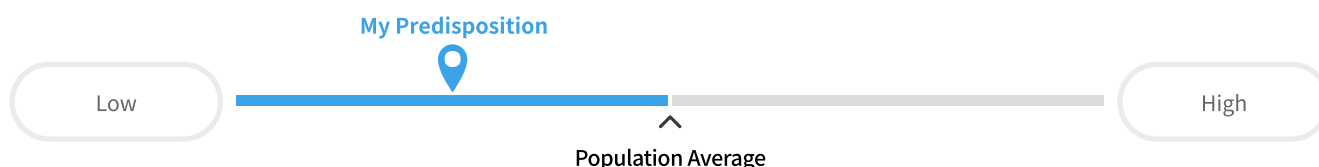


0 genetic markers with unknown location.

# Snacking Frequency

Some say snacking is a habit brought on by social needs. While some also say it could be physiological, behavioral, or even genetic. Whatever the reason may be, be sure to snack in a healthy way.

## Likely Frequency of Eating Snacks:



Based on your genetics, you likely have a **low** frequency of eating snacks.

When you want to eat a snack, try choosing a healthy fruit or vegetable instead of processed foods high in calories.

### Sweet potato

Sweet potatoes are rich in dietary fiber and beta carotene, making them a healthy snack. However, be careful of their high caloric content.

### Yoga for suppressing appetite

Sit with your legs fully extended and your back straight. While breathing out, slowly lower your upper body. Hold this for 20~30 seconds.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 8 genetic markets, we have found **3** effect allele.

The credibility score is **95** points.  
because studies used for the analysis of this test item's genes are based on a big sample size.

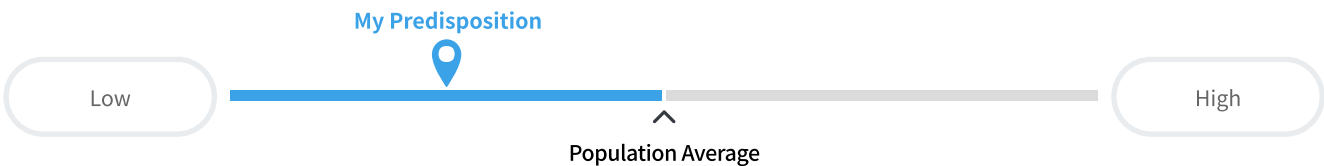


0 genetic markers with unknown location.

# Yo-Yo Effect

Yo-yo effect is a term used to explain the cyclical loss and gain of weight when a person goes on and off a diet.

## Likelihood of Regaining Lost Weight:



Based on the genes we analyzed, your likelihood of regaining lost weight is **low**.

Although your innate likelihood is low, it is a good idea to lead an active lifestyle and prevent regaining weight.

### Adequate carbohydrate intake

Reducing carbohydrates drastically can result in protein damage and incomplete fatty acid oxidation. Try eating brown rice with each meal.

### Diverse exercise routine

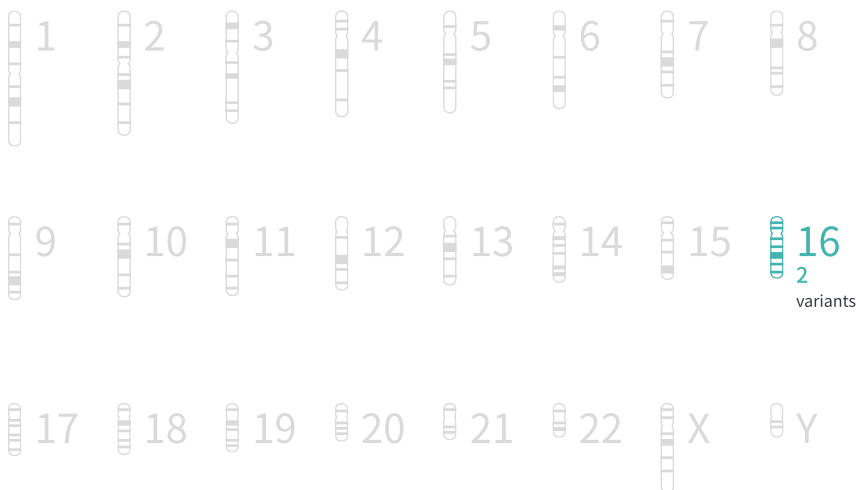
To alleviate boredom, circulate your exercise among 10 minutes of running machine, cycling, and stair stepper.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 4genetic markets, we have found 2 effect allele.

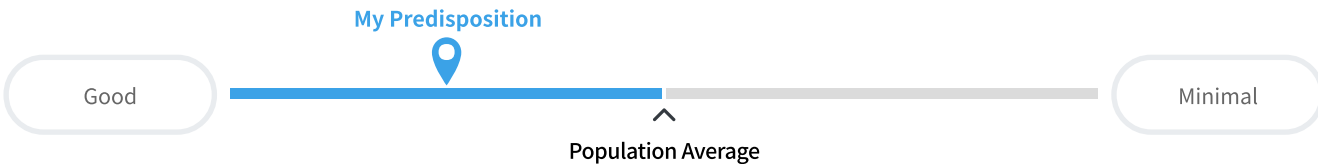
The credibility score is 50 points. because studies used for the analysis of this test item's genes are based on a very small sample size.



# Calorie Restriction Diet

Calorie restriction means reducing average daily caloric intake below what is typical or habitual, without malnutrition or deprivation of essential nutrients.

## Likely Response to Calorie Restriction Diet:



Based on the genes we analyzed, you are likely predisposed to have a **good** response to calorie restriction diet.

Even with this positive result, combining diet with exercise can still give you more effective weight loss.

### Konjac

Konjac has almost no calories and is very filling, making it ideal for dieting. It expands in the stomach, which helps with bowel movements.

### Walking 30 minutes daily

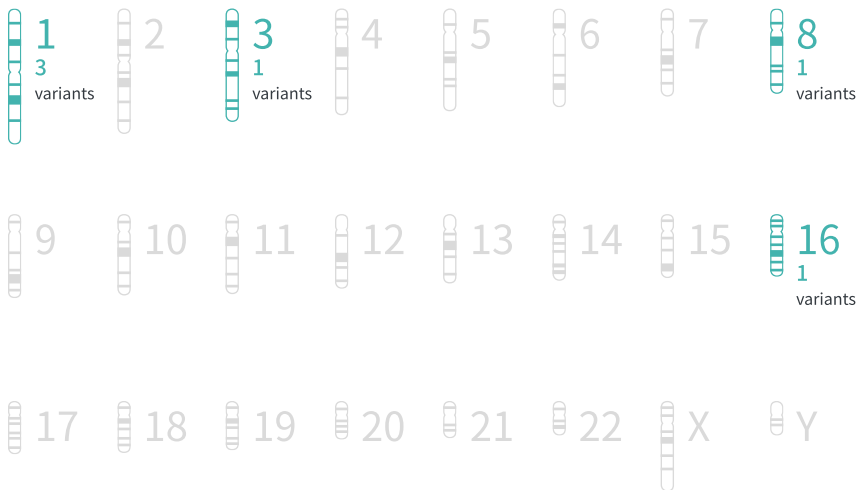
You can prevent obesity just by lightly walking every day. If you are already obese, 1-hour of speed walking every day is recommended.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 7 genetic markets, we have found 6 effect allele.

The credibility score is 51 points. because studies used for the analysis of this test item's genes are based on a small sample size.

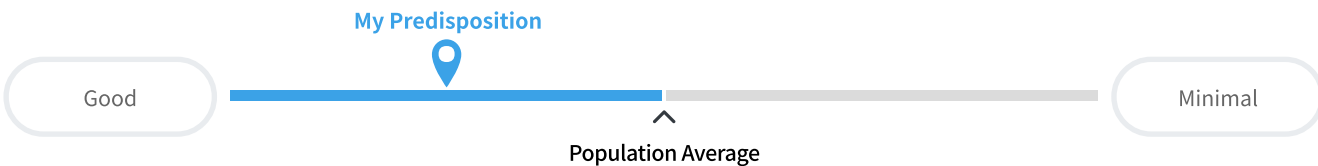


0 genetic markers with unknown location.

# High Fat Diet

A high fat diet requires indepth understanding and vigorous management. When done right, it could offer health benefits to certain people.

## Likely Response to High Fat Diet:



Based on the genes we analyzed, your weight loss response to high fat diets is likely **good**.

Although your response is positive, you may see even better results by combining both healthy fat intake and exercise.

### Proper carbohydrate intake

Since carbohydrate is the brain’s main energy source, eliminating it can be dangerous. Eat high-quality food rich in dietary fiber.

### Lunge

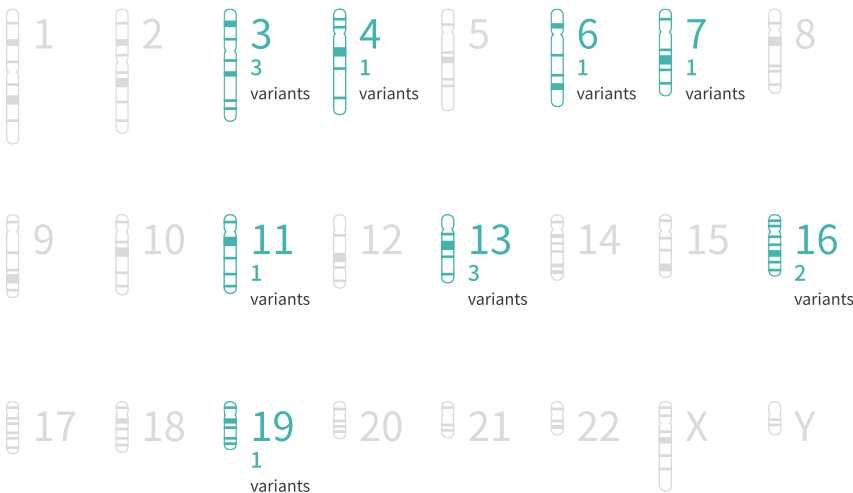
Stand with one foot shoulder-width forward. Bend the forward knee and stand back up. Perform 3 sets, 15~20 reps each.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 21genetic markets, we have found **13** effect allele.

The credibility score is **67** points. because studies used for the analysis of this test item’s genes are based on an acceptable sample size.

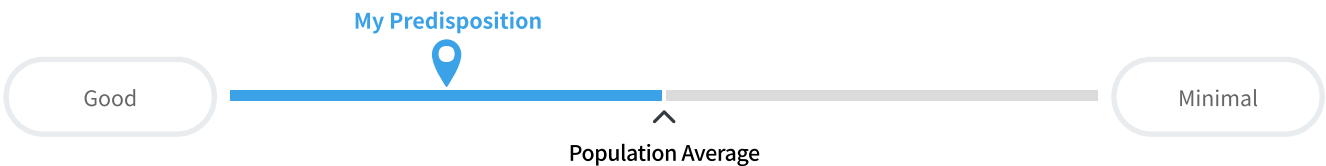


0 genetic markers with unknown location.

# High Protein Diet

A high protein diet is a type of weight loss plan that emphasizes consumption of high-protein-containing foods.

## Likely Response to High Protein Diet:



Your genetics indicate that your weight loss response to high protein diets is likely **good**.

In addition to eating a high-protein diet, doing weight lifting exercises may give better results.

### Protein from vegetables

Meat contains protein necessary for our body, but its high fat content is not healthy. Try eating nuts to consume vegetable protein.

### Lower abdomen

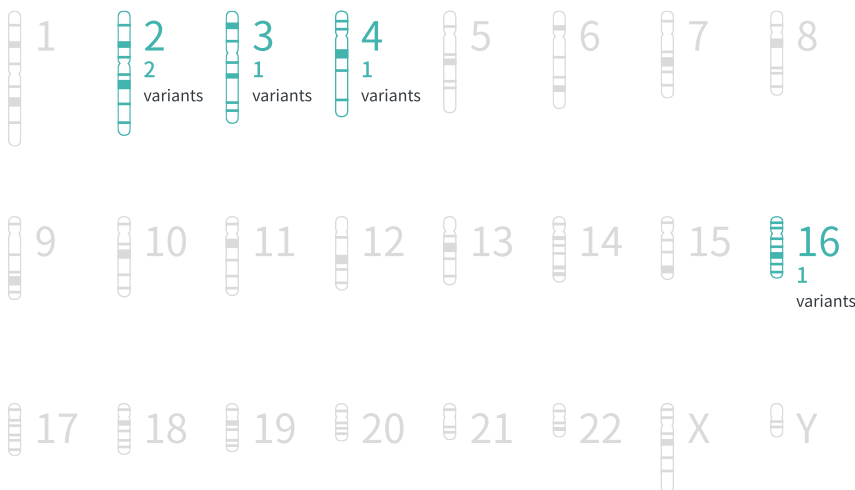
Lying flat on your back, do multiple dry coughs and feel your abdomen flex. Core exercises help to strengthen the center of your body.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 6genetic markets, we have found 5 effect allele.

The credibility score is 50 points. because studies used for the analysis of this test item's genes are based on a very small sample size.



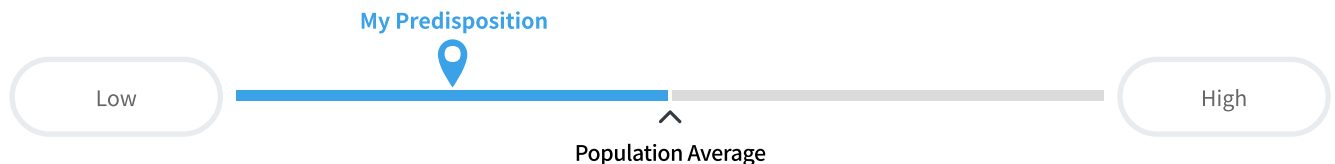
0 genetic markers with unknown location.



# Fat Level

Fat is one of the 3 essential nutrients the body require to function, along with carbohydrate and protein. It is the largest energy source and constituent of our cells.

## Indicator of Fat Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** fat level in blood.

Use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### White meat

Compared to red meats such as beef and pork, white meats such as chicken and duck contain less saturated fat.

### Interval training

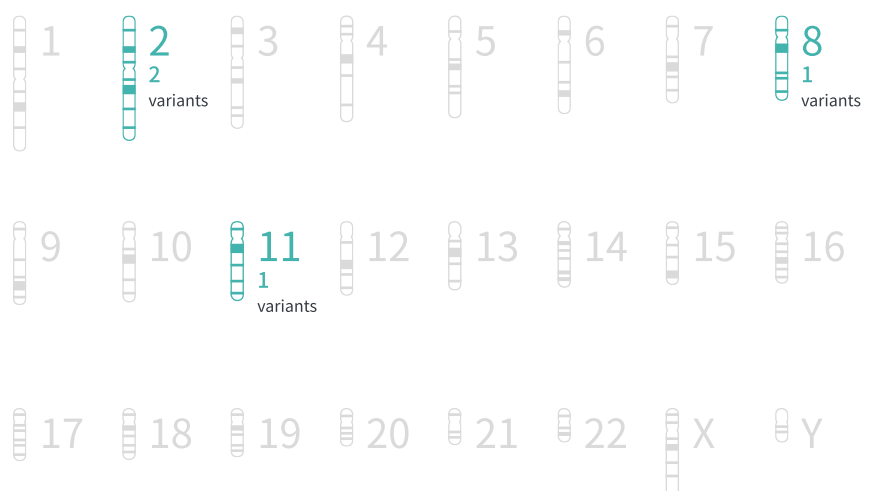
Perform workouts with alternating intensities to burn fat. Sprint for 1 minute and then jog for 1~2 minutes. Repeat this 10 times.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 8 genetic markets, we have found **4** effect allele.

The credibility score is **50** points. because studies used for the analysis of this test item's genes are based on a very small sample size.

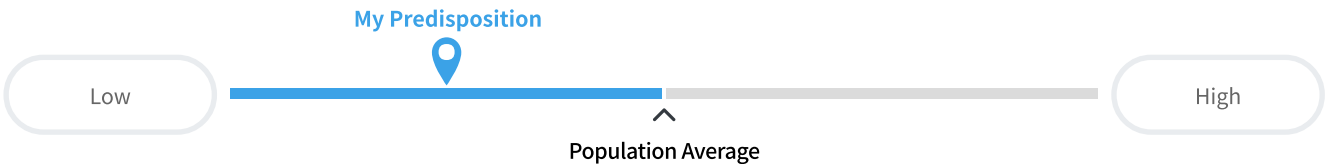


0 genetic markers with unknown location.

# Saturated Fat Level

A type of fat containing a high proportion of fatty acid molecules without double bonds, considered to be less healthy than unsaturated fat. They are typically solid at room temperature.

## Indicator of Saturated Fat Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** saturated fat level in blood.

Use this result as a reference only since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Trimming your meat

Remove the visible saturated fats before eating your meat. When cooking soups, cool it once to remove the hardened fat on the surface.

### Aerobics and Zumba

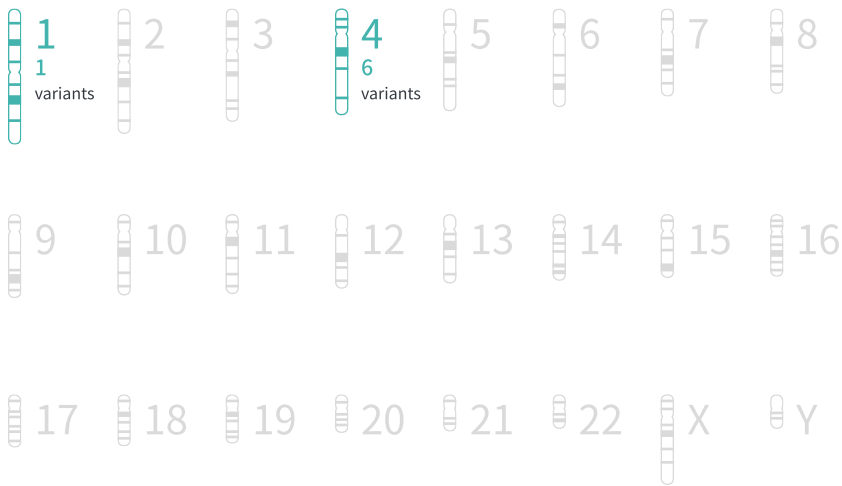
Aerobics and zumba allow you to burn fat listening to exciting music. Try doing these exercises 3 times per week, 30 minutes each.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 17genetic markets, we have found **7** effect allele.

The credibility score is **73** points. because studies used for the analysis of this test item’s genes are based on an acceptable sample size.

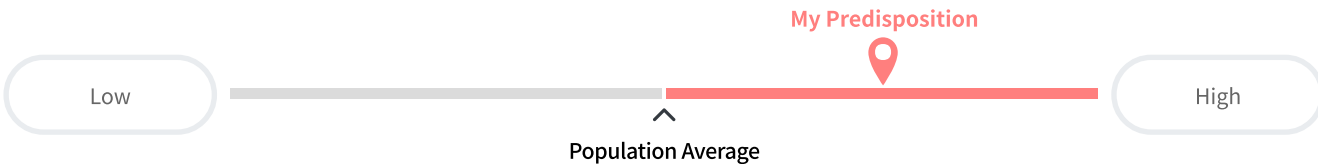


0 genetic markers with unknown location.

# Stearate Level

Stearic acid is a common saturated fatty acid abundant in animal fat. Cocoa butter and shea butter are also high in stearic acid.

## Indicator of Stearate Metabolism



Trait

Based on the genes we analyzed, you are likely predisposed to have a **high** stearate level in blood.

Use this result as a reference only since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Lard, a savory fat

Lard is more savory and cheaper than vegetable oil, so it is often used in restaurants. High in saturated fats, make sure to limit your consumption.

### Distinguishing saturated from unsaturated fats

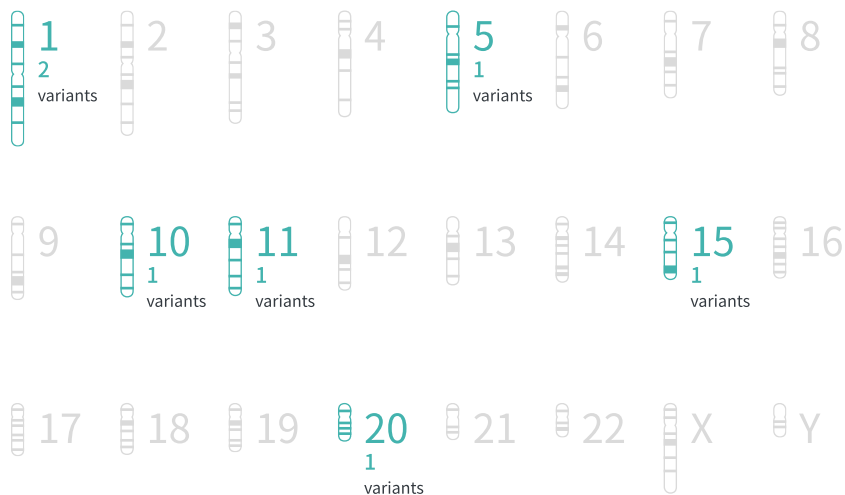
Saturated and unsaturated fats are solid and liquid at room temperature, respectively. This is visible when comparing animal and vegetable fats.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 10 genetic markets, we have found **7** effect allele.

The credibility score is **75** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

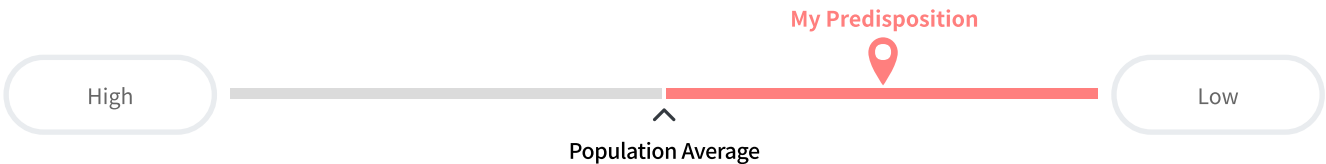


0 genetic markers with unknown location.

# DHA Level

DHA is a type of omega-3 fatty acid. Your body can only make small amounts of it, so you need to consume it from food. DHA supports brain function and eye health.

## Indicator of DHA Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** DHA level in blood.

This may mean poor DHA metabolism, but use this result as a reference only since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Salmon

Salmon, often called a “super food,” is rich in DHA. Eat a decent-sized portion 1~2 times per week to prevent cardiovascular disease.

### Omega-3 and exercise

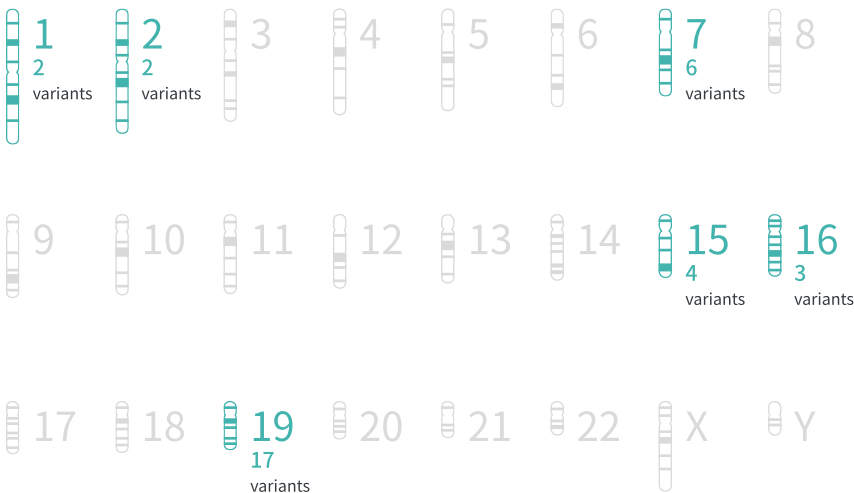
Omega-3 consumption can increase your athletic performance. It relieves inflammation and quickly transfers nerve stimulation to muscles.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 60genetic markets, we have found **34** effect allele.

The credibility score is **50** points. because studies used for the analysis of this test item’s genes are based on a very small sample size.

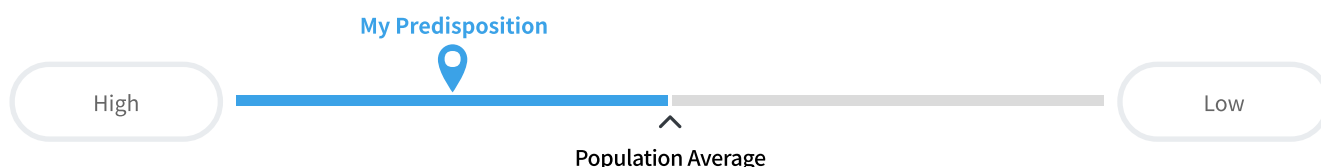


0 genetic markers with unknown location.

# EPA Level

EPA is a type of omega-3 fatty acid. It plays a role in anti-inflammatory processes and is essential for proper fetal development and healthy aging.

## Indicator of EPA Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** oleic acid level in blood.

This may mean good EPA metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Anchovy

Anchovy is high in EPA, activating brain cells and strengthening blood vessels. Take a spoonful daily to maintain your health.

### EPA is beneficial to mental health

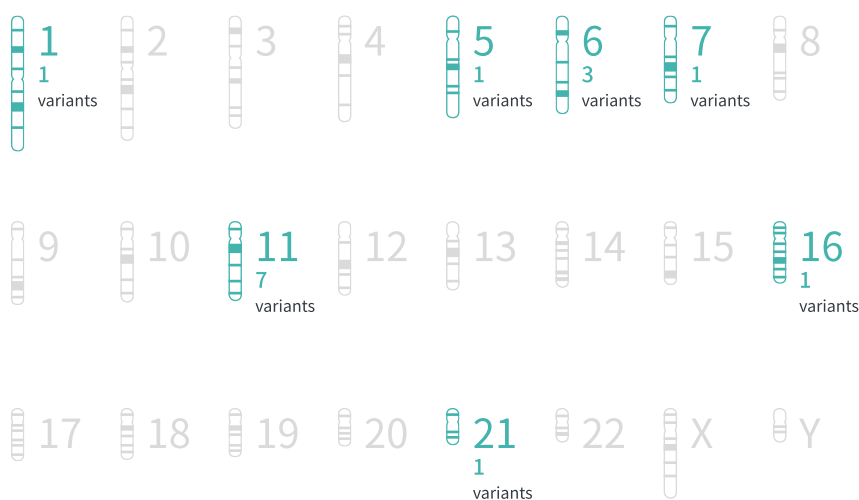
It is reported that EPA and DHA fats help with depression. They have anti-inflammatory effects in the brain, improving mental health.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 22 genetic markets, we have found **15** effect allele.

The credibility score is **77** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

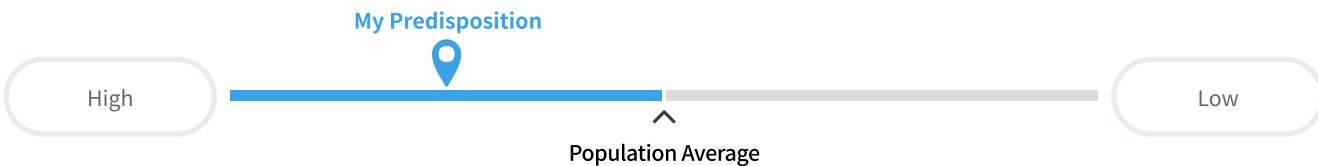


0 genetic markers with unknown location.

# Alpha-Linolenic Acid Level

Alpha-linolenic acid (ALA) is a type of omega-3 fatty acid. Your body does not synthesize ALA, so it must be consumed from food. It is found in flaxseed oil, canola, soy, perilla, and walnut oils.

## Indicator of Alpha-Linolenic Acid Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** oleic acid level in blood.

This may mean good alpha-linolenic acid metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Canola oil

Canola oil contains about 10 times more alpha linolenic acid than olive or corn oil and is a good source of omega-3 fatty acids.

### Jump roping

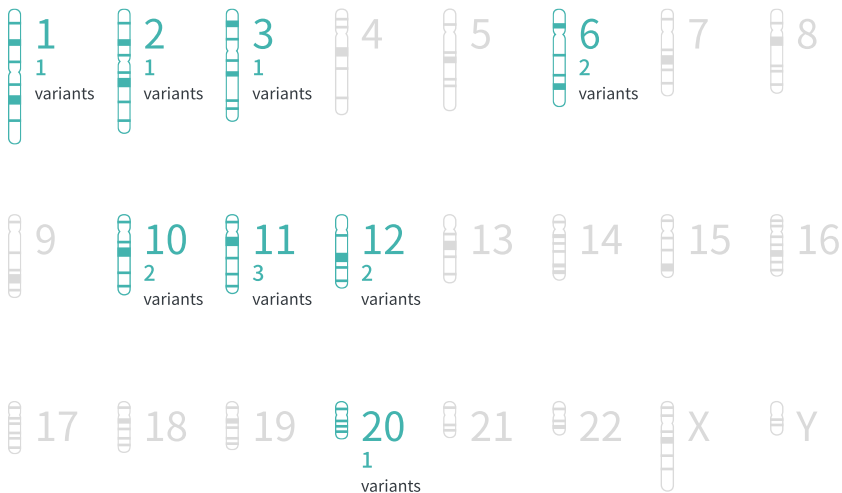
20~30 minutes of daily jump roping is recommended. Regular light exercises help reduce fatigue and inflammation in our body.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 17genetic markets, we have found **13** effect allele.

The credibility score is **83** points. because studies used for the analysis of this test item's genes are based on a big sample size.

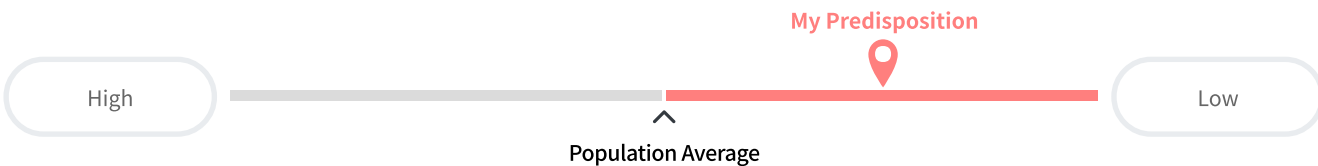


0 genetic markers with unknown location.

# Gamma-Linolenic Acid Level

Gamma-linolenic acid (GLA) is an omega-6 fatty acid that is essential for lowering blood cholesterol. It also plays a role in anti-inflammatory processes.

## Indicator of Gamma-Linolenic Acid Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** gamma-linolenic acid level in blood.

This may mean poor gamma-linolenic acid metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Evening primrose seed oil

Evening primrose seed oil is rich in gamma-linolenic acid. It is the most common source of GLA on the market.

### Prostaglandin

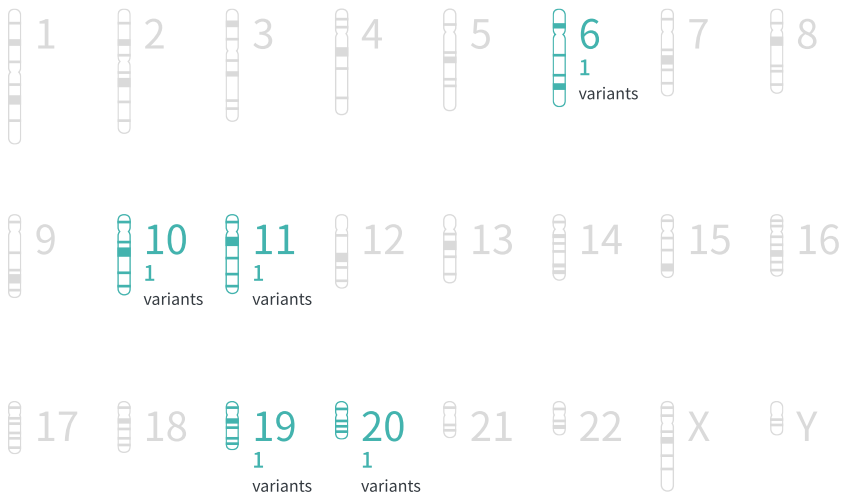
GLA makes prostaglandins, which expand capillaries to improve blood circulation and lower blood cholesterol levels.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 5 genetic markets, we have found 5 effect allele.

The credibility score is 83 points. because studies used for the analysis of this test item's genes are based on a big sample size.

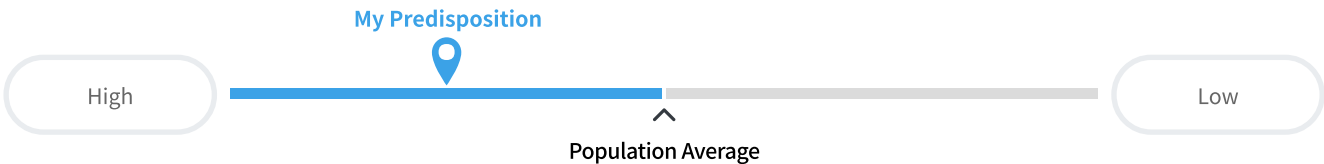


0 genetic markers with unknown location.

# Linoleic Acid Level

Linoleic acid is an essential omega-6 fatty acid that must be obtained through diet. It should be consumed in a proportionate amount relative to omega-3 to maintain equilibrium.

## Indicator of Linolenic Acid Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** linoleic acid level in blood.

This may mean good linoleic acid metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Cooking oils rich in linoleic acid

Soybean and corn oils are rich in linoleic acid. You do not need to supplement linoleic acid since you can naturally consume it through food.

### Linoleic acid functions

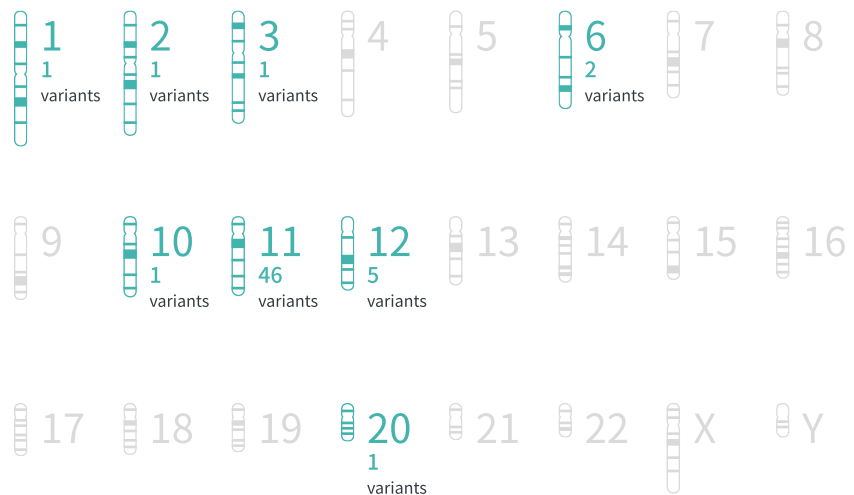
Linoleic acid is an essential nutrient for strengthening skin and hair, cholesterol metabolism, reproductive function, and tissue growth.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 65 genetic markets, we have found **58** effect allele.

The credibility score is **87** points.  
because studies used for the analysis of this test item's genes are based on a big sample size.



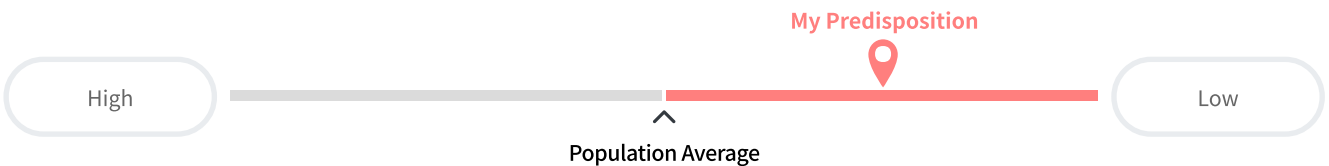
0 genetic markers with unknown location.



# Arachidonic Acid Level

Arachidonic acid (AA) is an omega-6 fatty acid that has proinflammatory and immunosupportive functions.

## Indicator of Arachidonic Acid Metabolism



Trait

Based on the genes we analyzed, you are likely predisposed to have a **low** arachidonic acid level in blood.

This may mean poor arachidonic acid metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### White meat

If arachidonic acid is a problem, choose white instead of red meat. We recommend chicken that has low saturated fat or fish, rich omega-3.

### Proper amount

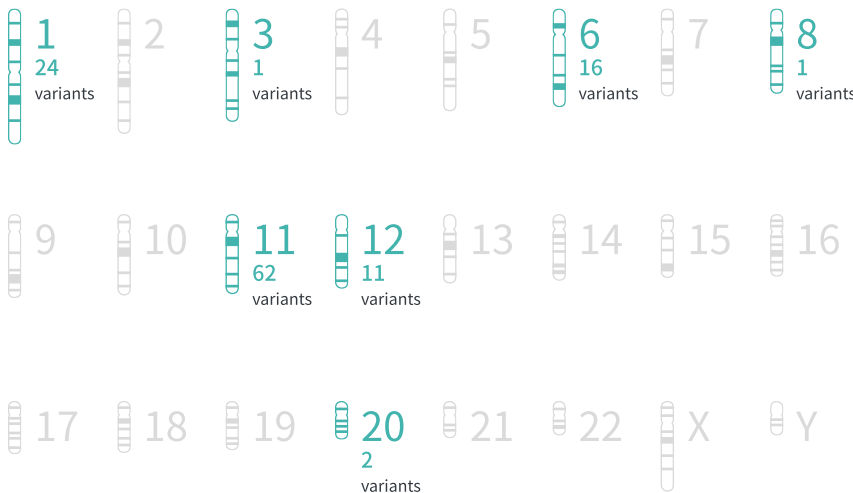
Arachidonic acid produces eicosanoids associated with inflammation. This process protects the body against acute infection.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 153 genetic markets, we have found **117** effect allele.

The credibility score is **50** points.  
because studies used for the analysis of this test item's genes are based on a very small sample size.

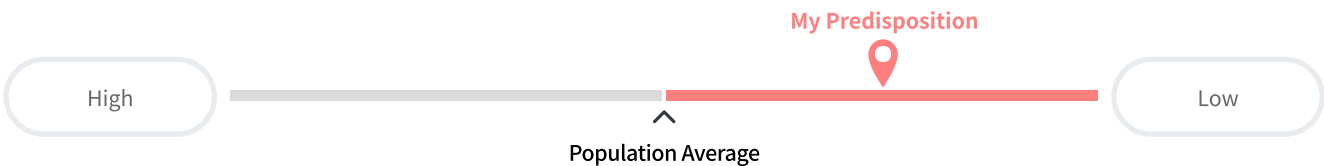


0 genetic markers with unknown location.

# Palmitoleic Acid Level

Palmitoleic acid is an omega-7 monounsaturated fatty acid that has recently gained popularity due to its beneficial effects on the skin and gastrointestinal health.

## Indicator of Palmitoleic Acid Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** palmitoleic acid level in blood.

This may mean poor palmitoleic acid metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Nuts and dairy products

Dairy products and nuts contain an unsaturated fatty acid called palmitoleic acid. It is also present in anchovy, mackerel, and other foods.

### Hemp cream

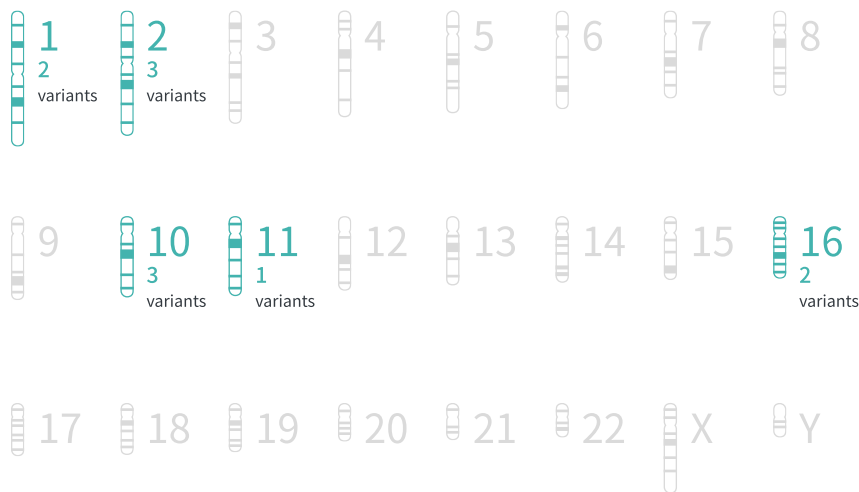
Hemp oil is known to contain palmitoleic acid and vitamin E. They help with maintaining skin moisture and improving dermatitis.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 14 genetic markets, we have found **11** effect allele.

The credibility score is **74** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

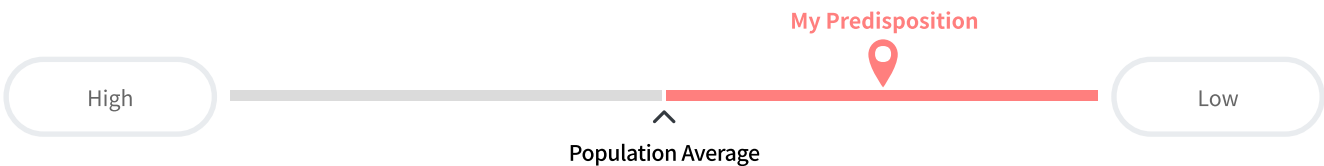


0 genetic markers with unknown location.

# Oleic Acid Level

Oleic acid is an omega-9 fatty acid that is essential in human nutrition and helps to reduce levels of bad cholesterol and the glycemic index. Olive oil is a major source.

## Indicator of Oleic Acid Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** oleic acid level in blood.

This may mean poor oleic acid metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Sesame oil

Sesame oil contains a lot of linoleic and oleic acids. Use it in vegetable and meat dishes to control your blood cholesterol level.

### Olive oil

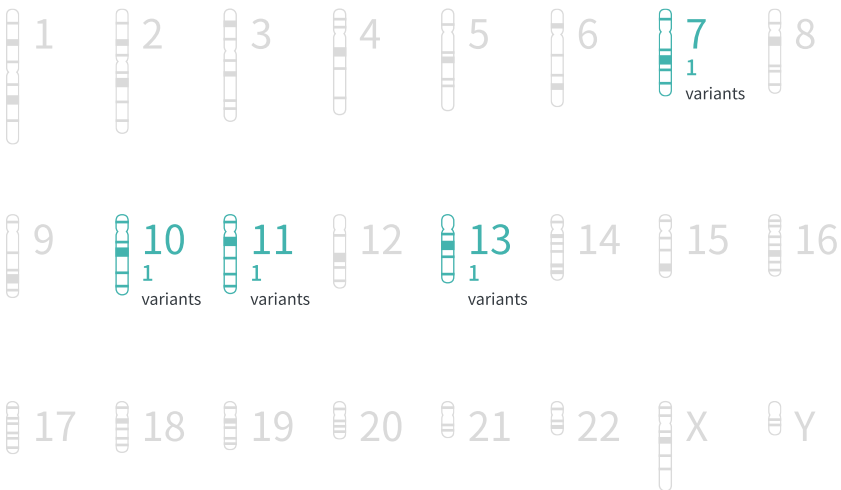
Extra virgin olive oil is the initially squeezed batch of oil and is high in oleic acid and polyphenol. Try it in salad dressing and sauces!

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 9 genetic markets, we have found **4** effect allele.

The credibility score is **73** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

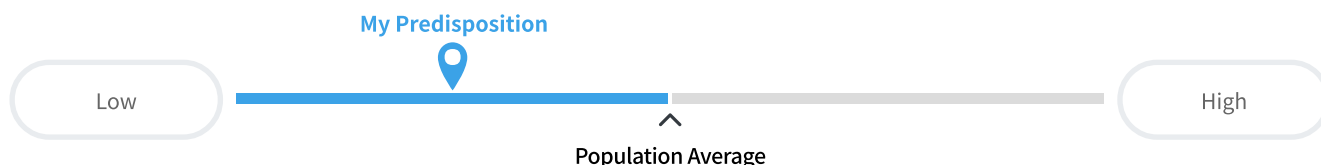


0 genetic markers with unknown location.

# Trans Fat Level

Trans fats are a form of unsaturated fat associated with a number of negative health effects. It can be created artificially or found naturally in meat and dairy.

## Indicator of Trans Fat Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** trans fat level in blood.

It is still important to avoid overeating foods high in trans fats including processed and fried foods.

### Soggy means more trans fat?

Deep frying for long periods increases trans fats, which are harmful to your body. Deep fried foods should not be stored for long periods.

### Nighttime snacks and alcohol

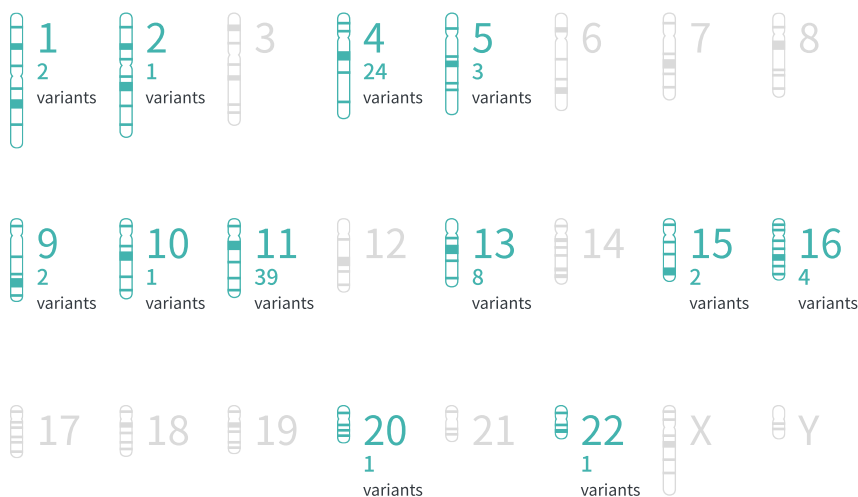
Often eaten with alcohol, pork belly and fried chicken are high in cholesterol, trans, and saturated fats. These increase risk of obesity.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 105 genetic markets, we have found **88** effect allele.

The credibility score is **95** points.  
because studies used for the analysis of this test item's genes are based on a big sample size.

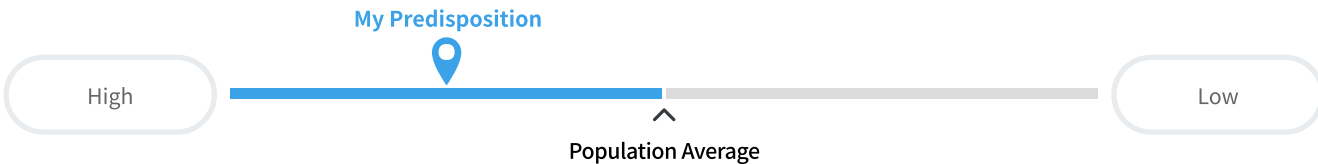


0 genetic markers with unknown location.

# Vitamin A Level

Vitamin A refers to a group of fat-soluble molecules called retinoids, which are essential for proper immune function, vision, reproduction, and cellular communication.

## Indicator of Vitamin A Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** vitamin A level in blood.

This may mean good vitamin A metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Retinol-rich foods

Vitamin A in the retinol form is found in animal derived foods including liver, red meat, eggs, fish, and dairy products.

### Incompatibility with smoking

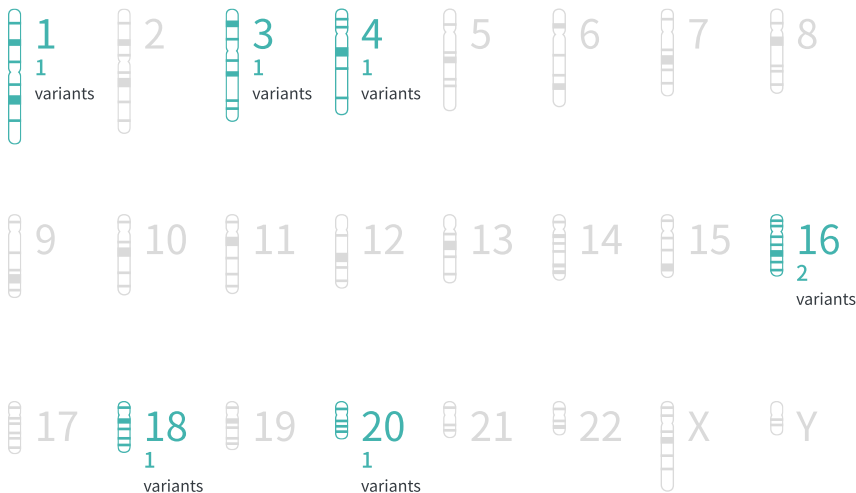
Research results suggest that vitamin A supplements increase risk of lung cancer in smokers. It is best to consume dietary vitamin A.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 21 genetic markets, we have found **7** effect allele.

The credibility score is **51** points. because studies used for the analysis of this test item's genes are based on a small sample size.

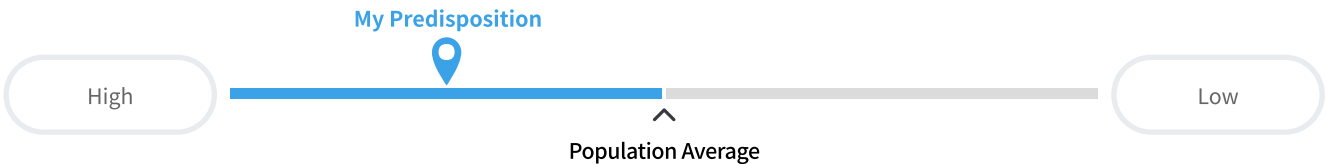


0 genetic markers with unknown location.

# Vitamin B6 Level

Vitamin B6 is a water soluble vitamin that is involved in protein metabolism and neurotransmitter synthesis, making it beneficial for athletic endurance.

## Indicator of Vitamin B6 Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** vitamin B6 level in blood.

This may mean good vitamin B6 metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Bananas

One banana contains 20% of the daily required vitamin B6. Try to eat a banana every day by adding them to salads, shakes, and more.

### Essential for endurance

Vitamin B6 is involved in protein metabolism and neurotransmitter synthesis, making it beneficial for athletic endurance.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 4genetic markets, we have found **1** effect allele.

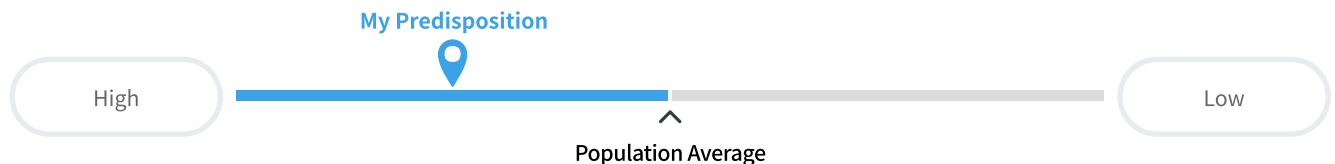
The credibility score is **74** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.



# Folate Level

Folate, or Vitamin B9, is needed to produce healthy red blood cells and is critical during periods of rapid growth, such as during pregnancy.

## Indicator of Folate Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** folate level in blood.

This may mean good folate metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Spinach

A plate of spinach contains 1/3 of folic acid needed per day. Prolonged boiling destroys folate, so lightly cook it before eating it.



### Essential for exercise endurance

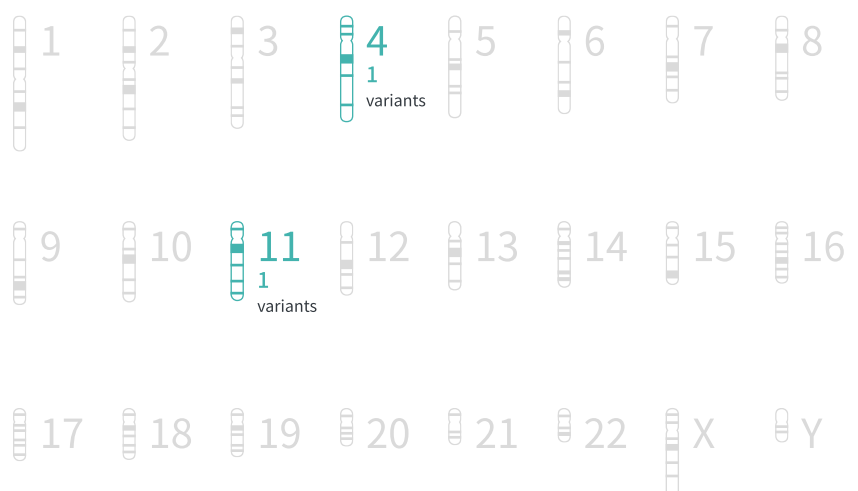
After exercise, consume vitamin B for muscle recovery. A lack of folate can cause anemia during exercise and low endurance.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 9 genetic markets, we have found **2** effect allele.

The credibility score is **55** points. because studies used for the analysis of this test item's genes are based on a small sample size.

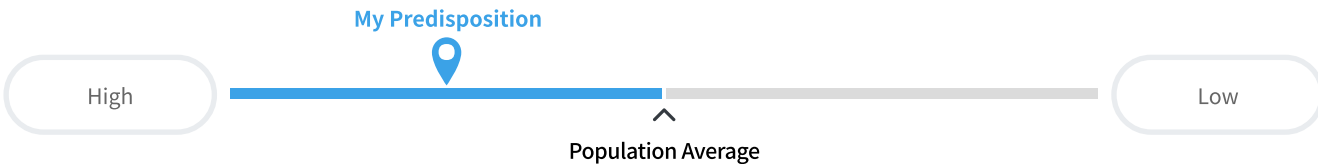


0 genetic markers with unknown location.

# Vitamin B12 Level

Vitamin B12 is a water soluble vitamin that is necessary for keeping your nerves healthy and supporting the production of DNA and red blood cells, as well as maintaining normal brain function.

## Indicator of Vitamin B12 Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** vitamin B12 level in blood.

This may mean good vitamin B12 metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Seafood

Vitamin B12 is abundant in seafood such as clam, oyster, mackerel, and scallop. One piece of fish or plate of shellfish per day is sufficient.

### Essential for exercise endurance

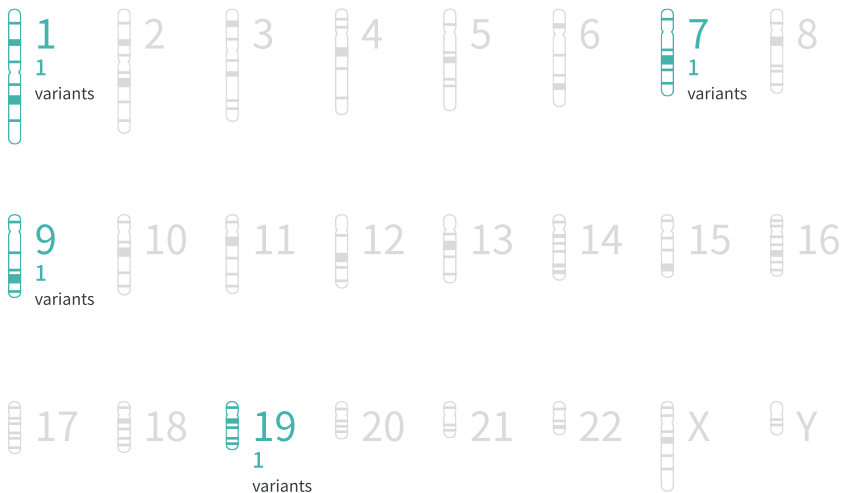
After exercise, consume vitamin B for muscle recovery. A lack of vitamin B12 can cause anemia during exercise and low endurance.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 22 genetic markets, we have found **4** effect allele.

The credibility score is **70** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.



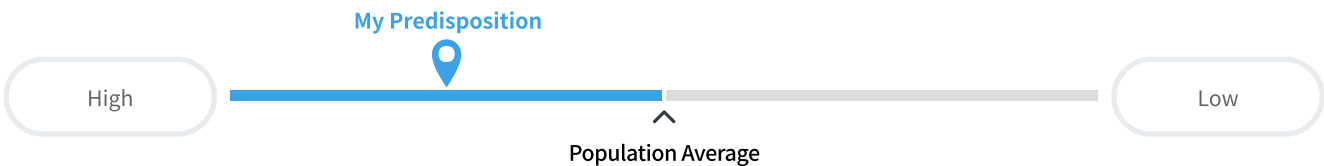
0 genetic markers with unknown location.



# Vitamin C Level

Vitamin C is an essential vitamin with strong antioxidant functions. It can help reduce the risk of heart disease, anemia, diabetes, aging skin and gout.

## Indicator of Vitamin C Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** vitamin C level in blood.

This may mean good vitamin C metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Vegetables

To consume enough vitamins, eat at least one vegetable with each meal. Try to incorporate vegetables as various side dishes.

### Exercise increases antioxidant activity

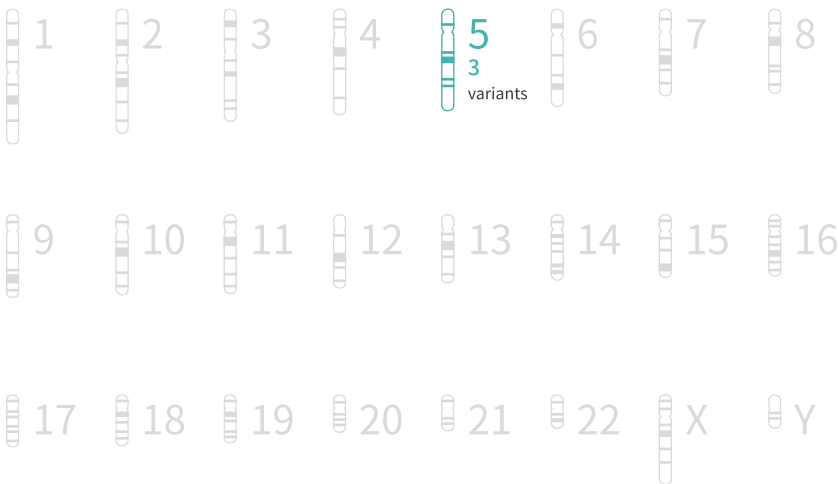
Prolonged cardio exercise and vitamin C intake improves the body's antioxidant activity. Don't forget to take antioxidant vitamins with exercise.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 3 genetic markets, we have found **3** effect allele.

The credibility score is **80** points.  
because studies used for the analysis of this test item's genes are based on an acceptable sample size.

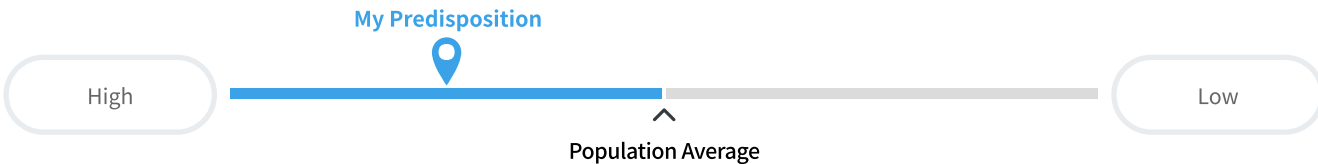


0 genetic markers with unknown location.

# Vitamin D Level

The two main ways to get vitamin D are by exposing your bare skin to sunlight and by taking supplements, as foods don't provide adequate vitamin D.

## Indicator of Vitamin D Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** vitamin D level in blood.

This may mean good vitamin D metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Calcium

Vitamin D and calcium have synergistic functions. Insufficient vitamin D leads to lower calcium absorption and bone weakening.

### Outdoor activities

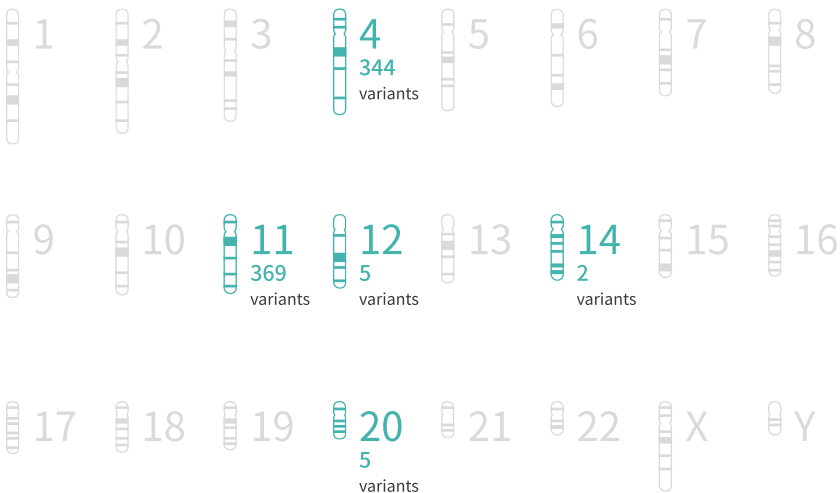
You should receive sunlight for 5~30 minutes at least twice per week. Be aware that sunscreen interferes with vitamin D synthesis.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 1240 genetic markets, we have found **725** effect allele.

The credibility score is **74** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

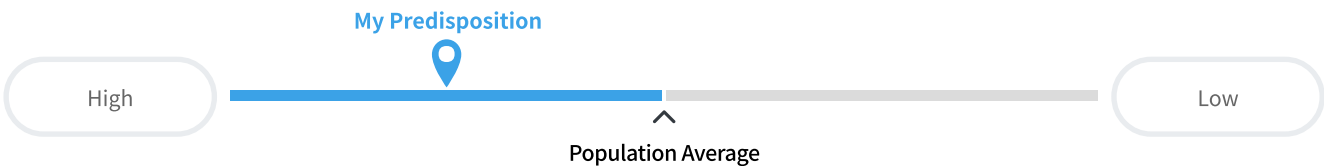


0 genetic markers with unknown location.

# Vitamin E Level

Vitamin E is the collective name for a group of fat-soluble compounds with distinctive antioxidant activities. Taken together with other antioxidants such as vitamin C and selenium multiplies the benefits on your health.

## Indicator of Vitamin E Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** vitamin E level in blood.

This may mean good vitamin E metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Almonds

Try eating a handful of almonds every day. Almonds are rich in antioxidant vitamin E, which is beneficial for heart health.

### Protecting muscle cells

Vitamin E reduces muscle damage by increasing performance and reducing oxidative stress. When exercising, take antioxidant vitamins.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 4genetic markets, we have found **1** effect allele.

The credibility score is **75** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

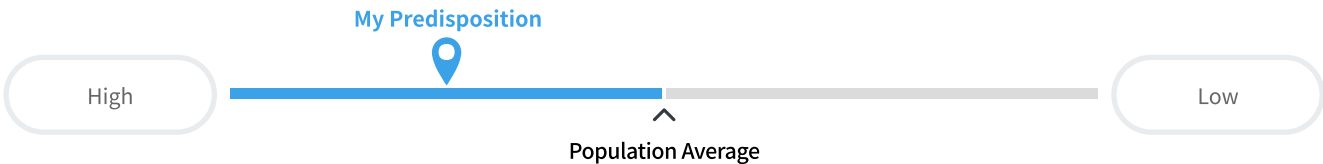


0 genetic markers with unknown location.

# Vitamin K Level

Vitamin K aids the binding of calcium to bones. Without adequate vitamin K, calcium is easily lost from the bones, increasing the risk of osteoporosis.

## Indicator of Vitamin K Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** vitamin K level in blood.

This may mean good vitamin K metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Kale

Eating just 1 plate of kale provides sufficient vitamin K to prevent osteoporosis. Kale and tofu benefit bone health in postmenopausal women.

### Beneficial for bone health

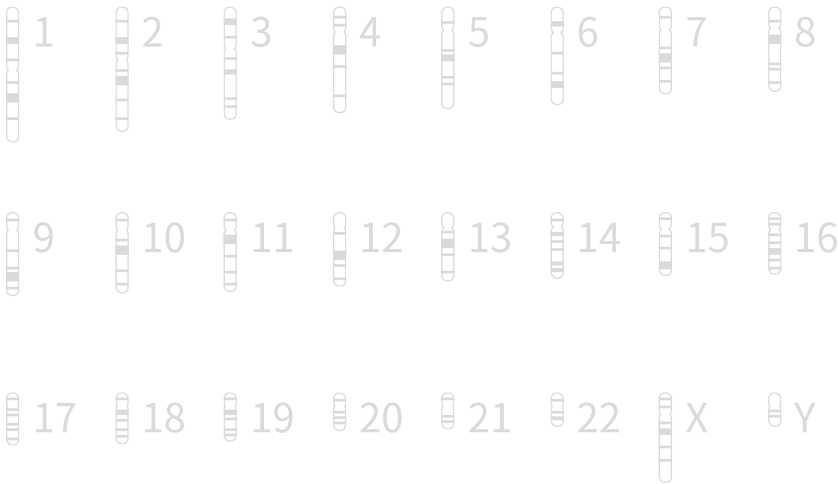
Vitamin K plays a role in production of osteocalcin, a major bone protein. Osteoporosis patients often have low vitamin K levels.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 2 genetic markets, we have found no effect allele.

The credibility score is **67** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

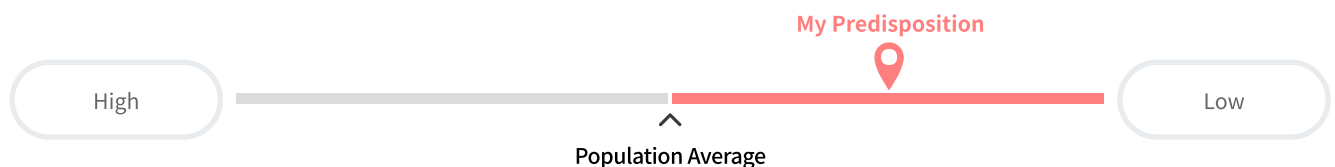


0 genetic markers with unknown location.

# Calcium Level

Calcium is the most abundant mineral in our body. The body needs calcium to maintain strong bones and to carry out many important functions.

## Indicator of Calcium Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** calcium level in blood.

This may mean poor calcium metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Dairy products

Try consuming dairy products such as milk, cheese, and yogurt at least once a day. This is good for consuming calcium and lactose.

### Bone strengthening exercise

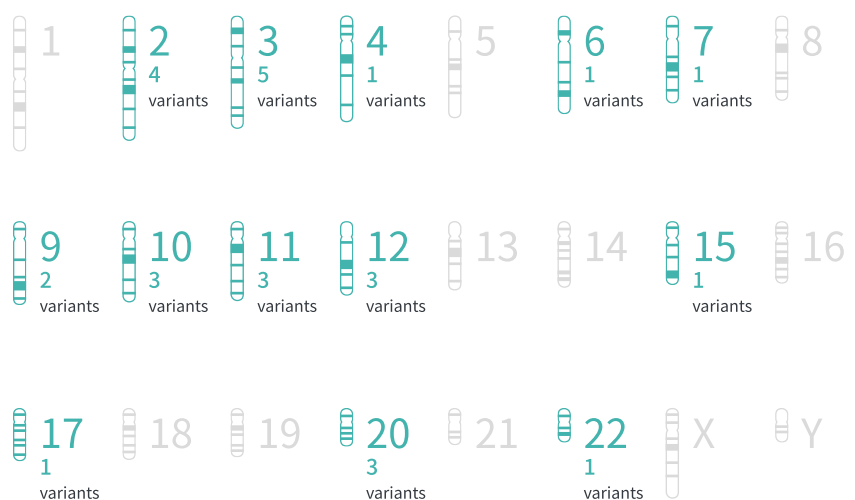
Light weight lifting is good for increasing bone density by stimulation. If weight lifting is too much, walking or climbing stairs is good.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 47 genetic markets, we have found **29** effect allele.

The credibility score is **82** points. because studies used for the analysis of this test item's genes are based on a big sample size.

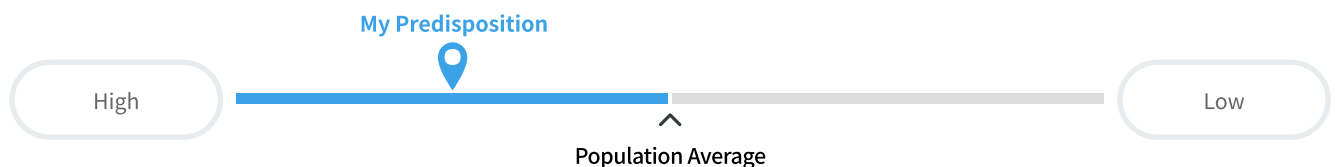


0 genetic markers with unknown location.

# Iron Level

Iron is an essential mineral that our bodies need for many functions - physical growth, neurological development, and synthesis of some hormones and red blood cells.

## Indicator of Iron Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** iron level in blood.

This may mean good iron metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Animal source foods

Eat an animal source food every meal. Iron in red meat and seafood is better absorbed than iron in fruits and vegetables.

### Breathing during exercise

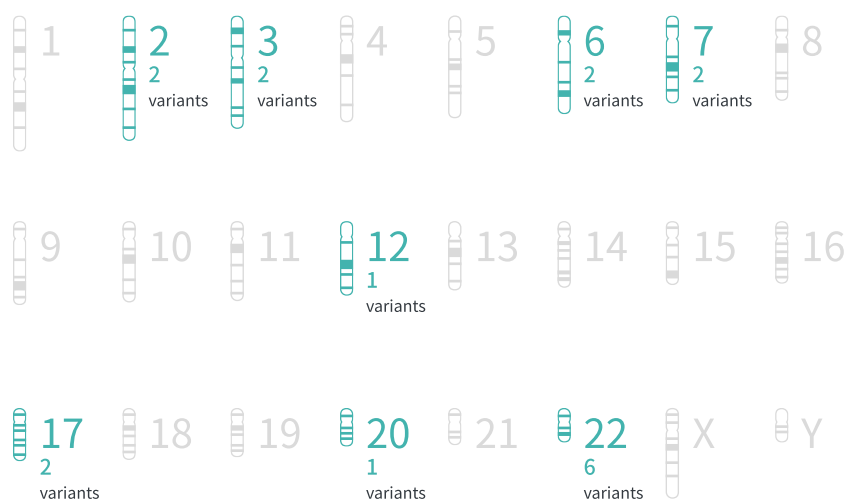
Keep a constant rhythm while doing cardio exercise. Also, it is good to inhale and exhale naturally through your nose and mouth.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 22 genetic markets, we have found **18** effect allele.

The credibility score is **80** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

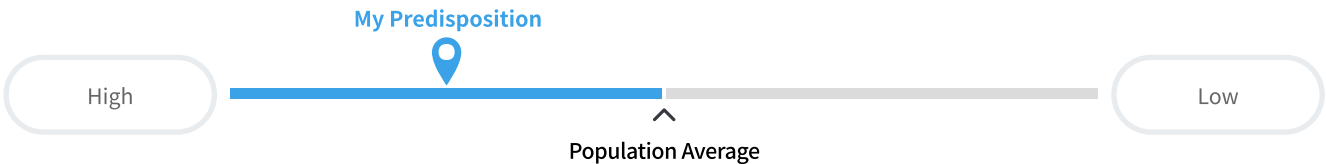


0 genetic markers with unknown location.

# Zinc Level

Zinc is an essential mineral that involved in numerous aspects of cellular metabolism, immune function, protein synthesis and wound healing. It also supports normal growth and development during pregnancy.

## Indicator of Zinc Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** zinc level in blood.

This may mean good zinc metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Oysters, the milk of the sea

Oysters are a great source of zinc. By eating six medium-sized oysters, you can meet your recommended daily intake of zinc.

### Zinc for preventing cold

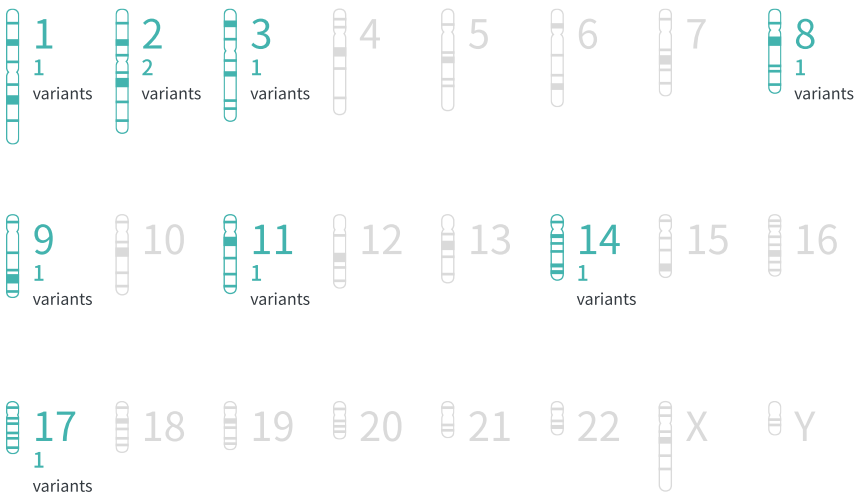
Most colds are caused by rhinoviruses that multiply in the nostrils and neck. Zinc inhibits their multiplication and help prevent cold.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 13 genetic markets, we have found **9** effect allele.

The credibility score is **64** points. because studies used for the analysis of this test item's genes are based on a small sample size.

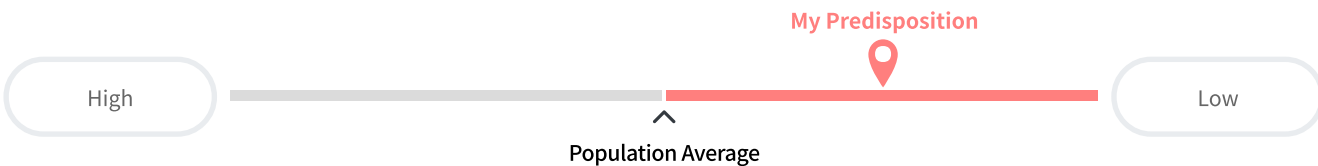


0 genetic markers with unknown location.

# Magnesium Level

Magnesium is an abundant mineral in the body and in food, that contributes to the structural development of bone and an important factor in nerve function, muscle contraction, and a normal heart rhythm.

## Indicator of Magnesium Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** magnesium level in blood.

This may mean poor magnesium metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Whole grains

Try mixing whole grains such as buckwheat, brown rice, and sorghum into rice. This allows easy consumption of magnesium.

### Stretching

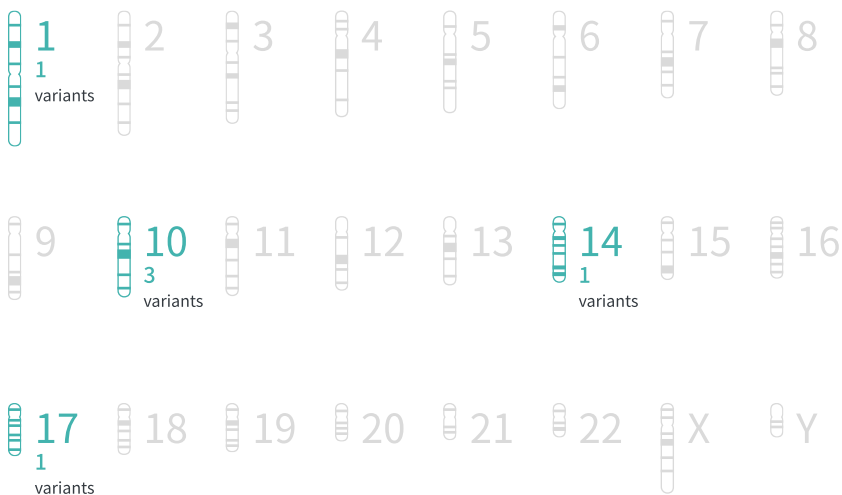
Stretching relaxes your muscles and joints. Stretching before and after exercising can reduce muscle soreness.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 11 genetic markets, we have found **6** effect allele.

The credibility score is **50** points. because studies used for the analysis of this test item's genes are based on a very small sample size.



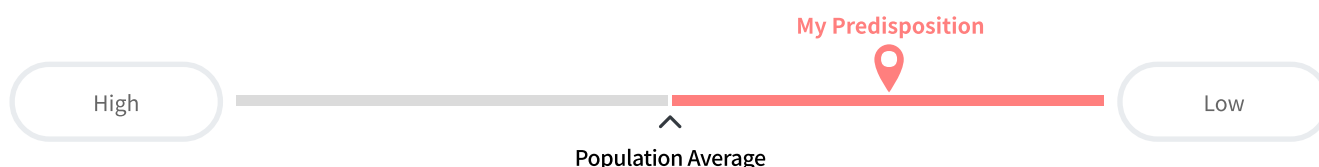
0 genetic markers with unknown location.



# Phosphorous Level

Phosphorus is an essential mineral that have functions in bone formation, activation of vitamins and enzymes, and metabolism.

## Indicator of Phosphorus Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** phosphorous level in blood.

This may mean poor phosphorous metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Beans and milk

Phosphorus is found in meat, fish, milk, nuts, etc. Processed foods have high phosphorus content. Use beans and milk as your main sources.

### Avoid processed foods

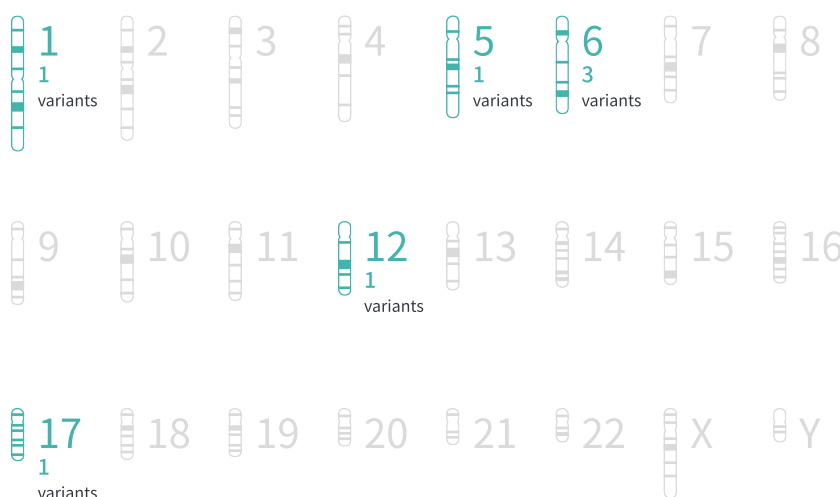
Excessive consumption of processed foods leads to overconsumption of phosphorus. Be cautious of this and avoid them.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 11 genetic markets, we have found **7** effect allele.

The credibility score is **95** points. because studies used for the analysis of this test item's genes are based on a big sample size.

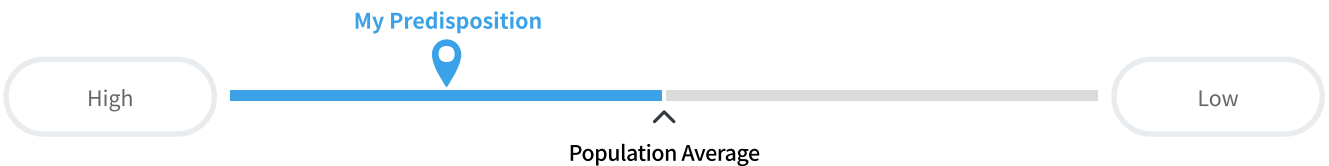


0 genetic markers with unknown location.

# Potassium Level

Potassium is a water-soluble mineral and electrolyte, that help regulate blood pressure and the amount of water in the body.

## Indicator of Potassium Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** potassium level in blood.

This may mean good potassium metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### What foods contain potassium?

Potassium is in almost all foods. It is high in vegetables, fruits, legumes, etc., and can be consumed through milk and whole grains.

### Consuming potassium

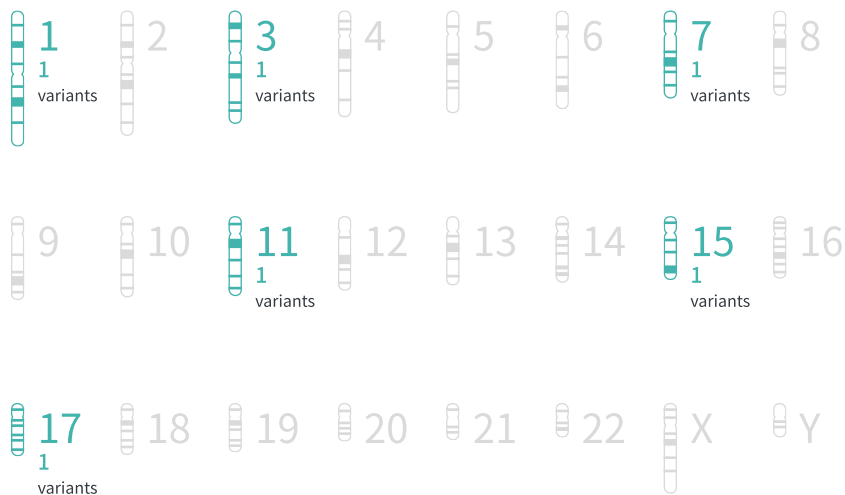
Potassium is water soluble is easily lost when cooking with water. It is best to lightly cook potassium foods or eat them uncooked.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 12genetic markets, we have found **6** effect allele.

The credibility score is **95** points.  
because studies used for the analysis of this test item's genes are based on a big sample size.

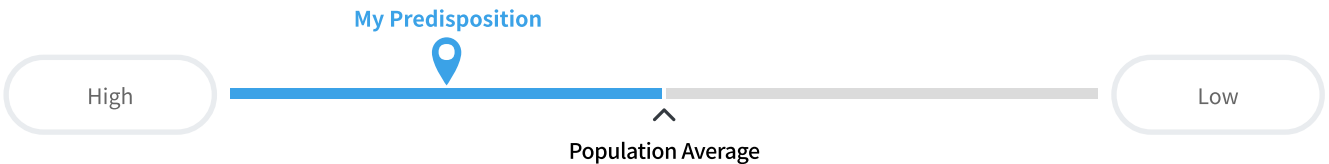


0 genetic markers with unknown location.

# Betaine Level

Betaine is a chemical that occurs naturally in the body and is found in foods. It is effective in lowering blood pressure and promoting insulin secretion.

## Indicator of Betaine Metabolism



Trait

Based on the genes we analyzed, you are likely predisposed to have a **high** betaine level in blood.

This may mean good betaine metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Mussels

Mussels contain taurine and betaine which are good for fatigue. Mussel broth is good for children and elders with poor digestive system.

### Shrimp

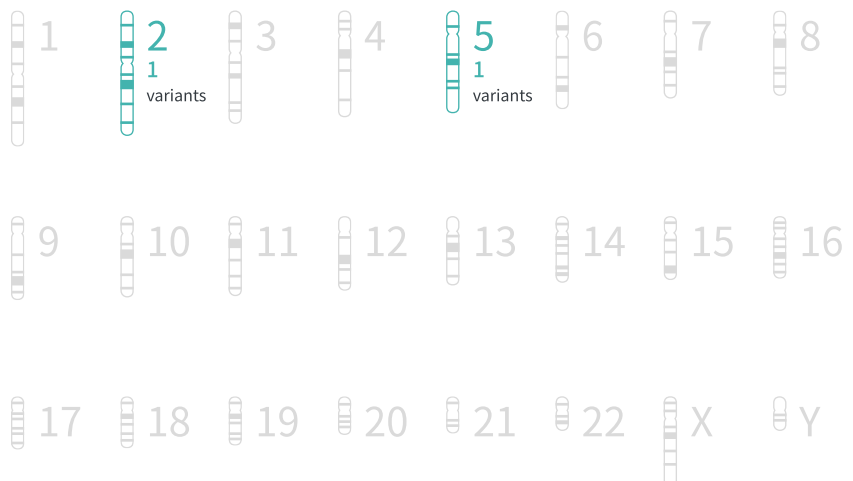
Shrimp is a food rich in betaine, arginine, and taurine. Soups made of whole-shrimp broth are good for consuming various nutrients.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 6 genetic markets, we have found **2** effect allele.

The credibility score is **64** points.  
because studies used for the analysis of this test item's genes are based on a small sample size.

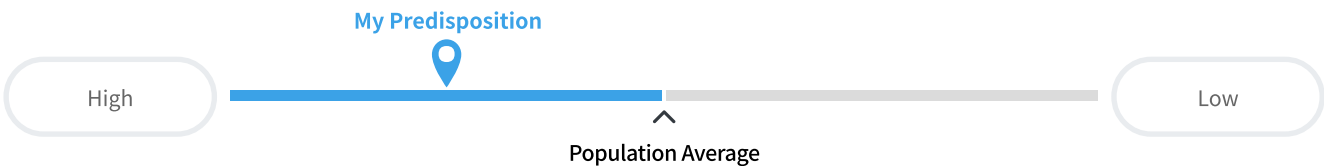


0 genetic markers with unknown location.

# Coenzyme Q10 Level

Coenzyme Q10 is an antioxidant that is naturally present in the human body. People with some diseases have reduced levels of this substance, so researchers are trying to determine whether CoQ10 supplements have health benefits.

## Indicator of Coenzyme Q10 Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** coenzyme Q10 level in blood.

This may mean good coenzyme Q10 metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Food sources

You can consume CoQ10 through egg, fish, and red meat. Because CoQ10 is fat-soluble, cooking with oil enhances its absorption

### Enhancing absorption

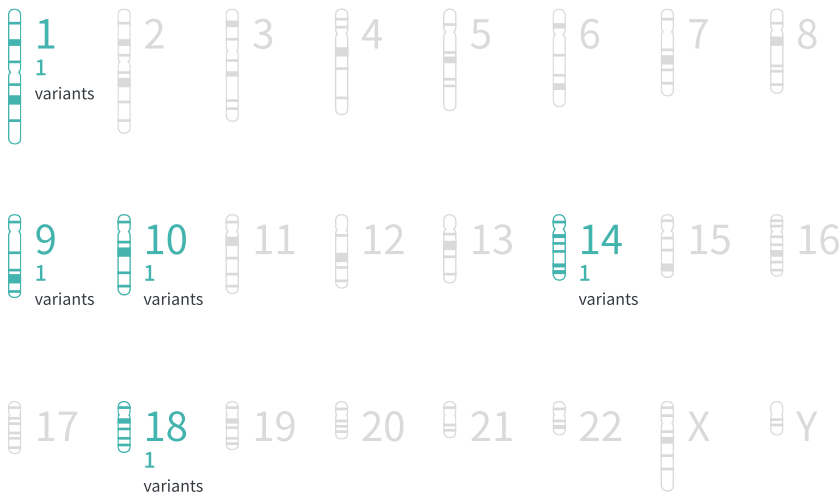
CoQ10 is fat-soluble, so absorption improves if eaten with fatty foods. It is recommended to consume it with omega-3 and vitamin E.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 18genetic markets, we have found **5** effect allele.

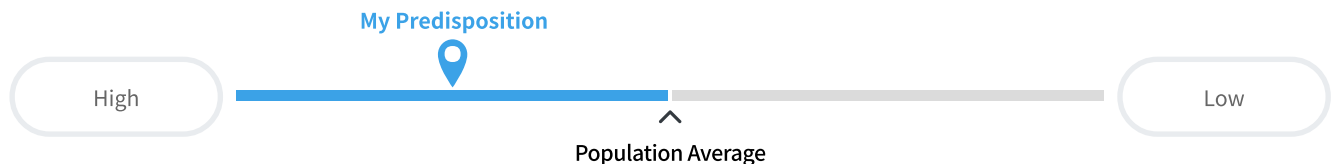
The credibility score is **50** points. because studies used for the analysis of this test item's genes are based on a very small sample size.



# Selenium Level

Selenium is a powerful antioxidant that removes free radicals that cause cellular damage and accelerated aging.

## Indicator of Selenium Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **high** selenium level in blood.

This may mean good selenium metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Food sources

Selenium is found in animal liver, milk, tuna, garlic, tomatoes, broccoli and others. Red meat and seafood are recommended sources.

### Immune health

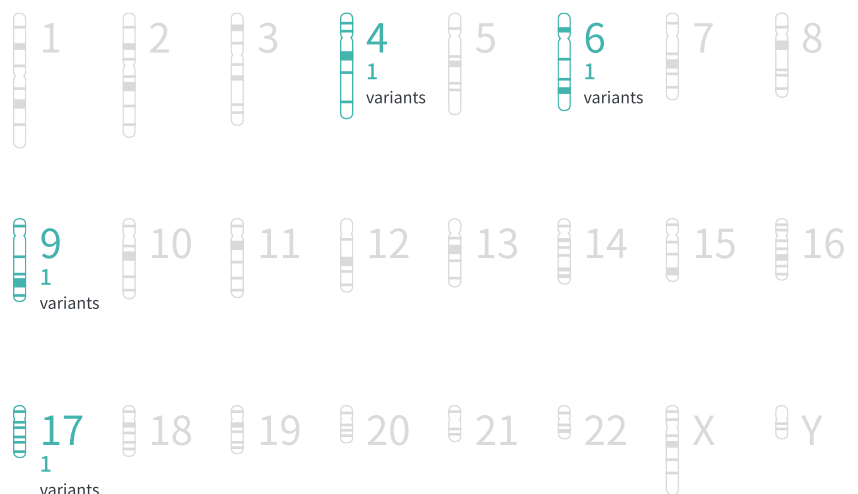
Selenium is involved in immune responses and functions. It also promotes macrophage and B lymphocyte activity to increase immunity.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 11 genetic markets, we have found **4** effect allele.

The credibility score is **71** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

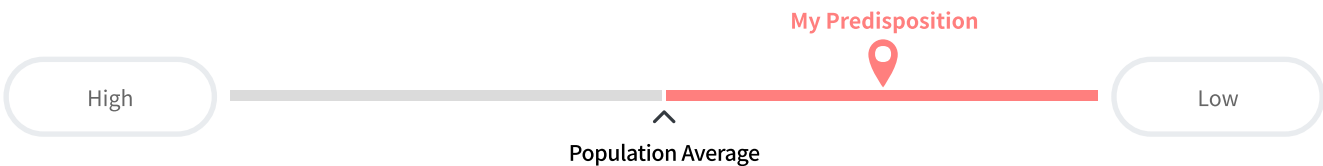


0 genetic markers with unknown location.

# Arginine Level

Arginine is a non-essential amino acid that our body can synthesize on its own. It dilutes the blood vessels and increases blood flow, which is effective in treating cardiovascular diseases.

## Indicator of Arginine Metabolism



Based on the genes we analyzed, you are likely predisposed to have a **low** arginine level in blood.

This may mean poor arginine metabolism, but use this result only as a reference since this test does not measure actual levels. Consume the recommended daily amount to avoid excess or deficiency.

### Cod sperm sac

Cod’s sperm, rich in various minerals and arginine, is great for restoring stamina. Try cooking cod in a stew with bean sprouts.

### Try abalone when you are fatigued!

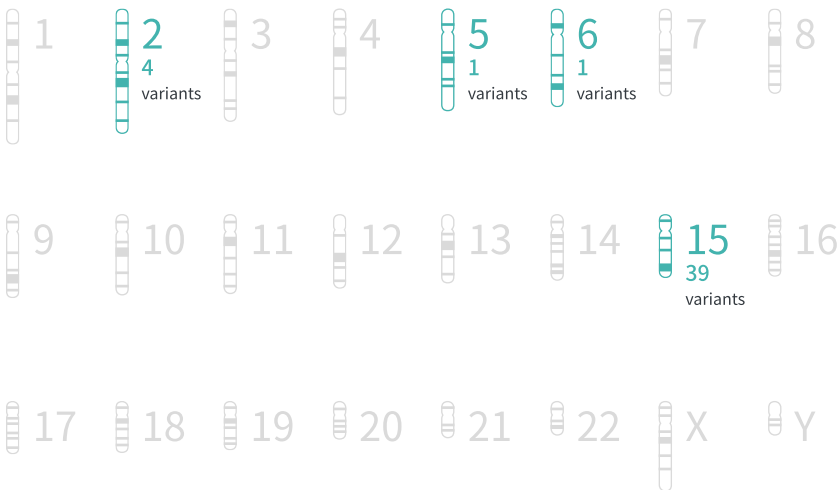
Abalone contains vitamins, glycine, arginine and other amino acids. It is good for elders’ stamina and children for their growth.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 116genetic markets, we have found **45** effect allele.

The credibility score is **76** points. because studies used for the analysis of this test item’s genes are based on an acceptable sample size.

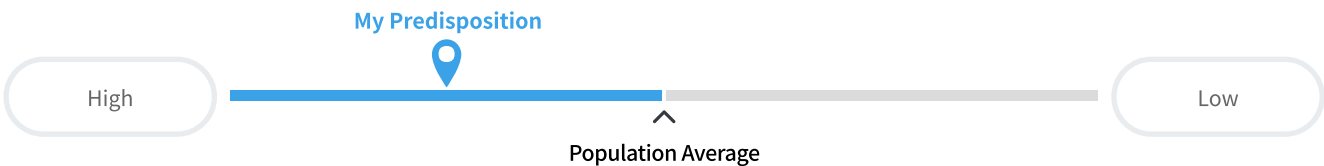


0 genetic markers with unknown location.

# Unsaturated Fat

A type of fat containing a high proportion of fatty acid molecules with double bonds. It is considered to be healthier because it can improve blood cholesterol levels and ease inflammation.

## Likelihood of Triglyceride Reduction From Unsaturated Fat:



Basd on the genes we analyzed, your likelihood of triglyceride reduction from unsaturated fat consumption is **high**.

Avoid excessive consumption of unsaturated fatty acids, and try eating healthy fats through foods such as fish and nuts.

### Nuts

Eat a handful of nuts such as walnuts, peanuts, almonds, and pine nuts every day. It is an eay way to consume healthy unsaturated fats.

### Unsaturated fatty acids vs omega-3

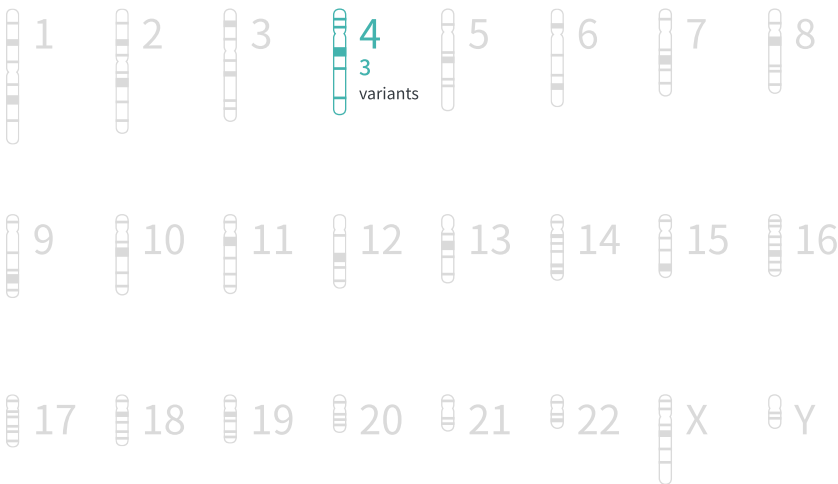
Omega-3 and omega-6 fatty acids are all unsaturated fats. They differ in carbon number and chemical structure.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 11genetic markets, we have found **3** effect allele.

The credibility score is **65** points. because studies used for the analysis of this test item's genes are based on a small sample size.

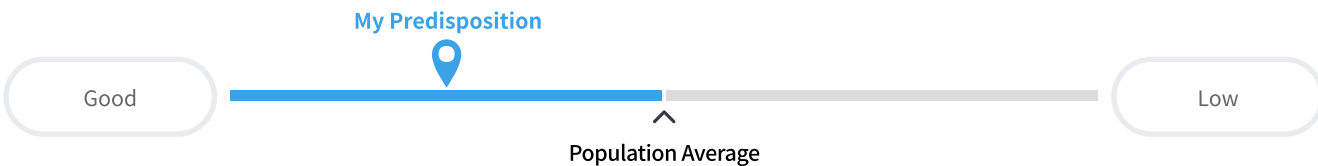


0 genetic markers with unknown location.

# Lutein and Zeaxanthin

Lutein and zeaxanthin are two important carotenoids, often found in yellowish-red vegetables or fruits. Both are potent antioxidants and offer a range of health benefits. However, lutein and zeaxanthin are best known for protecting your eyes.

## Likely Response to Lutein and Zeaxanthin:



Based on the genes we analyzed, you are likely predisposed to having a **high** response to lutein and zeaxanth consumption.

Pay attention to your daily consumption of nutrients beneficial for eye health, and give your eyes frequent rest from bright screens.

**Do eggs protect your eyes?**

Egg yolk is rich in lutein and zeaxanthin, helping to control blue light entering the eyes. This reduces eye fatigue and protects your eyes.

**Green vegetables**

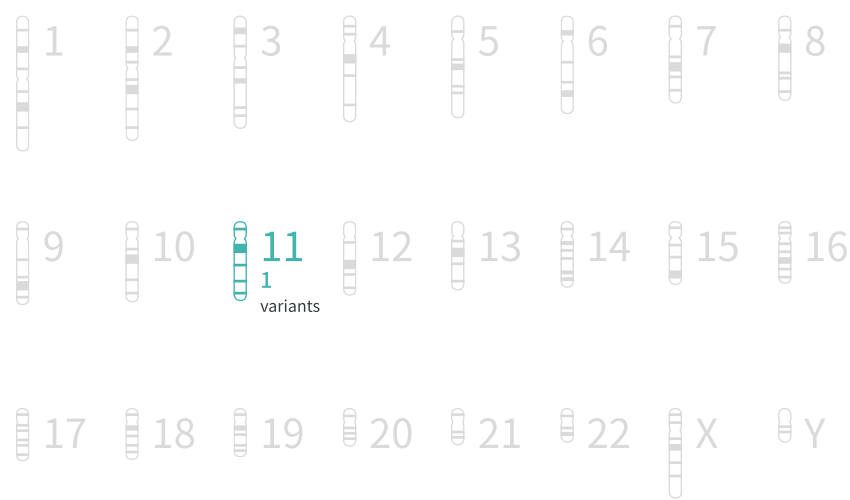
Enjoy green vegetables such as kale, spinach, broccoli, cabbage, etc. Nutrient consumption is safer through foods than supplements.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 4genetic markets, we have found **1** effect allele.

The credibility score is **50** points. because studies used for the analysis of this test item's genes are based on a very small sample size.



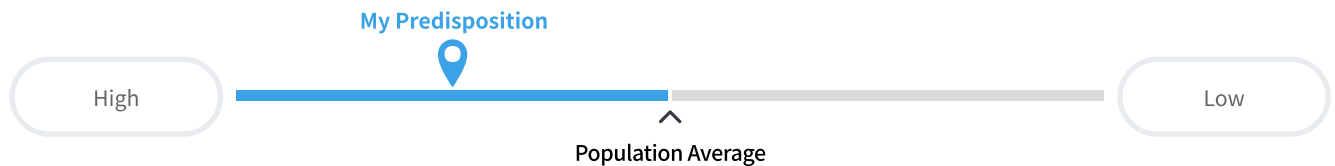
0 genetic markers with unknown location.



# Trp / Phe Metabolism

Tryptophan (Trp) and phenylalanine (Phe) are essential amino acids. They are converted into sleeping hormone melatonin and excitatory hormone adrenaline, respectively. Production of these hormones are regulated by competitive absorption.

## Likely Ability of Blood Tryptophan / Phenylalanine Metabolism:



Based on the genes we analyzed, you are likely predisposed to have a **high** tryptophan : phenylalanine ratio.

High phenylalanine levels can inhibit absorption of tryptophan, make you excited, and cause sleep disorder; however, use this result only as a reference since this test does not measure actual levels.

### Eat meat when you feel down

Trp is abundant in meats such as pork, beef, duck, and chicken. Milk is rich in calcium, magnesium, and Trp to help stabilize nerves.

### Control your happiness with food

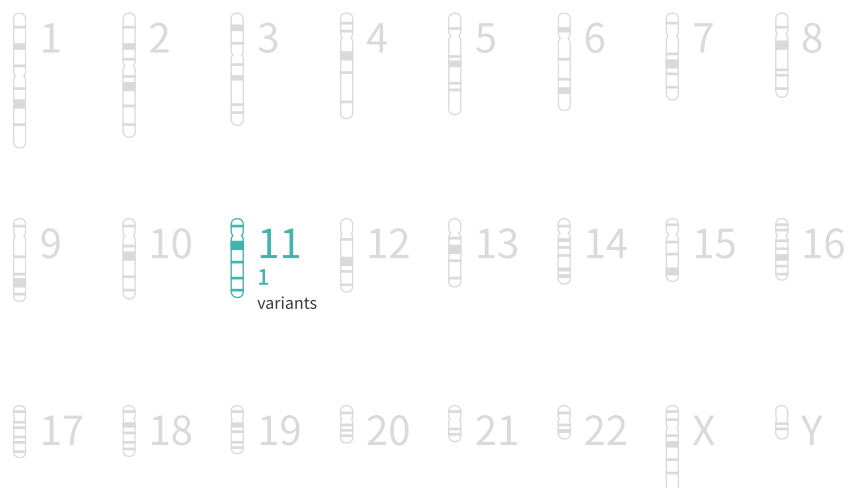
With vitamin B6 insufficiency, serotonin synthesis is poor even if Trp is abundant. Try eating a serving of vegetables or an apple.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 1 genetic markets, we have found **1** effect allele.

The credibility score is **67** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

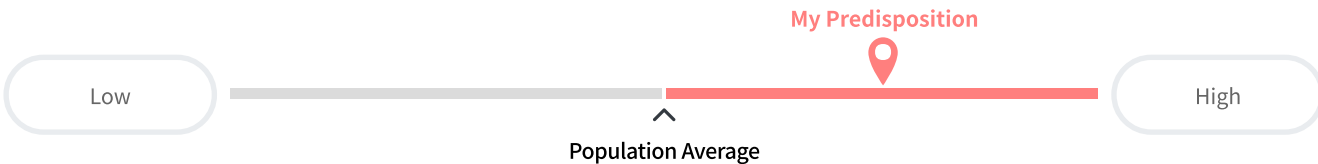


0 genetic markers with unknown location.

# Triglyceride Level

Triglycerides are a type of fat found in your blood. When you eat, your body converts any calories it doesn't use right away into triglycerides, which are stored in your fat cells. Later, hormones release triglycerides for energy between meals.

## Index for Heart Health



Based on your genetics, you are likely predisposed to have a **high** triglyceride level.

Although high level is indicative of poor heart health, use this result only as a reference since this test did not measure actual levels.

### Omega-3 fatty acids

Omega-3 fats, abundant in oily fish, is effective in lowering blood triglycerides. Try eating one piece of oily fish, four times a week.

### Swimming

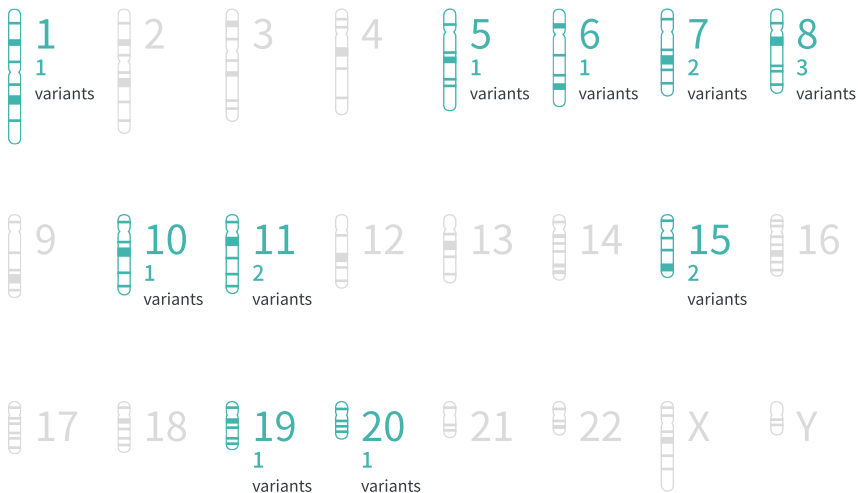
Swimming is an energy-intensive cardio exercise that uses the whole body. Swimming 30 minute daily helps to remove fat in the blood.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 31genetic markets, we have found **15** effect allele.

The credibility score is **50** points. because studies used for the analysis of this test item's genes are based on a very small sample size.



0 genetic markers with unknown location.

LDL stands for low-density lipoproteins. It is sometimes called the "bad" cholesterol because a high LDL level may lead to blocked or partially blocked arteries.

Low My Predisposition Population Average High

It is still important to maintain healthy cholesterol levels by avoiding foods high in saturated fats and doing regular cardio exercises.

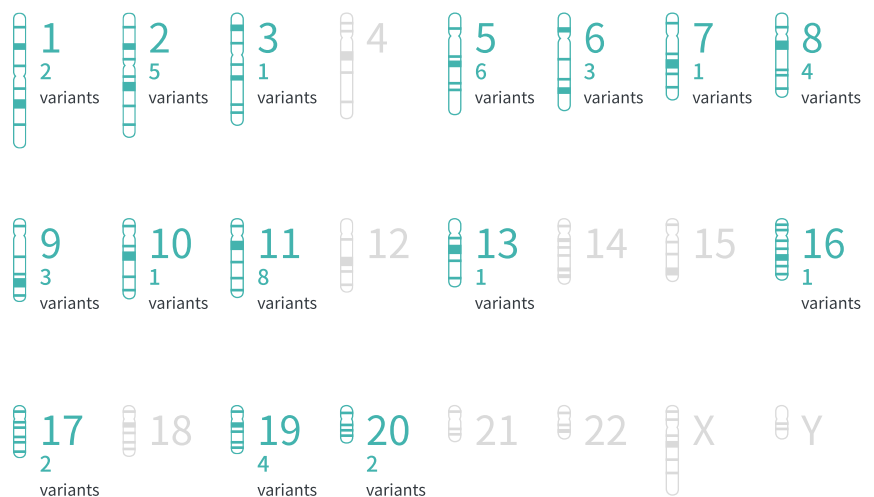
Saturated fat is a major cause of increased LDL in the body. Avoid eating butter, cheese, red meat, chocolate, and processed foods.

Swimming is a whole-body and energy-intensive cardio exercise. 30 minutes per day reduces cholesterol and enhances vascular health.

UP-To-Date, Cochrane Library

**From analyzed 90 genetic markets, we have found 44 effect allele.**

**The credibility score is 50 points.**  
because studies used for the analysis of  
this test item's genes are based on a  
very small sample size.

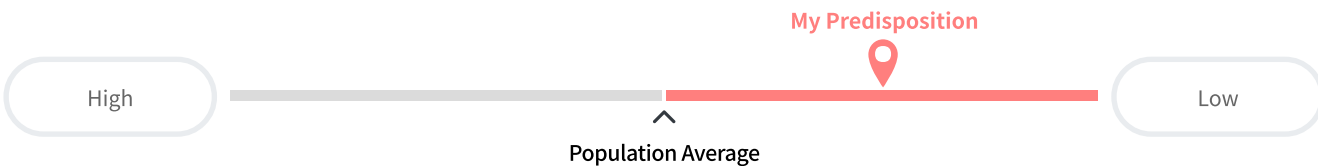


0 genetic markers with unknown location.

# HDL Cholesterol Level

HDL stands for high-density lipoproteins. It is sometimes called the "good" cholesterol because it carries cholesterol from other parts of your body back to your liver. Your liver then removes the cholesterol from your body.

## Likely HDL Cholesterol Level:



Based on the genes we analyzed, you are likely predisposed to having a **low** HDL cholesterol level.

It is important to increase good HDL cholesterol by practicing healthy habits, such as not smoking, not drinking, and cardio exercises.

### Niacin

Niacin boosts HDL and helps to lower LDL and triglycerides. It is abundant in foods such as mackerel, tomato sauce, beef, and peanuts.

### Water aerobics

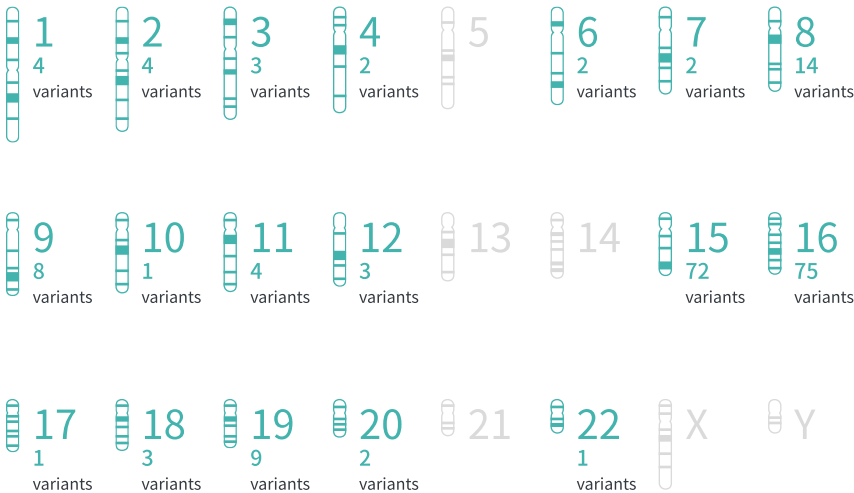
It is cardio exercise in water that is energy-intensive without excessive joint stress. 3~4 times per week, 40 minutes each time is good.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 628 genetic markets, we have found **210** effect allele.

The credibility score is **84** points. because studies used for the analysis of this test item's genes are based on a big sample size.

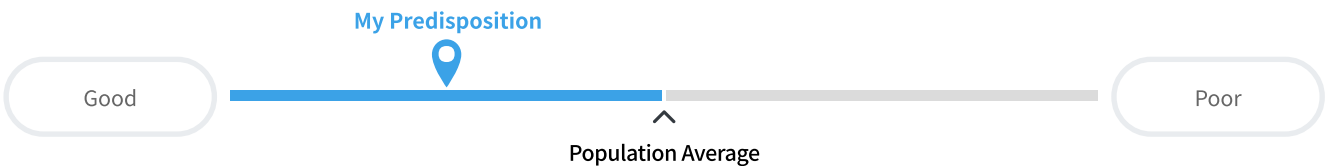


0 genetic markers with unknown location.

# Alcohol Metabolism

Alcohol metabolism is defined as the way alcohol is broken down and eliminated by the body. Differences in alcohol metabolism may put some people at greater risk while others, in some degree, may be protected from alcohol's harmful effects.

## Likely Ability to Metabolize Alcohol:



Trait

Based on the genes we analyzed, you are predisposed with a **good** ability to metabolize alcohol.

Even if you may have good innate ability, it is best to avoid excessive alcohol consumption and practice healthy drinking habits.

### Truth about hangover relievers

Commercially available hangover relievers reduce blood alcohol levels or protect against liver damage, but don't resolve hangovers quickly.

### Cause of hangover

Acetaldehyde is toxic and causes hangovers. If not metabolized quickly, it causes vitamin deficiency, liver failure, and hormonal issues.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 10 genetic markets, we have found **2** effect allele.

The credibility score is **50** points. because studies used for the analysis of this test item's genes are based on a very small sample size.

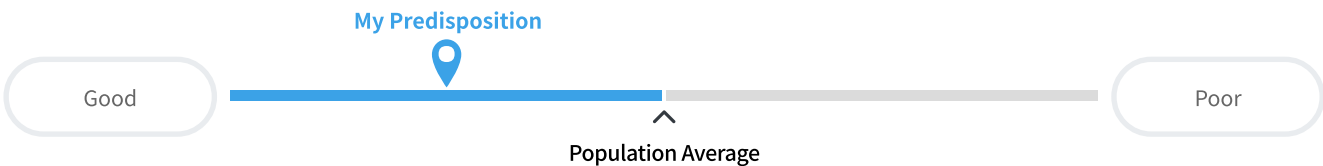


0 genetic markers with unknown location.

# Nicotine Metabolism

Nicotine metabolism is defined as the way nicotine is broken down and eliminated by the body. Differences in nicotine metabolism may put some people at greater risk while others, in some degree, may be protected from nicotine's harmful effects.

## Likely Ability to Metabolize Nicotine:



Based on your genetics, you are predisposed with a likely **good** ability to metabolize nicotine.

Although you may metabolize nicotine well, smoking obviously has negative health implications.

### Antioxidant vitamins

Make sure to consume antioxidant vitamins, vegetables, seaweed, and fruits every day. Also, eat nuts to maintain your health.

### Alcohol and smoking

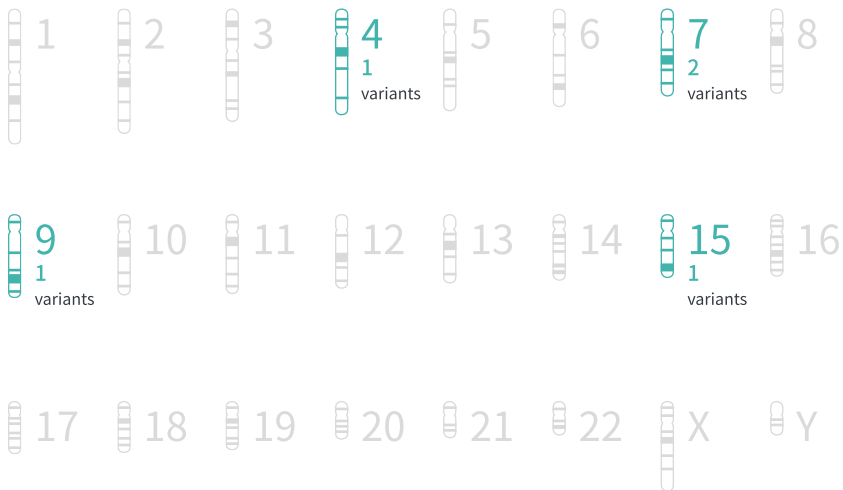
Tobacco and alcohol cause dopamine secretion in the brain, leading to pleasure. Try making a responsible plan to quit drinking.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 7 genetic markets, we have found 5 effect allele.

The credibility score is 95 points. because studies used for the analysis of this test item's genes are based on a big sample size.

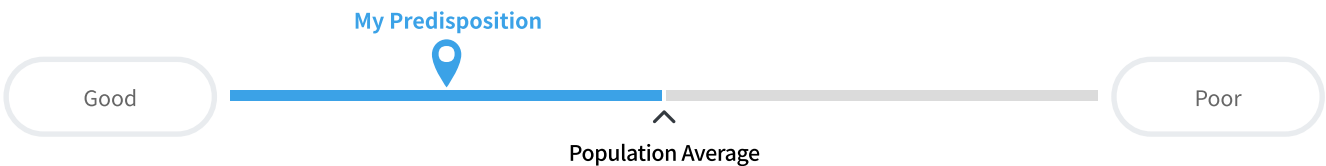


0 genetic markers with unknown location.

# Caffeine Metabolism

Caffeine metabolism is defined as the way caffeine is broken down and eliminated by the body. It determines how an individual reacts to caffeine and how much coffee one needs to drink in order to feel the effects.

## Likely Ability to Metabolize Caffeine:



Your genetics indicate that your likely ability to metabolize caffeine is **good**.

This result does not mean you can drink lots of coffee. Try moderate coffee intake with plenty of water.

### Hydration

Caffeine is a diuretic and releases water from the body. If you drink coffee often, make sure to also drink plenty of water.

### Less than 3 cups a day

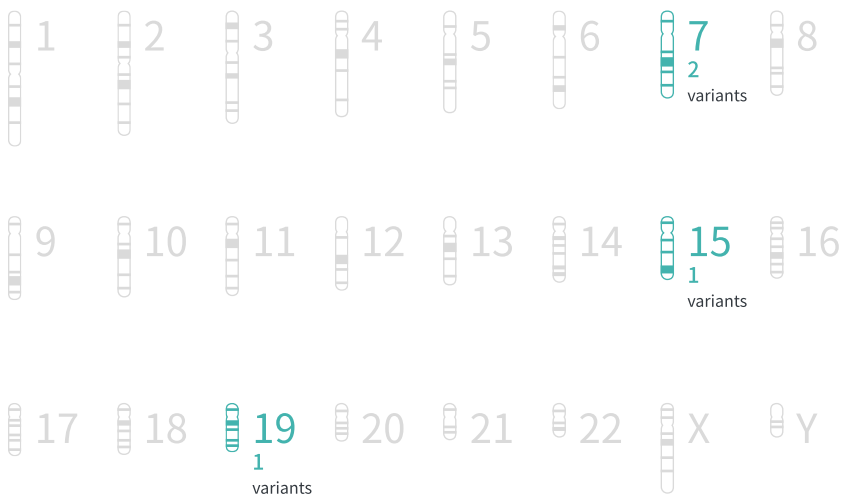
Recommended amount of caffeine is less than 400 mg per day. Limit yourself to 3 cups of coffee, which has 150 mg caffeine per cup.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 6 genetic markets, we have found 4 effect allele.

The credibility score is 75 points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

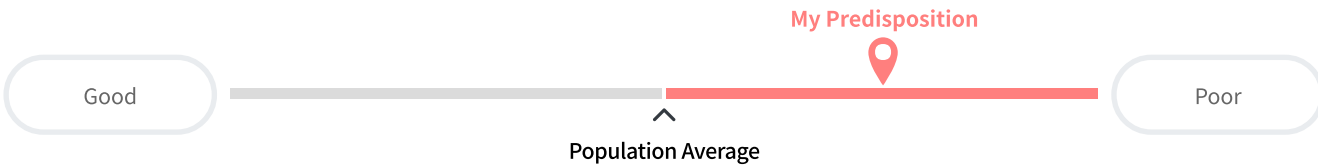


0 genetic markers with unknown location.

# Antioxidation

Antioxidation is a process in which reactive oxygen species (ROS), an unstable oxygen molecule, is removed to delay cell aging. ROS, produced from respiration and UV radiation, damages cells due to its toxicity and may cause various diseases.

## Likely Ability to Remove Reactive Oxygen Species:



Based on the genes we analyzed, you are likely predisposed with a **poor** ability to remove reactive oxygen species.

Try consuming antioxidant-rich foods such as tomato and pomegranate. It can also help to take antioxidizing supplements such as lycopene and vitamin E.

### Colorful fruits and vegetables

Try foods each colored green, red, yellow, purple, and white. Different phytochemicals have unique colors and antioxidant functions.

### Quit smoking

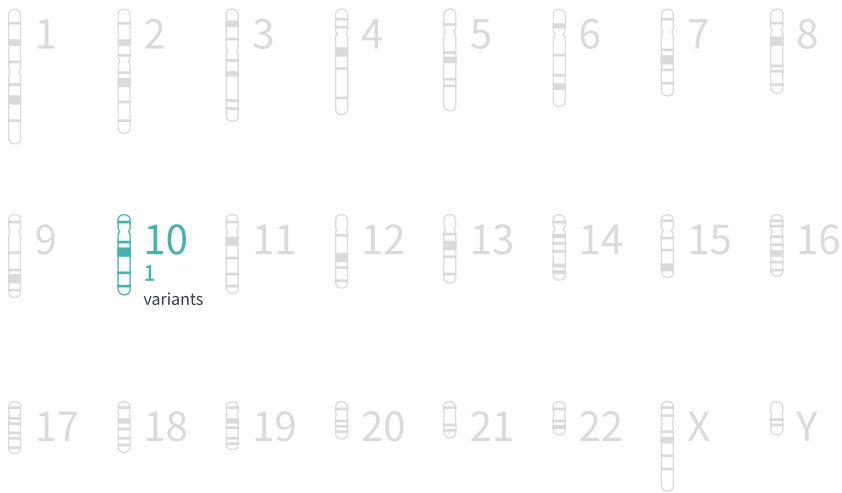
Cigarette smoke promotes peroxidation. Smokers require more antioxidant nutrients and should quit smoking to manage antioxidation.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 11 genetic markets, we have found **1** effect allele.

The credibility score is **55** points. because studies used for the analysis of this test item's genes are based on a small sample size.



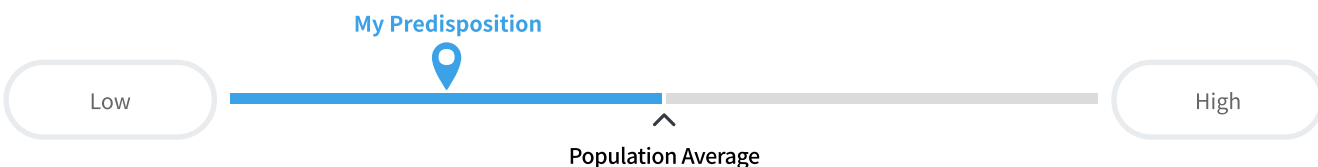
0 genetic markers with unknown location.



# Postural Hypotension

Postural hypotension is a form of low blood pressure that happens when you stand up from a sitting or lying position.

## Likelihood of Low Blood Pressure Occurring When You Stand Up:



Based on your genetics, your likelihood of postural hypotension occurring is **low**.

Avoid suddenly standing up and  
reduce excessive salt intake.

### Symptoms

Symptoms vary depending on the cause. If there is no cause, headache, neck stiffness, helplessness, and dizziness may occur.

### Neurally mediated syncope (fainting)

It can be caused by a slow heart rate or temporary hypotension, from the autonomic nervous system abnormally reacting to external stimuli.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 4genetic markets, we have found 2 effect allele.

The credibility score is 95 points.  
because studies used for the analysis of  
this test item's genes are based on a big  
sample size.

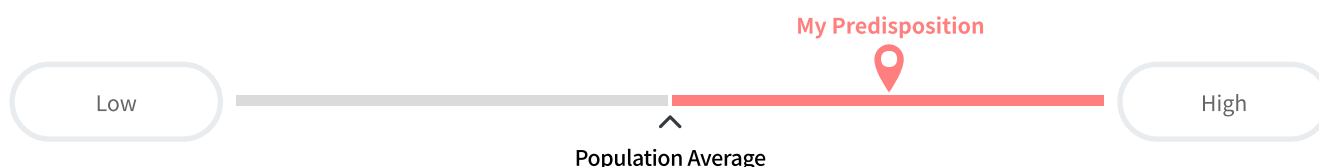


0 genetic markers with unknown location.

# Insulin Resistance

Insulin is a hormone which plays a number of roles in the body's metabolism. Insulin regulates how the body uses and stores glucose and fat.

## Likelihood of Losing Blood Glucose Regulation:



According to your genetics, your likelihood of developing insulin resistance is **high**.

Insulin resistance can ultimately lead to type 2 diabetes. Although this result should only be used as a reference, be mindful of your sugar intake.

### Soybeans

Eat soybeans mixed with rice, or soy foods such as tofu and soy milk. Pinitol improves insulin resistance and helps control blood sugar.

### Light cardiovascular exercise

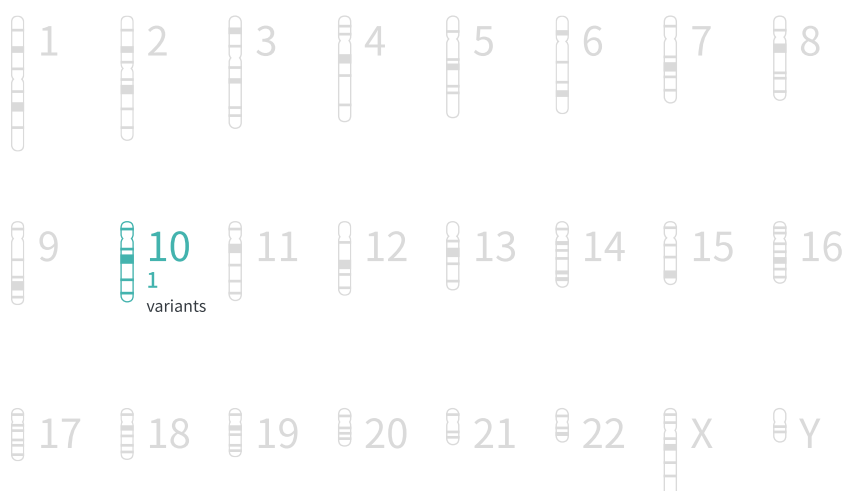
Start with walking, jogging, and cycling. We recommend exercising about 40 minutes each time, 3~4 times per week.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 2genetic markets, we have found 1 effect allele.

The credibility score is 59 points. because studies used for the analysis of this test item's genes are based on a small sample size.

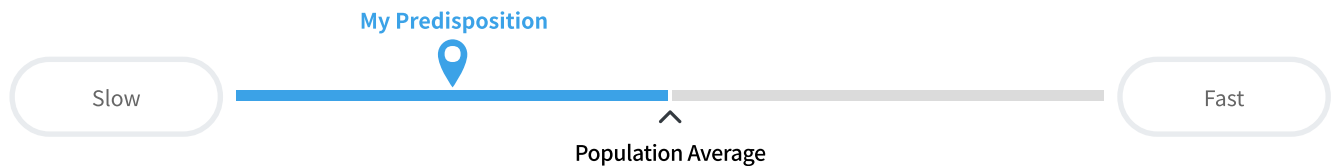


0 genetic markers with unknown location.

# Glycation and Aging

Glycation is a biochemical process where sugar attaches to proteins (ie. collagen and elastin) in our skin, causing discoloration, wrinkles, sagginess and loss of suppleness.

## Likely Rate of Skin Aging From Eating Sugar:



Trait

Based on the genes we analyzed, you are likely predisposed with a **slow** rate of aging from eating sugar.

Although your rate may be slow, it is still a good idea to limit your consumption of sugary foods.

### Steamed or boiled foods

Advanced glycation end-product causes aging and increases by up to 100 times with grilling. So steaming or boiling your food is recommended.

### Burning 1,000 kcal with a week of exercise

While excessive exercise promotes aging, moderate exercise helps to slow it. Try cardio exercise for at least 20 minutes, three times a week.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 11 genetic markets, we have found no effect allele.

The credibility score is **53 points**. because studies used for the analysis of this test item's genes are based on a small sample size.

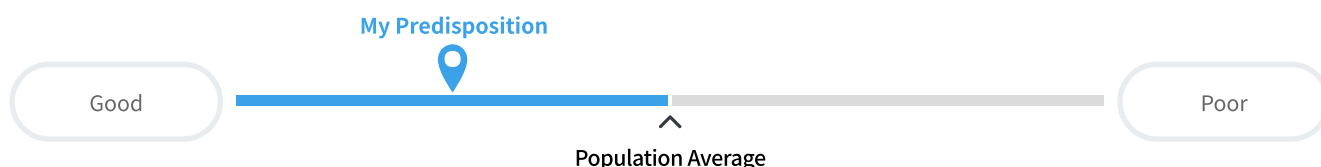


0 genetic markers with unknown location.

# Deep Sleep

Deep sleep is the stage of sleep required to feel rested and refreshed when you wake up. It is when your brain waves slow down, and your heartbeat and breathing become their slowest as your muscles relax.

## Likely Ability to Sleep Deeply:



According to your genetics, you are predisposed with a **good** ability to sleep deeply at night.

Although you may sleep deeply, it is a good idea to have good sleeping habits. Refrain from using your smartphone before falling asleep.

### Foods that help you sleep

A glass of milk is rich in tryptophan, which produces melatonin and has a soothing effect. Drinking warm milk one to two hours before bed helps with sleep. Beware of cold milk, which can interfere, rather than help with sleep. Also, kiwi is rich in nutrients such as vitamins C, E, calcium, magnesium, and inositol. These help to relax the nervous system

### Keep your smartphone away

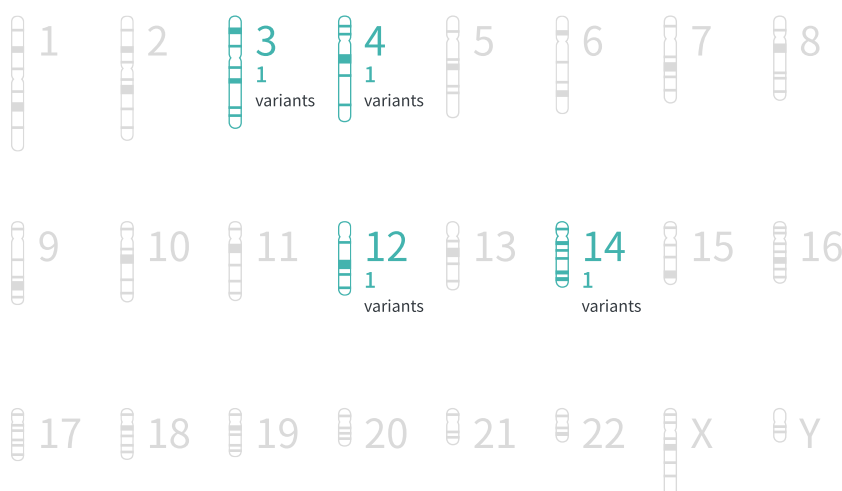
Being exposed to your smartphone's bright screen until falling asleep awakens your brain and interferes with sleep. Hormones like melatonin, secreted during sleep, are reduced due to the smartphone's light. Watching TV for a long time is not good for eye health, so it is recommended that you stop 1 hour prior to sleeping.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 7 genetic markets, we have found **4** effect allele.

The credibility score is **68** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

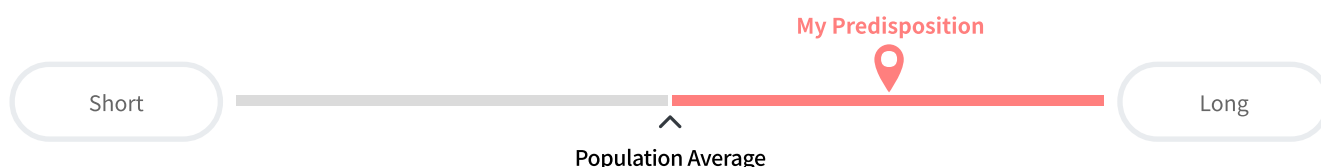


0 genetic markers with unknown location.

# Sleep Latency

Sleep latency is the amount of time it takes you to go from being fully awake to asleep. It can be affected by environmental factors.

## Likely Time You Require to Fall Asleep:



Based on the genes we analyzed, the time it takes for you to fall asleep after getting into bed is likely **long**.

Practice good sleep habits such as not using a bright screen before bed. Drinking warm milk before sleeping may also help you fall asleep.

### What is sleep latency?

The amount of time it takes you to transition from wakefulness to sleep is called sleep latency. A normal sleep latency is about 10-20 minutes.

### How to improve sleep efficiency?

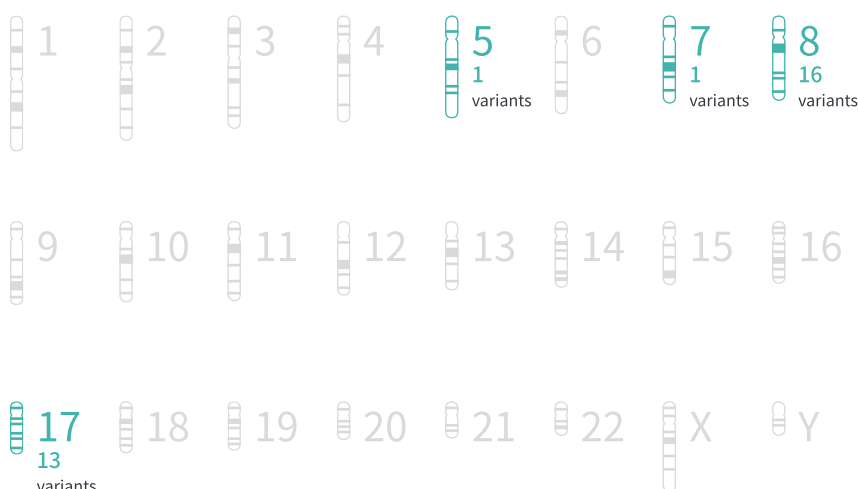
First is to improve sleep hygiene. Sleep hygiene refers to habits and environmental factors that may influence the length and quality of one's sleep. Doctor may also incorporate cognitive behavioral therapy.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 49 genetic markets, we have found **31** effect allele.

The credibility score is **64** points. because studies used for the analysis of this test item's genes are based on a small sample size.

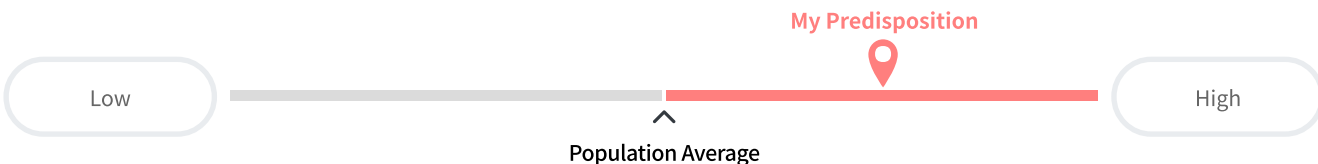


0 genetic markers with unknown location.

# Obstructive Sleep Apnea

Sleep apnea is a sleep disorder in which breathing is briefly and repeatedly interrupted during sleep. The word "apnea" refers to a breathing pause that lasts at least ten seconds.

## Likelihood of Breathing Issue During Sleep:



Based on your genetics, you are predisposed to have a **high** likelihood of developing obstructive sleep apnea.

Maintain a healthy weight and blood pressure level by eating a balanced diet and exercising regularly. Limit your alcohol intake, as it can interfere with your sleep.

### Snoring

With obstructive sleep apnea, you suffer from shortness of breath over a period of time while sleeping. Snoring is typical among sleep apnea patients with narrow upper airways. Most commonly affecting men, sleep apnea may cause complications such as fatigue, headache, decreased sexual function, hypoxia-mediated hypertension and high blood pressure.

### Preventing Obstructive Sleep Apnea

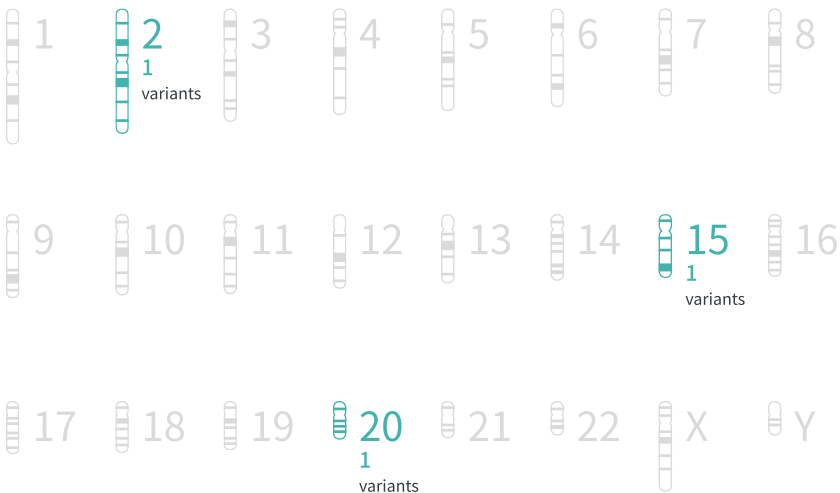
Obstructive sleep apnea is more common in obese individuals. If fat builds up inside the airway, you should be careful and lose weight since the airway becomes narrower and symptoms like snoring become worse. Smoking and excessive alcohol consumption also have negative effects on the airway muscles and mucous membranes.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 4genetic markets, we have found 3 effect allele.

The credibility score is 95 points. because studies used for the analysis of this test item's genes are based on a big sample size.

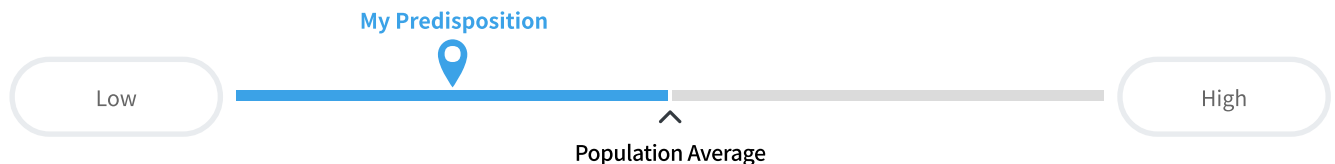


0 genetic markers with unknown location.

# Insomnia

Insomnia is a disorder in which people have difficulty falling or staying asleep. Symptoms include waking up during the night, daytime sleepiness, and irritability.

## Likelihood of Having Insomnia:



According to the genes we analyzed, you are predisposed with a **low** likelihood of having insomnia.

Although your risk is low, manage your stress to improve sleep quality.

## Causes of Insomnia

Insomnia is a state in which you cannot fall sleep even in a comfortable environment, wake up frequently, or cannot sleep well. It occurs in extreme stress situations including sickness and break up. Most people sleep normally once they get over such situations, but individuals who do not recover from the stress can experience chronic insomnia.

## Correct Sleeping Habits

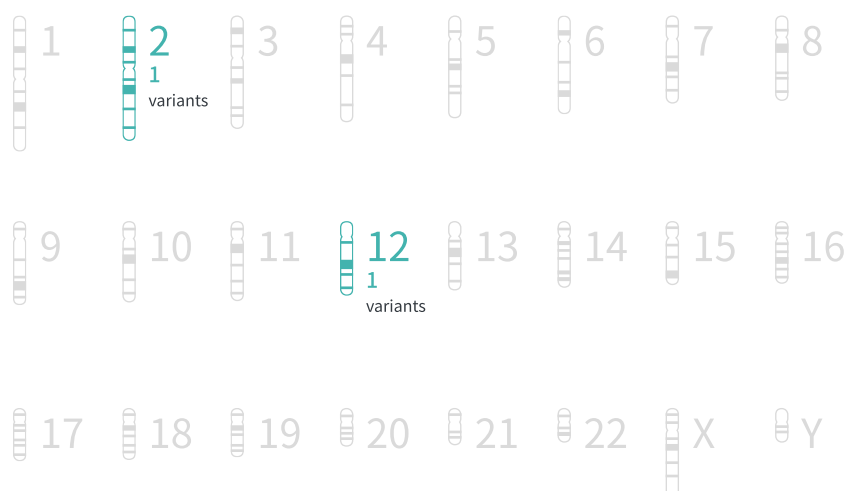
Treating insomnia requires changing sleeping habits rather than relying on drugs. Avoid daytime naps and sleep at regular times. Exercising regularly during the daytime with sunlight is good, but avoid exercising close to bedtime as this can interfere with sleep. If you cannot sleep while laying down in bed, you shouldn't force yourself to fall asleep.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 3genetic markets, we have found **2** effect allele.

The credibility score is **68** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

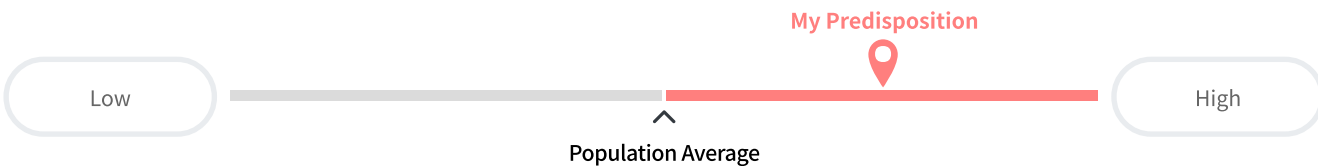


0 genetic markers with unknown location.

# Narcolepsy

Narcolepsy is a sleep disorder characterized by sudden and uncontrollable episodes of sleep and in some cases cataplexy (loss of muscle control, often triggered by a strong emotion such as laughter).

## Likelihood of Development:



Based on your genetics, you are predisposed with a **high** likelihood of developing narcolepsy.

Exact cause of this condition is not yet known, but practice regular sleeping habits and avoid excessive alcohol and caffeine intake.

### Features of Narcolepsy

Narcolepsy is a sleep disorder characterized by excessive daytime sleepiness, sleep paralysis, or hallucination. It has common symptoms of falling asleep involuntarily and waking up with a clear mind after 15~20 minutes. It typically starts during adolescence, and is easily misunderstood as laziness due to daytime napping.

### REM and non-REM Sleep

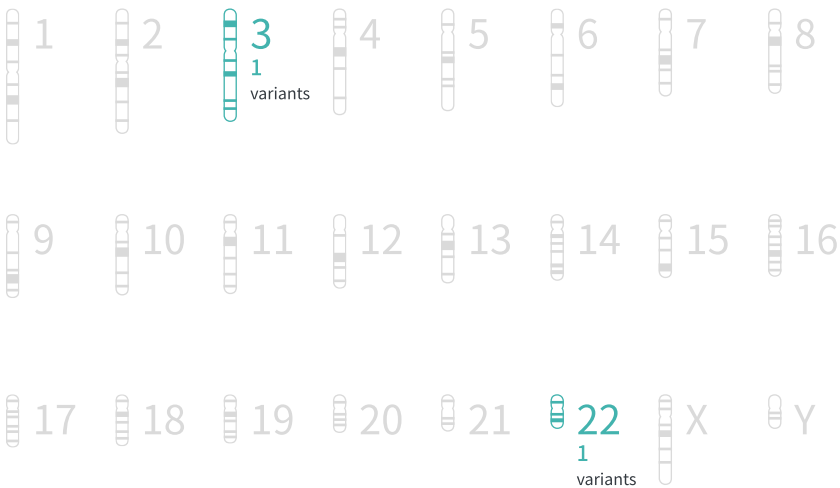
Sleep can be divided into two phases: REM sleep (dreaming with no movement during sleep) and non-REM sleep. REM accounts for 20~25% of total sleep and the rest is non-REM. These alternate with each cycle being 90~120 minutes, and repeat 5 times overnight. For narcolepsy, the interval is shortened and usually fall into REM sleep within 15 minutes.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 6genetic markets, we have found 2 effect allele.

The credibility score is 75 points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

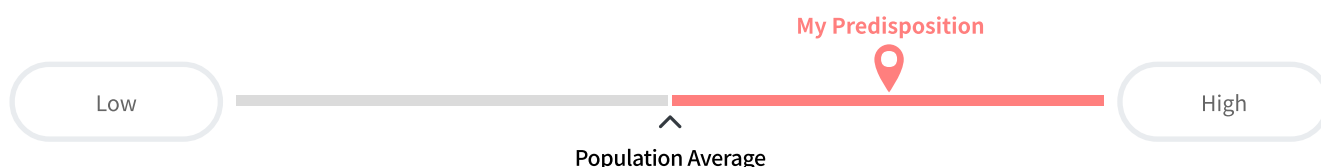




# Hypersomnia

Hypersomnia is a sleep disorder characterized by excessive daytime sleepiness or prolonged sleep patterns. This condition causes people to feel constantly tired, which may result in them sleeping more during the night or napping during the day.

## Likelihood of Development:



Based on your genetics, you are predisposed with a **high** likelihood of developing hypersomnia.

Manage your stress to have quality sleep. Activities such as yoga and meditation may also help.

## Features of Hypersomnia

Hypersomnia is a neurological disorder of excessive sleepiness even after long stretches of sleep, or discomfort due to an irregular sleep rhythm. Hypersomnia is similar to narcolepsy, except it does not cause loss of energy during laughter or excitement. It is caused by increased stress, aging, change in sleep cycle, etc.

## Hypersomnia Self-diagnosis

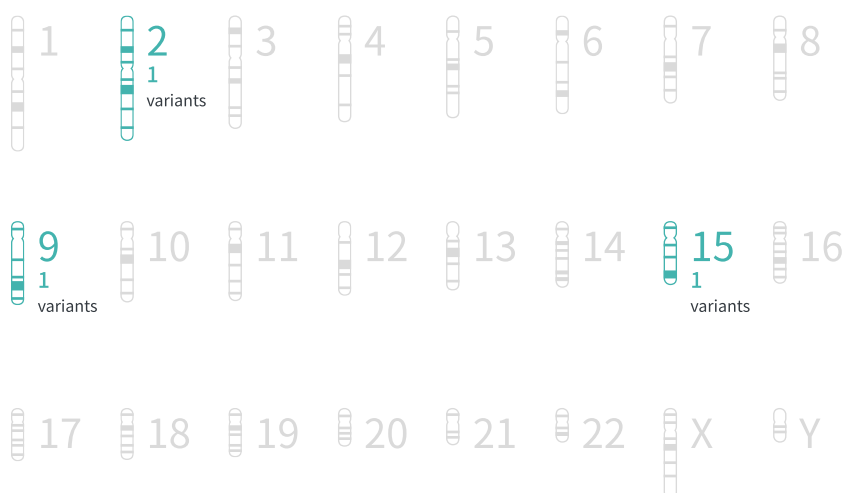
If you score a total of 13 points or more within the score range between 0 points (not drowsy) to 3 points (frequently drowsy), your condition is likely to be pathological. When I read a book / When I watch TV / When I sit / When I sit in a car for an hour / When I lie down in the afternoon / When I talk / When I sit after lunch.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 6 genetic markets, we have found 3 effect allele.

The credibility score is 93 points. because studies used for the analysis of this test item's genes are based on a big sample size.

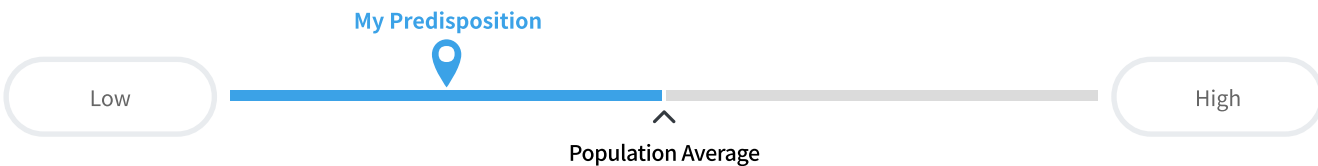


0 genetic markers with unknown location.

# Excessive Sleepiness

Excessive sleepiness is characterized by feeling drowsy or sluggish most days. Many cases are due to nighttime sleep disorders such as sleep apnea and sleep deprivation.

## Likelihood of Feeling Sleepy All Day:



Based on the genes we analyzed, your likelihood of experiencing excessive sleepiness is **low**.

Although your risk is low, make sure to practice good sleeping habits. These include regular sleeping schedule and avoiding evening caffeine intake.

### Daytime Drowsiness

Daytime drowsiness is falling asleep at an undesired time, experienced in sleep disorders such as narcolepsy. It is caused by a lack of sleep. It can even be caused by a lack of deep sleep during long periods of sleeping. If this symptom continues, an improvement in sleeping habits is necessary to avoid negatively affecting daily routine.

### Sleep Polyvalence Test

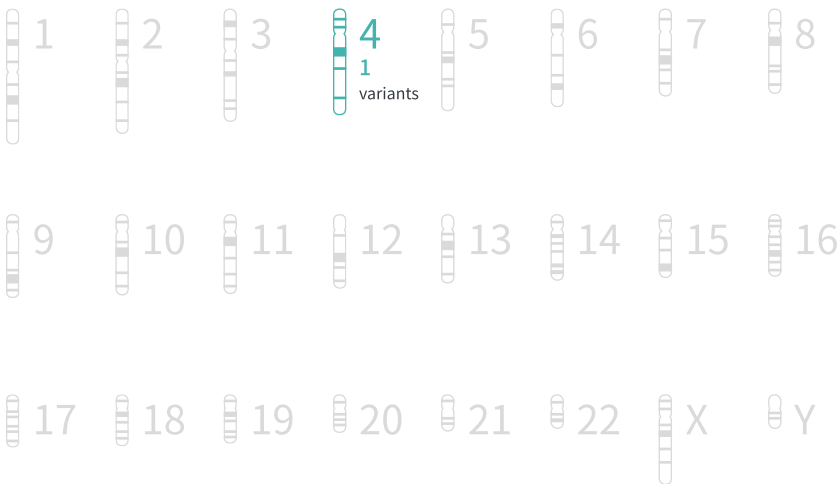
This test is used to diagnose various sleep disorders including daytime drowsiness and sleep apnea. It allows observation of EEG, EMG, ECG, blood pressure, eye movement, snoring, respiration degree, oxygen saturation, etc. during sleep. Based on these results, experts can make precise and professional identification of sleeping problems.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 2genetic markets, we have found 1 effect allele.

The credibility score is 83 points. because studies used for the analysis of this test item's genes are based on a big sample size.

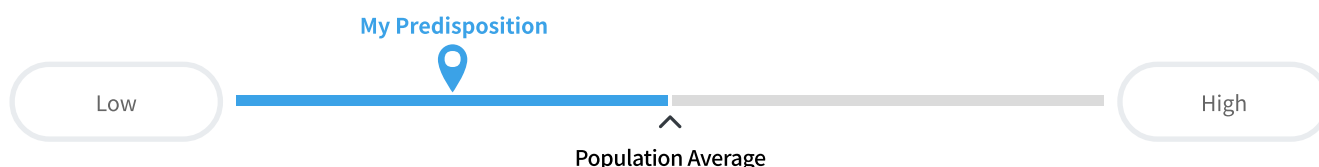


0 genetic markers with unknown location.

# Daytime Nap

Daytime nap is often frowned upon in work cultures. However, there are cultures where it is quite acceptable.

## Likelihood of Taking Daytime Naps or Breaks:



Based on your genetics, your likelihood of being sleepy during the afternoon is **low**.

A light nap can rejuvenate your afternoon, but a nap longer than 30 minutes can interfere with your night sleep

### Naps are Physiological Phenomena

Sleep is controlled by the balance between desire for sleep and state of arousal. If you stay awake for long, the desire to sleep (sleep pressure) will increase, and decrease if you sleep. The intensity of arousal fluctuates between high and low during the daytime. Weakening of arousal between 1 and 3 p.m. results in drowsiness. This is called daytime nap.

### Benefits of a Nap

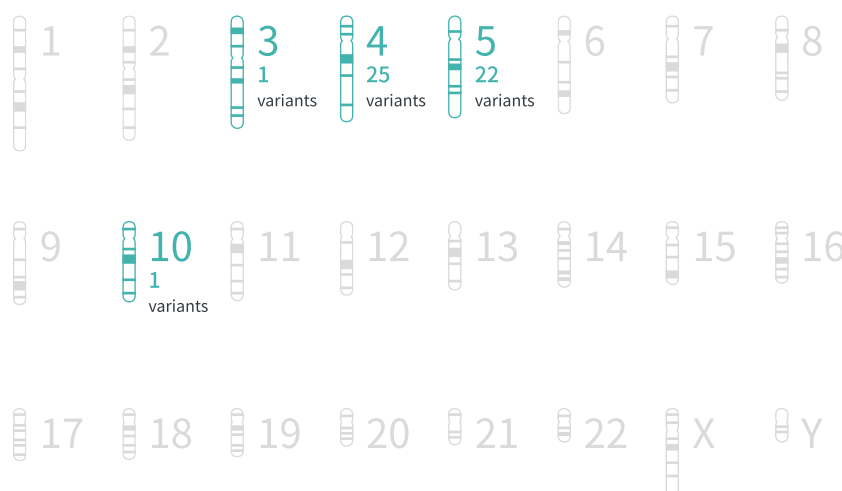
A short nap after lunch helps you to spend a fruitful afternoon. REM sleep helps to improve problem-solving skills and organize complex ideas logically. Especially, it helps to make knowledge and logic based decisions more efficient. Napping over 30 minutes may cause sleeping difficulties at night. Thus, short naps between 15~30 minutes are recommended.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 102 genetic markets, we have found **49** effect allele.

The credibility score is **50** points. because studies used for the analysis of this test item's genes are based on a very small sample size.

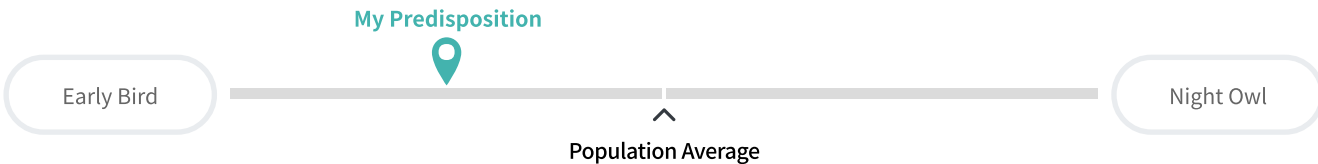


0 genetic markers with unknown location.

# Circadian Rhythm

Our innate preference for mornings or evenings is determined by the phase of our circadian rhythms.

## Early Bird or Night Owl?



Based on the genes we analyzed, you are likely predisposed to being an **early bird**.

Doing important tasks in the morning may be more effective for you.

### Natural Circadian Rhythm

Most physiological and psychological processes follow a natural daily circadian rhythm. Sleep-arousal, basal body temperature, hormone cycle, etc. are based on this rhythm, mediated by the hypothalamus' biological clock. Generally, the biological clock is affected by light sensed by our eyes, but the clock still moves in the absence of light.

### Morning Person vs. Night Person

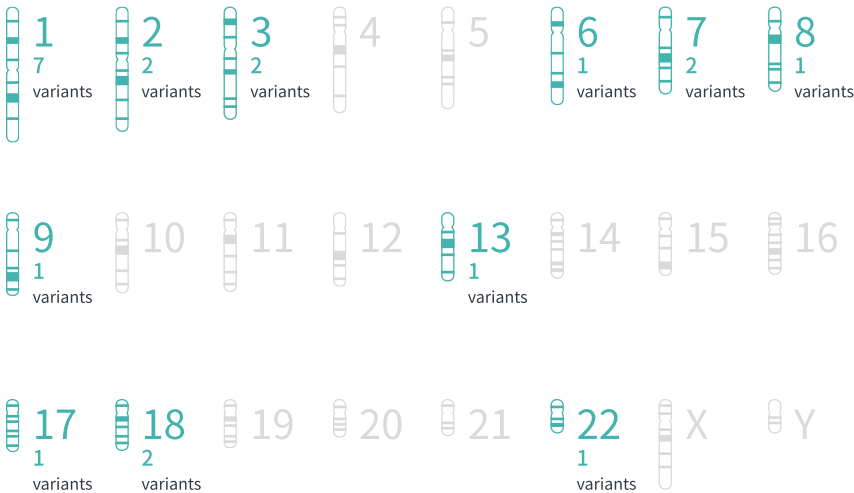
Being a morning or night person is not about diligence, but about the circadian rhythm determined by genes, age, and gender. A morning person sleeps deeply at night and concentrates well in the morning. A night person is the opposite. To avoid a sleep disorder, your lifestyle should fit into your own personal circadian rhythm.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 28 genetic markets, we have found **21** effect allele.

The credibility score is **83** points.  
because studies used for the analysis of this test item's genes are based on a big sample size.

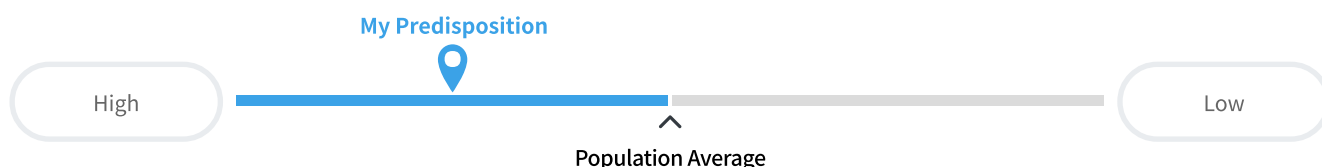


0 genetic markers with unknown location.

# Muscular Growth

Muscle strength is the amount of force your muscle can exert in one effort. Increase in the number of muscle fibers will also increase muscle size and strength.

## Tendency to Develop Muscle:



Genetically, your likelihood of being a muscular person is **high**.

With a bit of exercise, you can experience good results.

### Muscle growth and nutrition

Muscle is high in protein and water. Consuming good protein, carbohydrates, fats, vitamins, minerals, etc. helps build muscle.

### Core exercise

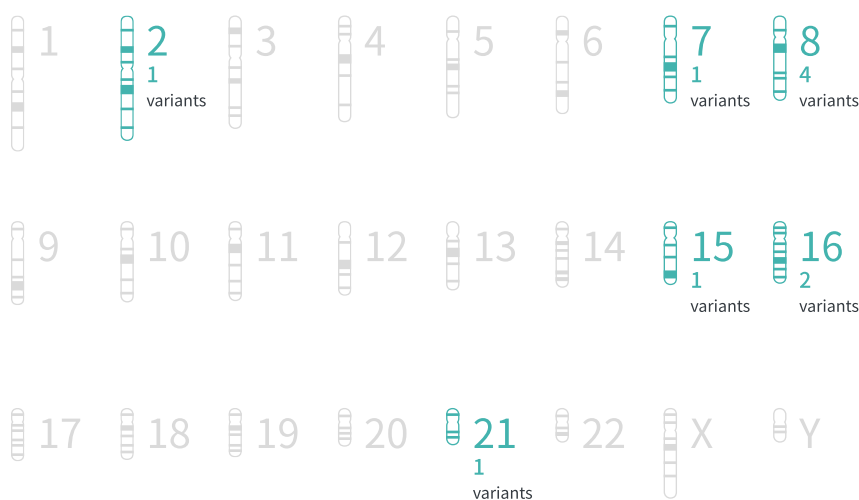
In addition to arm/leg strength, core exercises are also important. Forming balanced body by strengthening core muscles.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 14genetic markets, we have found **10** effect allele.

The credibility score is **95** points.  
because studies used for the analysis of this test item's genes are based on a big sample size.

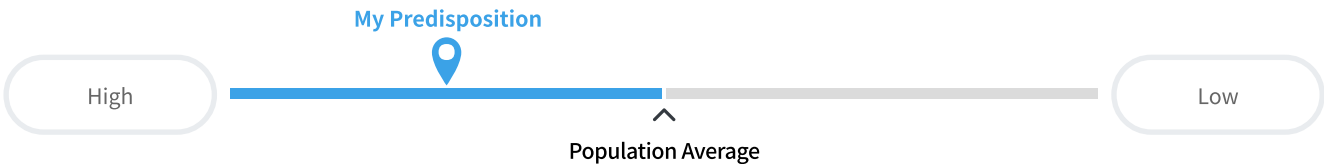


0 genetic markers with unknown location.

# Lower Body Strength

Your hips, butt and legs make up your lower body, the location of some of the largest and strongest muscles of the body.

## Tendency to Develop Lower Body Strength with Exercise:



Based on the genes we analyzed, you likely have a **high** tendency for developing lower body strength with exercise.

You may have an easier time strengthening the lower body. Beware that excessive exercise can lead to injury.



### Why lower body strength is important

Aging results in decreasing hip and thigh muscle masses. Increasing lower body strength helps to balance body and prevent lower back pain.



### Squats

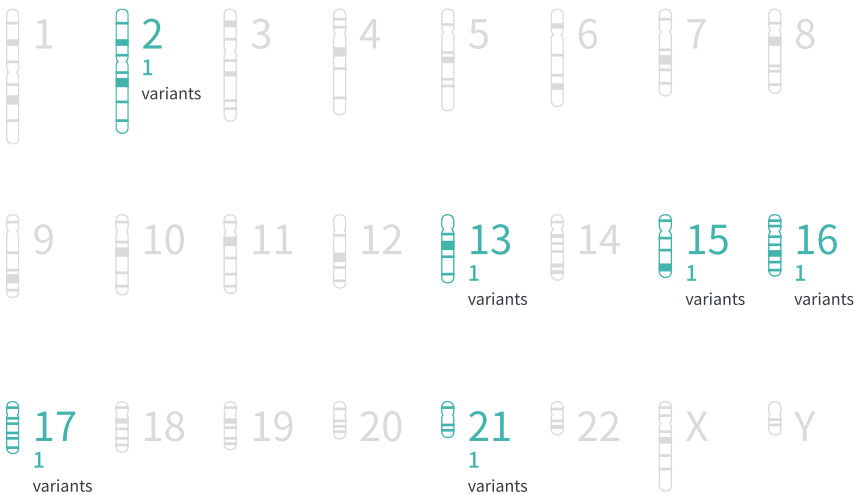
A typical lower body exercise, squats strengthen thigh, abdominal, and spinal muscles. It is also good for correcting bad posture.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 11 genetic markets, we have found **6** effect allele.

The credibility score is **73** points. because studies used for the analysis of this test item's genes are based on an acceptable sample size.

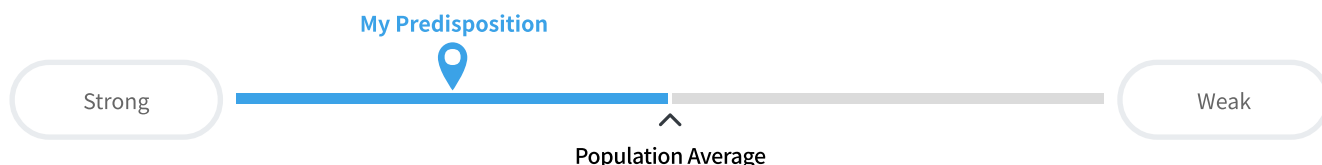


0 genetic markers with unknown location.

# Grip

Grip is the force applied by the hand to pull or hold on to an object. It requires muscular strength of ones forearm.

## Likely Grip Strength:



Based on the genes we analyzed, you are likely predisposed to having a **strong** grip strength.

You may have an easier time strengthening the lower body. Beware that excessive exercise can lead to injury.

### Hand grip

Hand grip is the easiest exercise to strengthen the antebrachial muscle and grip. Couple this with wrist stretching to prevent stress.

### Grip strength and health

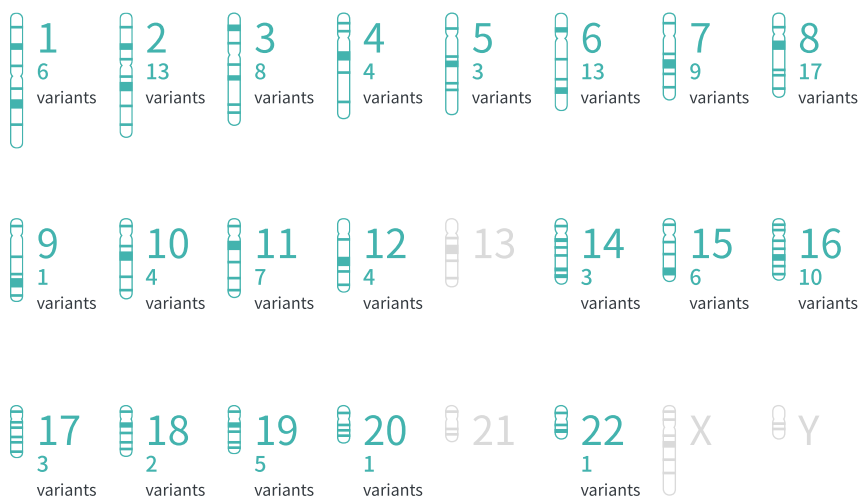
Grip strength is closely related to daily activities, such as lifting objects and eating. This also affects cognitive function and cardiovascular disease.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 192genetic markets, we have found **120** effect allele.

The credibility score is **85** points. because studies used for the analysis of this test item's genes are based on a big sample size.

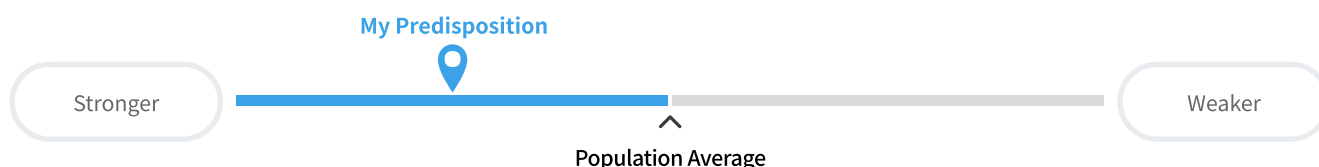


0 genetic markers with unknown location.

# Explosive Strength

Explosive muscle strength includes characteristics such as strong handgrip strength and elbow flexion. These traits are more commonly seen in power athletes who do weight lifting and high resistance activities.

## Likely Muscle Strength and Power:



According to your genetics, you are predisposed to have a **stronger** than average explosive strength.

With a bit of exercise, you may see noticable results. However, be aware that excessive exercise can lead to overuse injuries.

### What is fast twitch muscle?

Fast twitch muscle is used when exerting momentary force. It has high anaerobic metabolism, fast contraction, but high fatigue.

### Why African athletes are good sprinters

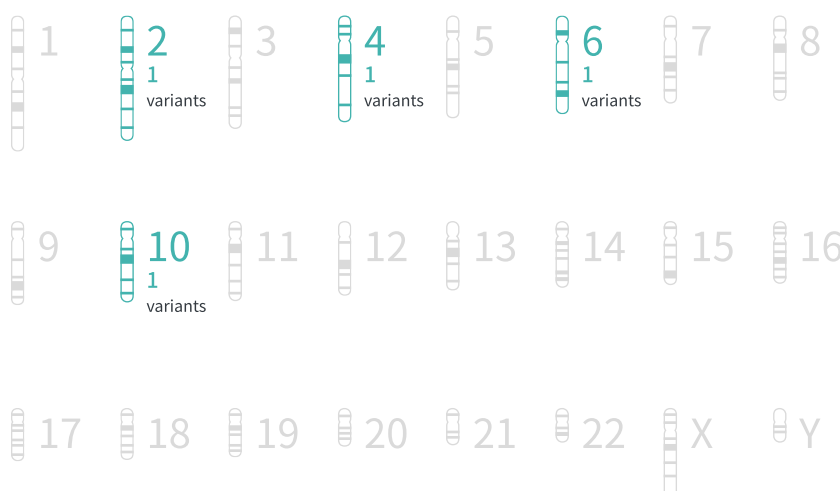
RR genotype of the fast twitch muscle gene ACTN3 is found in African sprinters. ACTN3 is known to aid in providing explosive energy.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 4genetic markets, we have found **4** effect allele.

The credibility score is **50** points.  
because studies used for the analysis of this test item's genes are based on a very small sample size.



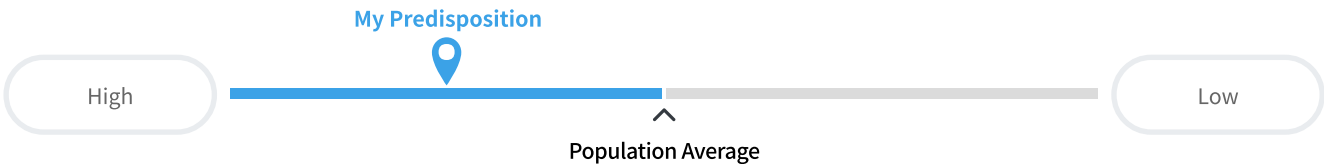
0 genetic markers with unknown location.



# Muscular Endurance

Muscular endurance is the ability of a muscle or group of muscles to sustain repeated contractions against a resistance for an extended period of time.

## Tendency to Develop Muscular Endurance with Exercise:



Based on the genes we analyzed, you likely have a **high** tendency for developing muscular endurance with exercise.

You may have an easier time developing muscular endurance with exercise. Beware that excessive exercise can lead to injury.



### Marathoner vs. Sprinter

While a marathoner's training program focuses on cardiac endurance, muscle endurance and stamina, sprinters focus on improving speed and explosiveness.



### How to evaluate muscle endurance

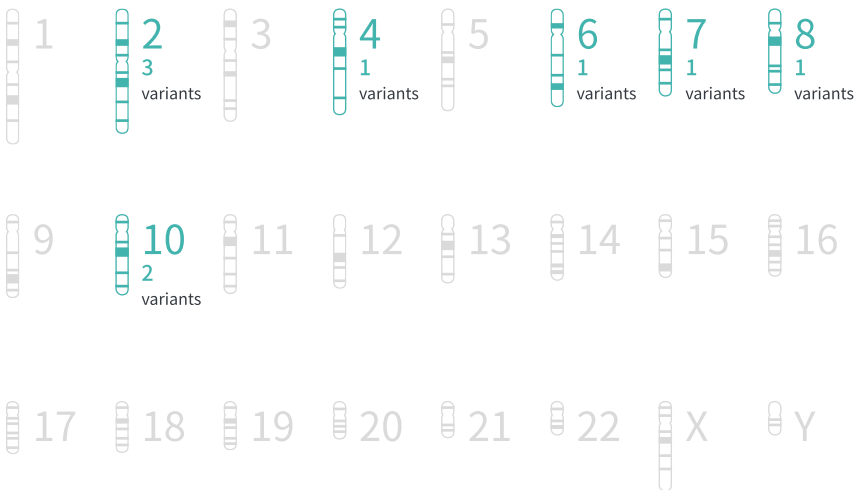
Measured by the number of times a person can repeat a movement of 1/3 of maximum muscle strength, and by cardio efficiency.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 15 genetic markets, we have found **9** effect allele.

The credibility score is **90** points.  
because studies used for the analysis of this test item's genes are based on a big sample size.

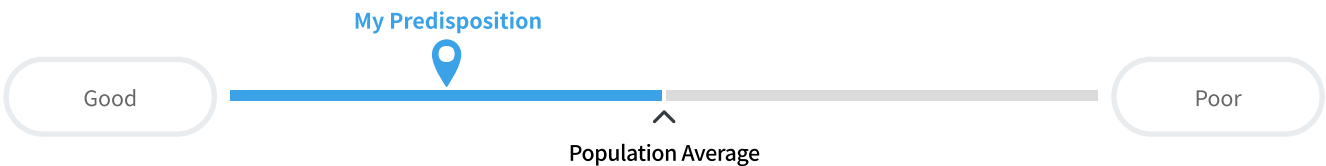


0 genetic markers with unknown location.

# Cardiovascular Endurance


Cardiovascular endurance is the ability of the heart, lungs and blood vessels to deliver oxygen to working muscles and tissues, as well as the ability of those muscles and tissues to utilize that oxygen.

## Likely Maximum Oxygen Uptake:




Based on the genes we analyzed, you are likely predisposed to having a **good** cardiovascular endurance.

It may be easier for you to enhance your cardiovascular endurance. Beware of injury from excessive exercise.

 **Why is cardiopulmonary endurance (VO2 max) important?**

VO2 max is used for endurance training such as long-distance running. With higher VO2 max, you can run longer at a constant pace.

 **Factors that determine VO2 max**

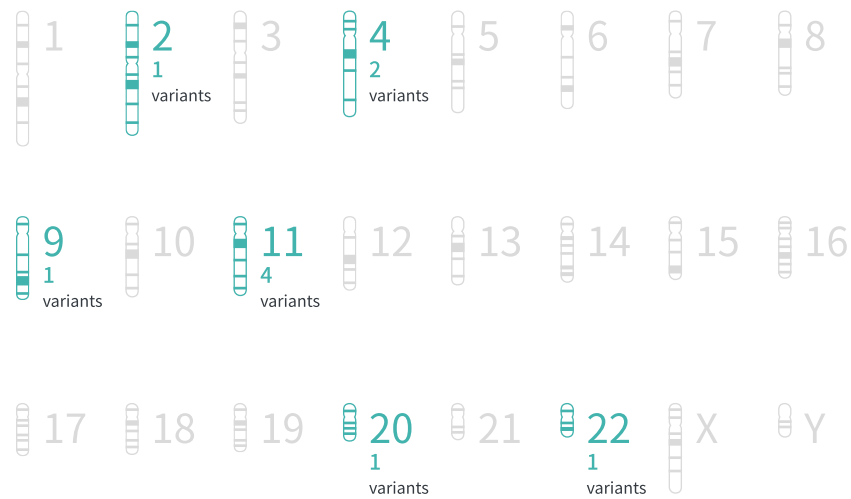
25% of VO2 max is known to be influenced by genetic factors. Other factors include age, fitness, exercise, sex, and body composition.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 15 genetic markets, we have found **10** effect allele.

The credibility score is **63** points. because studies used for the analysis of this test item's genes are based on a small sample size.

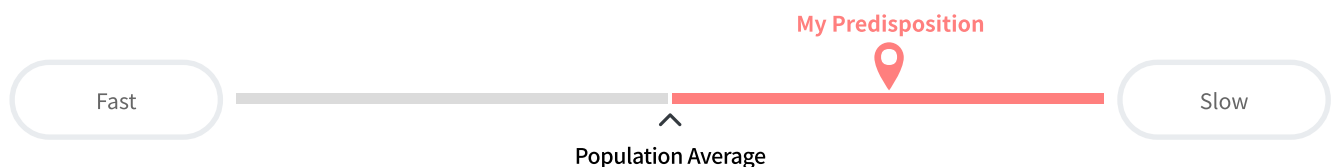


0 genetic markers with unknown location.

# Heart Rate Recovery

Heart rate recovery is the speed at which your heart rate returns normal after exercise. It is a great way to measure your fitness level.

## Likely Heart Rate Recovery After Exercising:



Based on the genes we analyzed, you are likely predisposed to having a **slow** heart rate recovery after exercising.

At the end of your workouts, slowly lower the intensity rather than stopping abruptly.

### Heart rate recovery

Heart beating during exercise is due to decreased parasympathetic nerve activity, and heart beat recovery is indicative of its reactivation.

### How to measure your heart rate

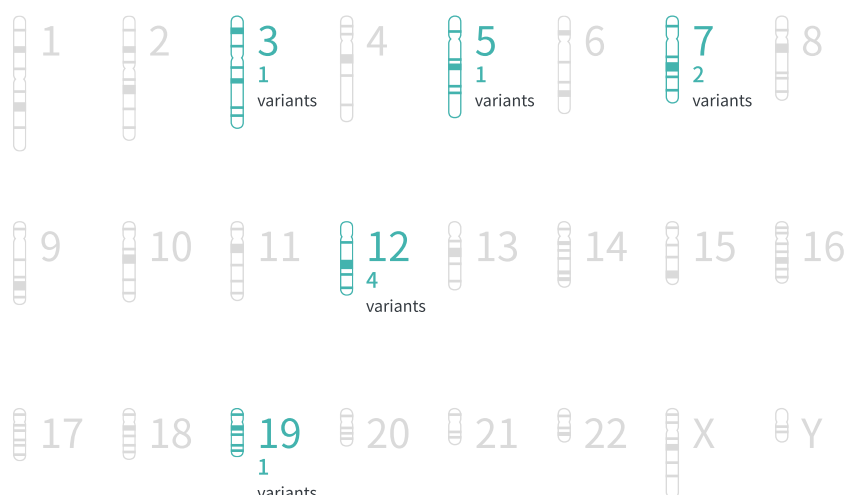
Lightly push the index and middle fingers on your wrist and measure for one minute. 50~70 bpm is healthy, with max being 170~180.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 15 genetic markets, we have found **9** effect allele.

The credibility score is **84** points. because studies used for the analysis of this test item's genes are based on a big sample size.

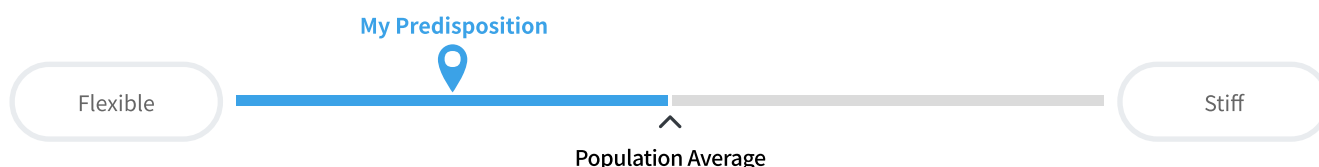


0 genetic markers with unknown location.

# Flexibility

Flexibility is the ability to move joints effectively through a complete range of motion. Enhancing your flexibility through stretching reduces the likelihood of getting injured.

## Likely Flexibility of Joints and Muscles:



Based on the genes we analyzed, you are likely predisposed to having **flexible** joints and muscles.

You may have an easier time becoming flexible, but always beware of injury from excessive exercise.

### What is joint range of motion?

It is a joint's range of movement, or the max angle of movement from exercise. A shallow range of motion means low flexibility.

### Is there a genetic basis to flexibility?

Flexibility is a trait that is differentially expressed among individuals. Recently, the COL5A1 gene was discovered to affect flexibility.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 18 genetic markets, we have found **10** effect allele.

The credibility score is **50** points. because studies used for the analysis of this test item's genes are based on a very small sample size.

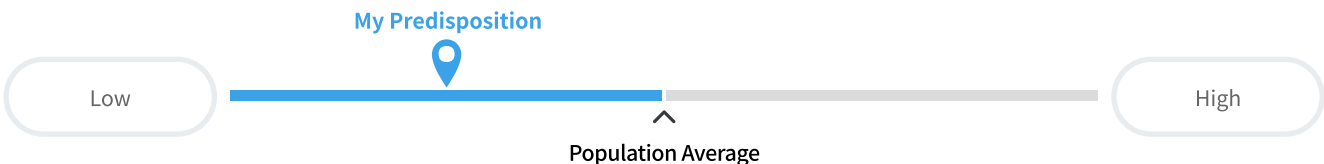


0 genetic markers with unknown location.

# Rotator Cuff Injury

The rotator cuff describes a group of 4 distinct muscles and their tendons, which provide strength and stability during motion to the shoulder. Genetic differences may contribute to overall injury risk.

## Likelihood of Injury:



Based on the genes we analyzed, you are predisposed to having a **low** likelihood of rotator cuff injury.

Despite your low risk, it is still a good idea to do warm-up exercises and stretch prior to doing higher intensity exercises.

### Injury of the rotator cuff

Excessive use during exercise, bad posture, and repeatedly lifting your arms over your head leads to inflammation and rupture.

### What are the symptoms?

Lifting arms results in squeaky sounds and severe pain, worsening at night. People often think it is frozen shoulder and do not take action.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 5 genetic markets, we have found 2 effect allele.

The credibility score is 50 points. because studies used for the analysis of this test item's genes are based on a very small sample size.

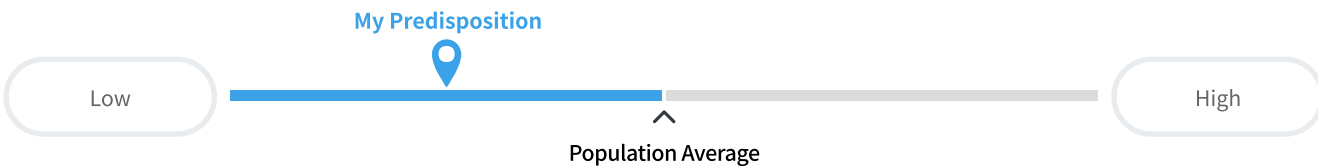


0 genetic markers with unknown location.

# ACL Injury

The anterior cruciate ligament (ACL) is one of the key ligaments that help stabilize your knee joint. It is most commonly torn during sports that involve sudden stops and changes in direction.

## Likelihood of Anterior Cruciate Ligament Injury:



Based on your genetics, you are likely predisposed to having a **low** likelihood of ACL injury.

Although your risk is low, stretching before physical activity can further decrease risk for injury.

### ACL injury

ACL ruptures with shinbone rotation or leg hyperextension. Injury often occurs during high load sports including soccer, basketball and skiing.

### Warm-up and cool down exercises

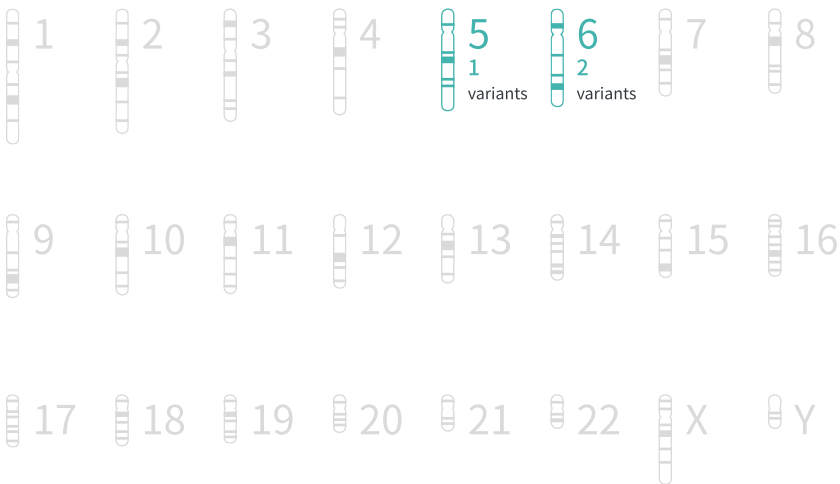
It is recommended that you stretch for at least 5 minutes before and after exercising. This loosens stiff joints and muscles.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 5 genetic markets, we have found 3 effect allele.

The credibility score is 50 points. because studies used for the analysis of this test item's genes are based on a very small sample size.

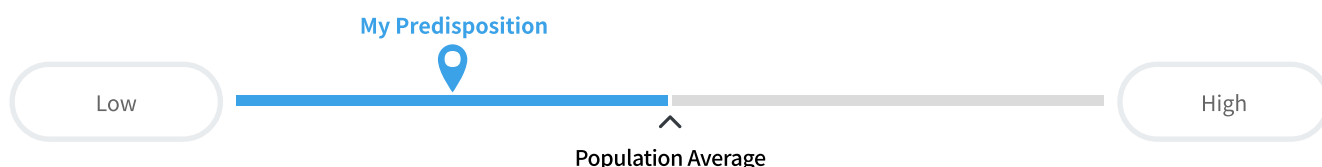


0 genetic markers with unknown location.

# Achilles Tendon Injury

The achilles tendon is the tendon connecting calf muscles to the heel. Several studies have suggested a genetic component to achilles tendon injury.

## Likelihood of Injury:



Based on your genetics, you are likely predisposed to having a **low** likelihood of achilles tendon injury.

Although your risk is low, stretching before physical activity can further decrease risk for injury.

### Role of the Achilles tendon

Calf muscles contract when you walk or run. The Achilles tendon transfers this energy to moving the feet and bodily movement.

### Why is it called “Achilles” tendon?

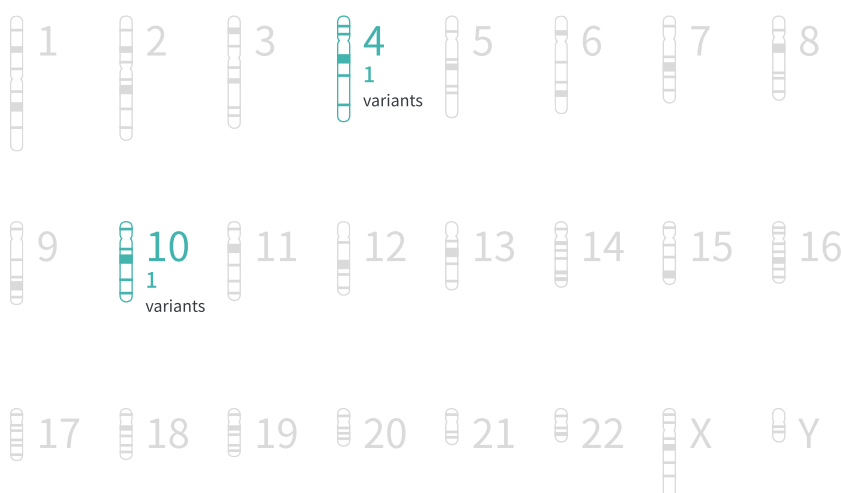
Achilles, great Greek warrior, died from an arrow to his heel. Afterwards, the term “Achilles heel” became to mean “fatal weakness.”

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 3 genetic markets, we have found **2** effect allele.

The credibility score is **95** points. because studies used for the analysis of this test item’s genes are based on a big sample size.

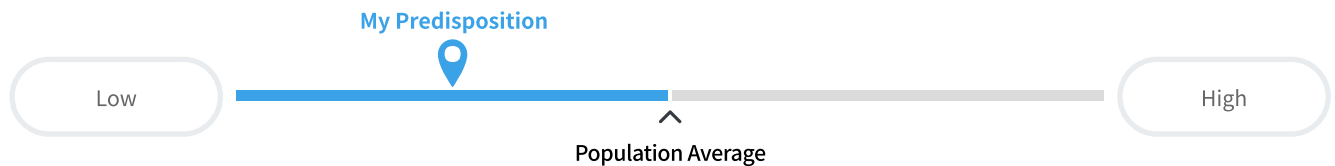


0 genetic markers with unknown location.

# Ankle Injury

Ankle injuries include sprains, strains and other joint derangements and instability. It is a common sports injury.

## Likelihood of Injury:



Based on your genetics, you are likely predisposed to having a **low** likelihood of ankle injury.

Lower your risk even further by warming up and stretching before exercising.

### Ankle injury

Ankle injuries account for 30% of exercise injuries. Wearing shoes that do not fit and taking a wrong step can cause ankle injury.

### Icing sprained ankles

Icing helps to relieve tissue swelling and pain. For 1 to 2 days following injury, ice the injured ankle for 10~20 minutes every 4 hours.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 1 genetic markets, we have found no effect allele.

The credibility score is 50 points. because studies used for the analysis of this test item's genes are based on a very small sample size.



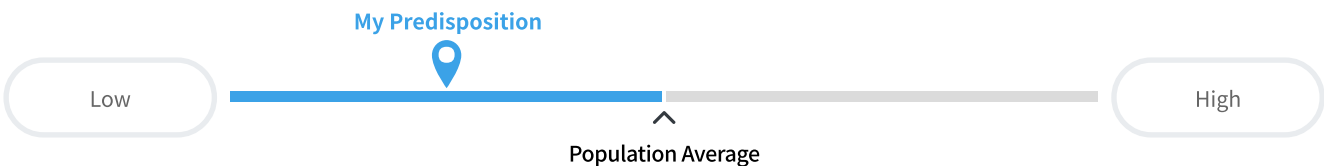
0 genetic markers with unknown location.



# Apixaban-Induced Kidney Dysfunction

This report evaluates the likelihood of developing kidney dysfunction due to apixaban side effects in patients with atrial fibrillation. Your genes are tested for variants that occur more in people with this side effect.

## Likelihood of Kidney Dysfunction From Apixaban:



Based on above results, your likelihood of experiencing kidney dysfunction from apixaban administration is **low**.

However, this is inadequate information to judge a drug response, so use it as a reference only.

Trait

### What is apixaban?

Apixaban is an anticoagulant, which inhibits blood clotting factor Xa. Inhibiting blood clotting factor Xa suppresses production of a proteolytic enzyme called thrombin, preventing thrombus. Apixaban is reported to be more effective than warfarin, vitamin K antagonist, and aspirin for patients with atrial fibrillation and coronary artery diseases. It can be administered only for a week in early stages.

### Complications

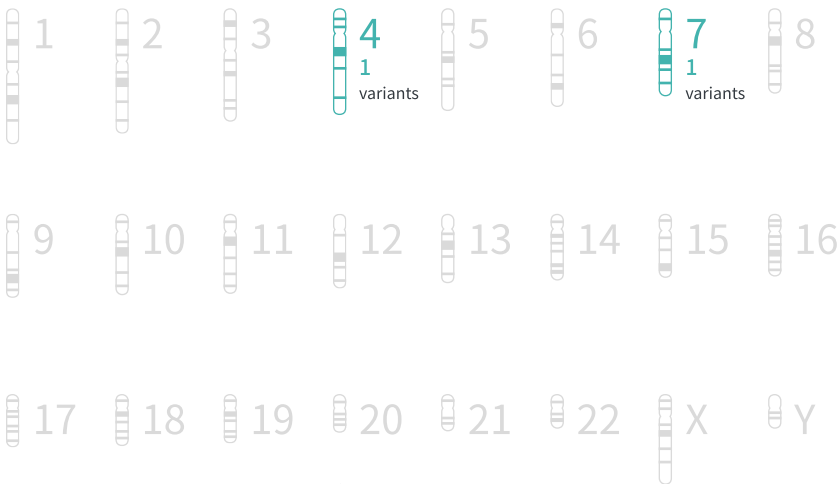
Likelihood of developing complications rises with atrial fibrillation. Patients with atrial fibrillation are 5 times more likely to suffer from stroke, and 3 times more likely to develop heart failure. Warfarin is effective for cerebral ischemia, but maintaining optimal concentration is difficult due to interaction with other drugs. Other anticoagulants are being developed to treat atrial fibrillation.

UP-To-Date, Cochrane Library

## Genetic information

From analyzed 2 genetic markets, we have found 2 effect allele.

The credibility score is 50 points. because studies used for the analysis of this test item's genes are based on a very small sample size.



# About Our Service.

---

## Genetic Analysis Service

---

Your health status is determined by genetic and non-genetic factors. Genetic factor is what you have inherited from your parents, while non-genetic factors can be from environment and behavior.

Our genetic test analyzes all the factors and provide you with information on how to better manage your health.



---

## Goals

---

### Goal 1

To predict your predisposition for specific diseases and provide personalized reports through genetic testing. Hence you can manage your health through our services.

### Goal 2

To provide 500 reports on Cancer, General Diseases, and Traits divisions. We have increased accuracy by analyzing hundreds of thousands of genes optimized for the Asian population. We strive to provide credible information to you.



---

## About Updates

### Update 1

Your risk results will be periodically updated as we incorporate newly released medical statistics.

### Update 2

Your results will only increase in credibility as we continuously add more genes to the analysis.



---

## Precautions

### Precaution 1

Genoplan's genetic analysis does not tell you what is the current state of your health. Nor does it provide diagnosis for any diseases. Our genetic analysis tells you if you have a particular genotype that increases the risk of developing a disease or having a particular trait.

### Precaution 2

Genoplan's genetic analysis results cannot be used to make medical decisions. Please receive accurate medical diagnoses from medical professionals.



#### What this report tells you

1. Health propensity based on genetic characteristics
2. Health propensity based on current lifestyle
3. Health propensity with an understanding of both genetic and non-genetic factors
4. Credibility of the analyzed genes
5. Analyzed genes' influence on the corresponding category



#### What this report cannot tell you

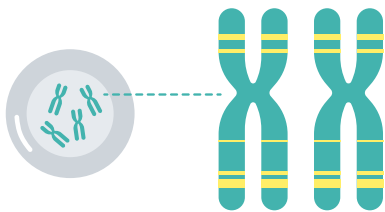
1. Medical diagnosis of diseases
2. Your current health status
3. Legal proof

# Terminology.

---

## Chromosome

Chromosomes are threadlike structures that house DNA. You received 1 set of 23 chromosomes from your mother and another set from your father. In total, you have 1 pair of sex chromosomes and 22 pairs of non-sex (autosomal) chromosomes, resulting 46 total.



## DNA

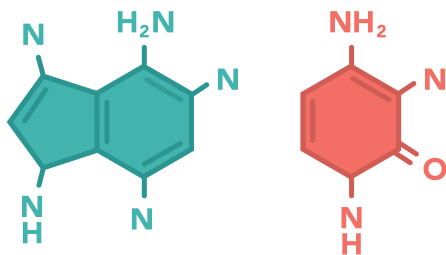
### Deoxyribonucleic Acid

DNA is the material for storing personal genetic information. It has a double helix structure, with two long strands coiling around each other. Between the two strands are nucleobases that make up the genetic information. Nucleobase combination and order determine variation in genetic information.



## Nucleobase

Nucleobase is a DNA component that connects the two long DNA strands. Main nucleobases are adenine(A), thymine(T), guanine(G), and cytosine(C). Nucleobase pairs are A with T, and G with C. Three continuous nucleobases determine a specific amino acid, the basic unit of proteins that make up your body.



## Gene

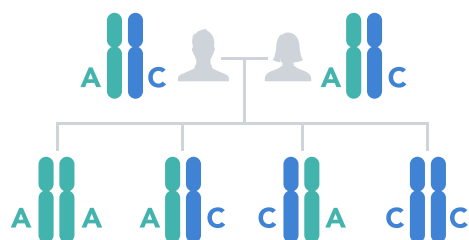
A gene is a specific DNA segment, containing unique information of an individual. Genes characterize traits such as skin color and blood type, and are inherited from parents to children. Only 1~2% of your total DNA is known to contain information for your body's makeup.



---

## Genotype

Genotype refers to the pair of nucleobases inherited from parents (e.g. AA, TC). Traits such as eye color or ear shape are determined by an individual's genotype, or which nucleobase is present at a specific point in a gene's sequence of nucleobases.



---

## Genetic Variation

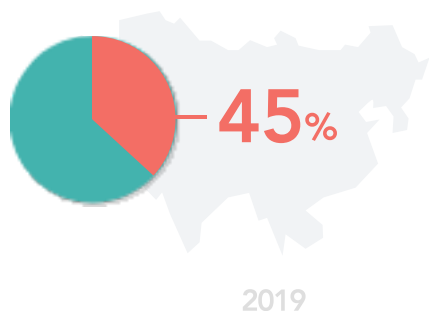
Refers to change (mutation) in nucleobase sequence that make up a gene, caused by a variety of factors. Genetic mutations can affect bodily function or appearance, or not affect them at all.



---

## Prevalence

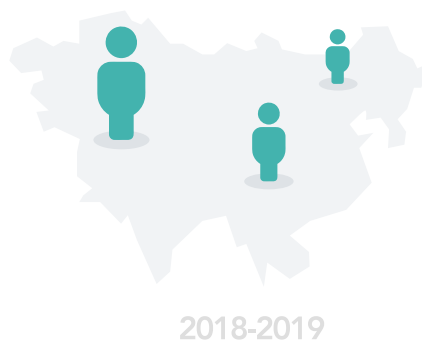
Prevalence is the proportion of persons in a population who have a particular disease or attribute at a specified point in time. Unlike incidence rate, which accounts for only new cases, prevalence includes both new and preexisting cases in its calculation.



---

## Incidence Rate

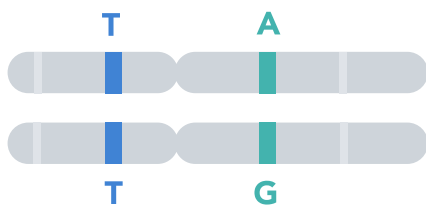
Incidence rate refers to the degree in which a specific disease has occurred in a given period of time. It is calculated as the affected percentage of a population being studied. It is used for predicting a disease onset rate or risk.



---

## Allele

Allele refers to different forms of a gene that arise by mutation. Differing traits among individuals are in part due to differences in the alleles they carry. Some allelic variations among people do not result in visibly detectable differences.



---

## Effect Allele

Effect allele is a genetic variant that increases the likelihood of certain condition (cancer, general disease), or that is more likely to yield a specific trait. For example, if carrying an A allele, compared to a G allele, in a gene increases the likelihood of developing certain disease, A allele is the effect allele.



---

## SNP

### Single Nucleotide Polymorphism

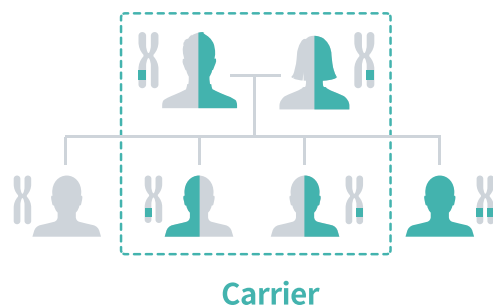
SNP refers to a genetic variation at a gene's specific nucleobase location. Some individuals may carry nucleobase A, while others may carry nucleobase G at a specific location. Variation among individuals in gene function, appearance, and disease risk are determined by these SNP differences.



---

## Carrier

A “carrier” is someone who can potentially pass on a gene containing variant(s) associated with a condition; but he or she does not actually suffer from this condition. Condition only occurs when both parents pass on a gene with variant(s) to their child. If only one parent passes on this gene, child (carrier) does not suffer from this condition.



# FAQ.

---

## Question

### What is a personal genetic analysis service?

---

## Answer

Genetic differences among individuals are 1% or less. These variation in genetics can be appear as simple differences in hair types or height, but they also explain differences in physical and health traits such as susceptibility to certain drugs or vulnerability to diseases including diabetes and dementia. Genoplan's genetic analysis services identify these genetic differences and offer customized health care directions and changes in lifestyle tailored to each customer.

---

## Question

### How accurate is Genoplan's genetic analysis?

---

## Answer

Genoplan selects SNPs for each category based on genetic analysis of Asian populations. This makes Genoplan's analysis results more accurate compared to other companies that incorporate genetic analysis of all racial populations. We use DNA Microarray technology of the world-renowned Illumina to analyze hundreds of thousands of SNPS specific to the Asian population. This whole analysis process is traced and managed with LIMS (Laboratory Information Management System) to ensure high experimental quality and reliability.

---

## Question

### What is the scientific basis for genetic analysis service?

---

## Answer

Genoplan selects genes for analysis based on published scientific articles from leading research institutions and universities around the world. In order to increase the accuracy, we also prioritize research results targeting Asians. Vast amounts of new research published every year are reflected in the report through ongoing updates.

---

## Question

### Do I need to do this test without any current physical issues?

---

## Answer

Yes, it is necessary. This is because diseases can be predicted by understanding individual genetic characteristics. We suggest the most appropriate diet and exercise methods based on your inherited genotype, for preparing a healthy future.

---

### Question

**How are genetic analysis and health physical different?**

---

### Answer

Health physical exam is a medical assessment of current health condition, but Genoplan's genetic analysis is predictive service based on scientific and clinical research. It is best to use the genetic analysis service as a reference for improving your lifestyle habits or predicting diseases in advance.

---

### Question

**Do genetic analysis results change with time?**

---

### Answer

Genes do not change, but research on the categories is still ongoing. Results may change in the future because of newly added genes for analyzing specific categories, or changed effects of previously selected genes. If you have categories of particular interest, please check for updates and receive another test.

---

### Question

**How are privacy of genetic analysis results and personal information managed?**

---

### Answer

All customer genetic information are encrypted and anonymized according to personal information protection policy and is strictly controlled. In particular, personal identification information is protected with two different encryption methods to minimize exposure risk of genetic and personal information. With customer's consent, the remaining DNA after genetic analysis can be used for medical research and service enhancement. Without consent, the remaining DNA is disposed immediately.

---

### Question

**Where can I contact if I have other questions regarding services provided by Genoplan?**

---

### Answer

If you have any further inquiries, please contact us via Genoplan website or app. We will get back to you as soon as possible.



# Test Verification


Unique Sample Number	CAAC-THRM-XXZY
Sample Type	Saliva
Analysis Method	SNP Genotyping

## About Our Quality Standards

Using DNA extracted from saliva, microarray genotyping was carried out to measure the signals of biomarkers embedded on the microarray chip. This allowed analysis of many genetic variants.

Proper quality control steps were taken to ensure quality of extracted DNA, accuracy of microarray genotyping, and accuracy of this analysis report.

Analysis report is issued only after all parameters pass our quality control standards.

	Passed	Failed
QC Result		

## Test Limitations

Clinical implications of this report's results have not been established. Thus, healthy lifestyle choices based on these results have not been verified for their objective validity.

## Analysis Supervisor

<div>Supervisor</div> <div>Naoki Kojima</div> <div></div>	<div>Experimental Supervisor</div> <div>Eto Shinya, Ph.D.</div> <div></div>	<div>DNA Analyst</div> <div>Sakaguchi Mari</div> <div>土反口 真理</div>
----------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------

## Laboratory Information

Genoplan Japan Inc. Laboratory  
#209 Fias, 4-1 Kyudai Shinmachi, Nishi-Ku, Fukuoka City, Japan



**Disclaimer :** Genoplan saliva kit and service are intended for use only for general wellbeing purpose to encourage or maintain a healthy lifestyle, and is not intended to be used for any medical purpose (such as the detection, diagnosis, monitoring, management or treatment of any medical condition or disease). Any health related information provided by this saliva kit and service should not be treated as medical device. Please consult a physician for any medical advice required.