





## About the report



# Summary of Genetic test results

## Sensitivity/ Intolerance

0.0 Allergy To Milk	✓
0.0 Allergy To Peanuts	✓
0.0 General Food Allergies	✓
100.0 Lactose Intolerance	✓
30.0 Gluten	✓
0.0 Sensitivity To Salt	✓
25.0 Caffeine sensitivity	✓

## Body and weight

0.0 Adiponectin Levels	✓
0.0 Energy Balance	✓
0.0 Metabolism	✓
0.0 Physical Activity	✓
50.0 Total Fat	✓
0.0 Weight Loss-regain	✓

## Diet And Metabolism

0.0 Low Protein Intake Risk	✓
0.0 Low-Carb Diet Effectiveness	✓
0.0 Low-Fat Diet Effectiveness	✓
28.0 Overweight Potential	✓
22.0 Polyunsaturated Fats Increased Benefits	✓
0.0 Starch Metabolism	✓
30.0 Satiety	✓
0.0 Fat Metabolism	✓
0.0 Carbohydrate Metabolism	✓

## Exercise response

0.0 Blood Pressure Response To Exercise	✓
0.0 Exercise Benefits For Lowering Cholesterol	✓
0.0 Exercise Benefits For Maximal Oxygen Uptake Response	✓
40.0 HDL (Good) Cholesterol Response To Exercise	✓
100.0 Insulin Sensitivity Response To Exercise	✓
0.0 Loss Of Body Fat Response To Exercise	✓
0.0 Weight Loss Response To Exercise	✓

## Fitness

0.0 Aerobic Performance	✓
0.0 Muscle Power	✓
0.0 Power and Strength	✓
0.0 Strength Training	✓
0.0 Endurance	✓
0.0 Overall Fitness Benefits	✓
50.0 Speed	✓
25.0 Cell detoxification capability	✓

## Macronutrient requirement

0.0 Response to monounsaturated fats	⚠
0.0 Response to protein	⚠
100.0 Response to polyunsaturated fats	⚠
0.0 Response to saturated fat	⚠
0.0 Response to carbohydrates	⚠
0.0 Response to fiber	⚠
42.839999999999996 Matching Diet Type	⚠
0.0 Omega-3 Fat	⚠
100.0 Omega-6 And Omega-3 Levels	⚠

## Metabolic health factors

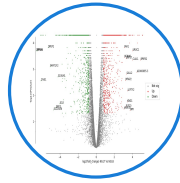
50.0 Elevated Blood Sugar	⚠
50.0 HDL Cholesterol	⚠
50.0 LDL Cholesterol	⚠
45.480000000000004 Triglycerides	⚠

## Micronutrient requirement

50.0 Vitamin A	⚠
0.0 Vitamin B1	⚠
0.0 Vitamin B2	⚠
0.0 Vitamin B3	⚠
0.0 Vitamin B5	⚠
0.0 Vitamin B6	⚠
0.0 Vitamin B7	⚠
0.0 Vitamin B9	⚠
56.25 Vitamin B12	⚠
0.0 Vitamin C	⚠
23.700000000000003 Vitamin D	⚠
65.0 Vitamin E	⚠
0.0 Vitamin K	⚠
0.0 Lutein And Zeaxanthin Deficiency	⚠
0.0 Lycopene Deficiency	⚠
0.0 Coenzyme Q10 Deficiency	⚠
0.0 Calcium	⚠
0.0 Iron	⚠
0.0 Sodium	⚠
50.0 Choline	⚠



## About



Milk allergy is immune-mediated response to proteins in cow's milk that occurs consistently with ingestion. It's one of the most common food allergies in children. Cow's milk is the usual cause of milk allergy, but milk from sheep, goats, buffalo and other mammals also can cause a reaction. The major cow's allergens belong to the casein fraction of proteins and to whey proteins.

## Genetic risk analysis

0.0



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

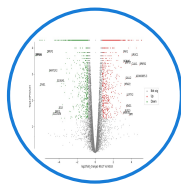
## Dietary Sources / What To Do ?

Avoid milk





## About



Peanut allergy is the hypersensitivity to dietary substances from peanuts causing an overreaction of the immune system which in a small percentage of people. It often starts in childhood and continues as an adult. Peanut allergy is a growing public health concern in westernized countries. To date, 17 peanut allergens have been identified. Many of these proteins have protective functions or are seed storage proteins. Peanut allergens belong to diverse protein families leading to IgE-mediated cross-reactions among different members of the legume families but also other plant foods such as tree nuts.

## Genetic risk analysis



Typical

### How do these results connect?

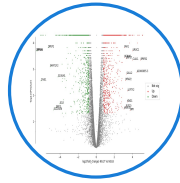
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

Avoid peanuts



## About



General food allergy, defined as an immunological intolerance to food, that occurs reproducibly on exposure to a given food. Food allergy is emerging as a major clinical and public health problem worldwide. Food allergy develops as a consequence of a failure in oral tolerance, which is a default immune response by the gut-associated lymphoid tissues to ingested antigens that is modified by the gut microbiota.

## Genetic risk analysis



Typical

### How do these results connect?

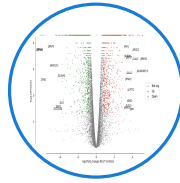
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

Avoid



## About



Lactose intolerance is the insufficient breakdown of lactose sugar in the small intestine. Lactose is found in dairy products and is normally broken-down during digestion by lactase enzyme. If lactase levels are low, undigested lactose is fermented by colon bacteria, creating gases and other by-products, leading to bloating, cramps, and diarrhoea.

## Genetic risk analysis

100.0



Enhanced

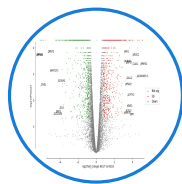
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Gluten is a family of storage proteins - formally known as prolamins - that are naturally found in certain cereal grains, such as wheat, barley, and rye. Repeat stretches of the amino acids proline and glutamine are characteristic of the gluten protein structure. Many different prolamins fall under the gluten umbrella, but they can be further classified based on the specific grains in which they're found. For instance, glutenins and gliadins are the prolamins in wheat, secalins are in rye, and hordeins are in barley. Gluten proteins play a key role in determining the unique baking quality of wheat by conferring water absorption capacity, cohesivity, viscosity and elasticity on dough. Though gluten is safe for most people, certain medical conditions require a gluten-free diet as part of the treatment protocol. Celiac disease is a serious autoimmune condition in which a person's immune system attacks cells of their small intestine when they ingest gluten. The classic clinical presentation of celiac disease consists of diarrhoea, gas and bloating, and weight loss. It is one of the best-researched causes of gluten intolerance and is estimated to affect approximately 1% of the global population. Like many other autoimmune conditions, the exact cause of celiac disease remains unclear, but there is strong evidence of a genetic component. Medicinal treatments for celiac disease are currently being researched, but the most widely accepted and utilized treatment is a strict gluten-free diet.

## Genetic risk analysis

30.0



Slightly Enhanced

### How do these results connect?

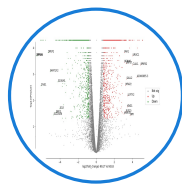
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?





## About



Salt is made up of sodium and chloride, for health reasons we are mostly concerned with our sodium intake as it can cause high blood pressure in those who are genetically susceptible. More than 70% of the sodium we eat comes from processed, pre-packaged and restaurant foods and salt added during cooking. Dietary salt or sodium chloride is essential for maintaining extracellular fluid volume and serum osmolality. Any changes in the plasma concentration of sodium may be directly detrimental to plasma osmotic pressure, acid-base balance, plasma volume, interstitial fluid volumes, electrical activity of cells. The salt sensitivity of the blood pressure (SSBP) is defined as a rise or fall in blood pressure induced by a change in sodium intake. People are either salt-sensitive or salt-resistant. Those who are sensitive to salt are more likely to have high blood pressure than those who are resistant to salt. Sodium homeostasis in the human body is regulated mainly by the renin-angiotensin-aldosterone system. This system operates mainly in the kidney and in vascular smooth muscle cells. Variations in this system, due to genetic factors, race/ethnicity, age, gender, body mass index, diet and medical history, cause the kidney of salt-sensitive individuals to handle excess sodium less efficiently. Associated co-morbidities hypertension, diabetes, chronic kidney disease and metabolic syndrome also play a vital role. Dietary salt intake reduction can delay or prevent the incidence of antihypertensive therapy, can facilitate blood pressure reduction in hypertensive patients receiving medical therapy, and may represent a simple cost-saving mediator to reduce cardiovascular morbidity and mortality. The Daily Value for sodium is less than 2,300 milligrams (mg) per day.

## Genetic risk analysis



Typical

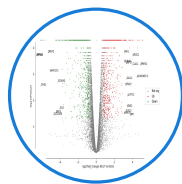
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Coffee is one of the world's most popular and widely consumed natural stimulants in daily life, used by millions to jump-start a sluggish morning and increase alertness throughout the day. Caffeine is also used for a variety of medical purposes. Caffeine, a methylxanthine compound related to theophylline, is a natural substance found in a number of plant species, including coffee, tea, kola and cocoa with varying amounts and concentrations of caffeine according to different types. Most people have a normal sensitivity to caffeine. People with heightened hypersensitivity to caffeine can't tolerate small amounts of it without experiencing negative side effects. People with hyposensitivity to caffeine can have large amounts of caffeine, late in the day, and not experience side effects, such as unwanted wakefulness. Because caffeine is similar in structure to adenosine, it is able to bind to receptors in place of adenosine. When this happens, it increases feelings of alertness. People with caffeine sensitivity experience an intense adrenaline rush when they consume it. Symptoms may include racing heartbeat, headache, jitters, nervousness or anxiousness, restlessness, insomnia, frequent urination or inability to control urination. A variety of factors causes caffeine sensitivity, such as genetics and liver's ability to metabolize caffeine, gender, age, and weight. Caffeine sensitivity isn't the same thing as caffeine allergy. Caffeine sensitivity may have a genetic link. While symptoms aren't usually harmful, you can eliminate your symptoms by reducing or eliminating caffeine. For healthy adults, the Food and Drug Administration has cited 400 milligrams a day-that's about four or five cups of coffee-as an amount not generally associated with dangerous, negative effects. However, there is wide variation in both how sensitive people are to the effects of caffeine and how fast they metabolize it. Toxic effects, like seizures, can be observed with rapid consumption of around 1,200 milligrams of caffeine, or 0.15 tablespoons of pure caffeine.

## Genetic risk analysis

25.0



Slightly Enhanced

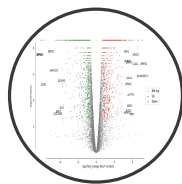
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Adiponectin is the most abundant peptide secreted by adipocytes, with insulin-sensitizing, anti-inflammatory and anti-atherogenic properties.<sup>1</sup> It modulates a number of metabolic processes, including glucose regulation and fatty acid oxidation. High levels of circulating adiponectin have been associated with lower diabetes incidence in many prospective studies.<sup>2</sup> Adiponectin exerts its favourable effects on insulin sensitivity in vivo through a decrease in hepatic glucose production. Adiponectin's anti-atherosclerotic effects are mediated in part by its anti-inflammatory activity on endothelial cells. Low adiponectin levels (hypoadiponectinemia) are thought to play a central role in the development of type 2 diabetes, metabolic syndrome, obesity and cardiovascular disease. Higher circulating adiponectin levels are related to poor muscle function and physical disability, which suggests a potential link between adiponectin and risk of falls.

### Genetic risk analysis



### Actual blood analysis



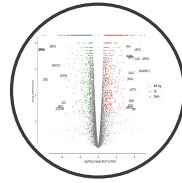
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

### Dietary Sources / What To Do ?



## About



Humans take in energy in the form of 3 macronutrients carbohydrate, protein and fat. A calorie is a commonly used unit of energy. For these nutrients to be used as fuel for the body, their energy must be transferred into the high energy molecule known as Adenosine Triphosphate (ATP), which is the body's immediate fuel source of energy that can be generated either with the presences of oxygen known as aerobic metabolism or without the presence of oxygen by anaerobic metabolism. The type of metabolism that is predominately used during physical activity is determined by the availability of oxygen and how much carbohydrate, fat, and protein are used. The basic components of energy balance include energy intake, energy expenditure, and energy storage. Body weight can change only when energy intake is not equal to energy expenditure over a given period of time. Humans expend energy through BMR is a minimum number of calories required for basic functions (resting heart rate, respiration, urine production, protein synthesis) at rest; Resting metabolic rate (RMR), which is the amount of energy necessary to fuel the body at rest; the thermic effect of food (TEF), which is the energy cost of absorbing and metabolizing food consumed; and the thermal effect of activity (TEA), which is the energy expended through physical activity; Adaptive Thermogenesis (AT), energy expenditure increases or decreases based on the change in environment. Disturbances in energy balance can cause excessive accumulation of fat leading to overweight and obesity. Strategies to combat obesity must target both energy input and expenditure, which includes food intake and physical activity. On the contrary, negative energy balance leads to weight loss over time. When energy intake equals energy expenditure, the body is in energy balance and body energy is stable.

## Genetic risk analysis

0.0  
● ● ● ● ● ●

Typical

### How do these results connect?

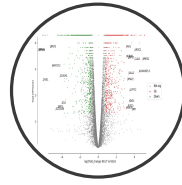
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?





## About



Metabolism refers to the set of biochemical reactions occurring in the body to maintain the life-sustaining activities. Cellular metabolism involves complex sequences of controlled biochemical reactions, known as metabolic pathways. These processes allow organisms to grow and reproduce, maintain their structures, and respond to environmental changes. Metabolic reactions are categorized into catabolism (breaking down of molecules by releasing the energy) and anabolism (synthesis of molecules by consuming the energy). Metabolism impacts all cellular functions and plays a fundamental role in biology. The main purposes of metabolism are: the conversion of food into energy to maintain cellular processes; to convert food into building blocks for vital nutrients like carbohydrates, proteins, lipids, and nucleic acids and also the elimination of metabolic wastes. The minimum number of calories required for basic functions (resting heart rate, respiration, urine production, protein synthesis) at rest is called the basal metabolic rate (BMR). It is essential that you maintain a healthy BMR. Fluctuations or abnormalities of the basal metabolic rate can result in weight gain, fatigue, endocrine and immune dysfunction. Body size, age, gender, and genes all play a role in the speed of metabolism. Making small lifestyle changes and incorporating these tips into your routine can increase your metabolism. Having a higher metabolism can help you lose weight and keep it off, while also giving you more energy.

## Genetic risk analysis

0.0



Typical

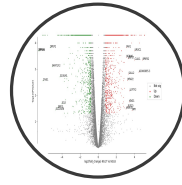
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Physical activity is defined as any force exerted by skeletal muscles that require energy expenditure above resting level. It includes a full range of activities, for example, competitive sport and exercise, hobbies, walking, cycling, or activities of daily living. Physical inactivity (insufficient or lack of physical activity) increases the risk for developing non-communicable diseases such as cancer, heart disease, stroke and diabetes. Regular and adequate levels of physical activity improves muscular and cardiorespiratory fitness; strengthen bone and muscle health; reduce the risk of overweight, hypertension, coronary heart disease, stroke, diabetes, various types of cancer; improves mental health, reduces the risk of anxiety and depression; improves the ability to do daily activities and prevent falls; reduce the risk of hip or vertebral fractures; maintain energy balance and weight control. Exercise is the subcategory of physical activity that is planned, structured, repetitive, and aims to improve or maintain one or more components of physical fitness.

## Genetic risk analysis



Typical

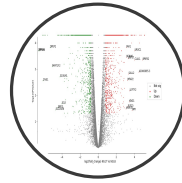
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Fat is a source of essential fatty acids, which the body cannot synthesize. A small amount of fat is an essential part of a healthy, balanced diet. Fat provides calories, or "energy," for the body. Each gram of fat provides 9 calories which is twice the calories per gram as either carbohydrate or protein. Essential functions of fat include, it serves as the energy reserve; supports key body processes, such as blood clotting, nervous system function, reproduction, and immune response; helps the body to absorb fat-soluble vitamins A, D, E and K. Total fat includes saturated fat, unsaturated fat and trans-fat. Saturated fat is usually solid at room temperature and mainly found in animal fats, baked goods, condiments, dairy products, desserts etc. Trans fatty acids, more commonly called trans fats, are made by heating liquid vegetable oils in the presence of hydrogen gas and a catalyst, a process called hydrogenation which causes the oil to become solid at room temperature. The manufactured form of trans fat, known as partially hydrogenated oil, is found in a variety of food products, baked goods, fried foods, and processed snack foods. Monounsaturated and polyunsaturated fats are usually liquid at room temperature as oils and are found in avocados, fish, mayonnaise and oil-based salad dressings, nuts, olives, seeds, soft margarines, and vegetable oils. Diets higher in saturated fat and trans-fat are associated with increased levels of LDL cholesterol - which, in turn, is associated with an increased risk of developing cardiovascular disease. Replacing saturated fat with good fats, especially, polyunsaturated fats is good for health.

## Genetic risk analysis

50.0



Slightly Enhanced

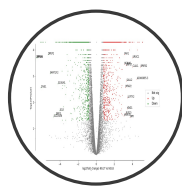
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Weight loss can be achieved through a variety of modalities, but long-term management of lost weight is extremely challenging due to genetics, interactions between our biology, behaviour, and the obesogenic environment. Weight regain after weight loss is a substantial challenge in obesity therapeutics and has large interindividual variation. Dieting leads to significant adaptations in the homeostatic system that controls body weight, which promotes overeating and the relapse to obesity. It is vital to maintain weight loss to obtain health benefits over a lifetime. Weight loss to a healthy weight for a person's height can promote health benefits. These include lower cholesterol and blood sugar levels, lower blood pressure, less stress on bones and joints, and less work for the heart. Physical activity plays a vital and essential role in maintaining weight loss. Studies show that even exercise that is not rigorous, such as walking and using stairs, has a positive effect. Recommendations for weight loss include a combination of reducing caloric intake, increasing physical activity, and behaviour modification. Behaviour modification includes mindful eating or eating with awareness. Incorporating long-term lifestyle changes are needed to increase the chance of successful long-term weight loss.

## Genetic risk analysis

0.0



Typical

### How do these results connect?

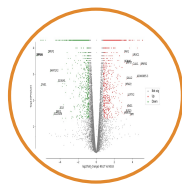
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?





## About



Protein is an essential macronutrient needed by the human body for growth and maintenance. Foods rich in animal protein are meat, fish, eggs, poultry, and dairy products, while plant foods high in protein are mainly legumes, nuts, and grains. Unlike carbohydrate and fat, there is no mechanism to store excess amino acids that are consumed in the diet. So, a continuous supply of amino acids is needed. When protein is lacking in the diet, especially for long periods of time, it can cause several implications and potentially lead to adverse effects. In order to maintain a steady flow of amino acids, adequate protein intake is essential. Eating required amount of protein is recommended to support body cells, structure, and function. This requirement will be different for each person based on factors like age, sex, genes and physical activity levels. Choosing nutritious protein sources is recommended for optimal health and fitness.

## Genetic risk analysis

0.0



Typical

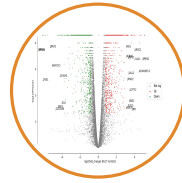
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Carbohydrates are macronutrients which are essential for proper body functioning. Carbohydrates serve as long-term food storage molecules and as structural components; play key roles in the immune system, fertilization, preventing pathogenesis, blood clotting, and development. Sufficient fiber intake is vital to maintain a healthy digestive system. While body uses carbohydrates as its main fuel source, there are substantial health benefits of limiting carbohydrate intake. Low-carb diets may help prevent or improve serious health conditions, such as metabolic syndrome, diabetes, high blood pressure and cardiovascular disease who are more sensitive to carbohydrates in their diet. Low-carb diets may improve high-density lipoprotein (HDL) cholesterol and triglyceride values slightly more than moderate-carb diets. There are 2 kinds of carbohydrates, refined (simple) and unprocessed (complex). Simple carbohydrates are sugary foods, pasta, bread, and white rice. Complex carbohydrates include whole grains, and legumes, including brown rice, and whole wheat breads. Complex carbohydrates take longer to break down, causing a slower increase in blood sugar levels. A low-carb diet limits carbohydrate - such as breads, cereals, grains, rice, starchy vegetables, fruit, as well as milk and yogurt and emphasizes foods high in protein and healthy fat. Processed and refined foods, trans fats, as well as foods with added sugars should be avoided. Lean protein (fish, poultry, legumes), healthy fats (monounsaturated and polyunsaturated) and unprocessed carbs - such as whole grains, legumes, vegetables, fruits and low-fat dairy products - are generally healthier choices. It is not recommended to suddenly and drastically cut carbs, as you may experience a variety of temporary health effects, including, headache, bad breath, weakness, muscle cramps, fatigue, skin rash, constipation or diarrhoea.

## Genetic risk analysis

0.0  
● ● ● ● ● ● ● ●

Typical

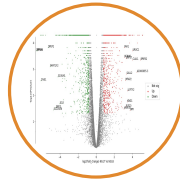
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Fat is a source of essential fatty acids, which the body cannot synthesize. A small amount of fat is an essential part of a healthy, balanced diet. Fat provides calories, or ?energy,? for the body. Essential functions of fat include, it serves as the energy reserve; supports key body processes, such as blood clotting, nervous system function, reproduction, and immune response; helps the body to absorb fat-soluble vitamins A, D, E and K. Total fat includes saturated fat, unsaturated fat and trans-fat. Low-fat diets are often recommended for people who need to lose weight. The main reason behind this recommendation is that each gram of fat provides 9 calories which is twice the calories per gram as either carbohydrate or protein. Low-fat diets are intended to reduce the occurrence of conditions such as heart disease and obesity. So, reducing fat can help to reduce your overall calorie intake. Studies show that people who reduce their calorie intake by eating less fat lose weight<sup>1</sup>. A low-fat diet is one that restricts fat, often saturated fat, and cholesterol and increases protein and complex carbohydrate intake. It is important to incorporate polyunsaturated and monounsaturated (good) fats in your diet which is found in fish, olive oils, avocados, and nuts. The primary reasons for choosing a low-fat diet tend to be to help reduce overall calorie intake and to improve cholesterol levels. To help achieve these aims a low-fat diet should be appropriately balanced to include a healthy amount of vitamins and minerals. Typically, a low-fat diet will include foods such as: whole grain foods, rice and bread, lean meats - such as skinless chicken and turkey, white fish, reduced fat dairy - skimmed milk and low-fat yoghurt and cheese, vegetables, lentils, fruits.

## Genetic risk analysis



Typical

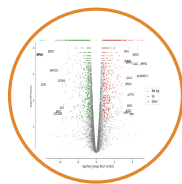
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Overweight and obesity may increase the risk of many health problems, including type 2 diabetes, high blood pressure, heart disease and strokes, certain types of cancer, sleep apnea, osteoarthritis, fatty liver disease, kidney disease, pregnancy problems. The BMI is the important way to tell whether you are at a normal weight, are overweight, or have obesity. Normal weight with a BMI of 18.5 to 24.9; overweight with a BMI of 25 to 29.9 and obesity with a BMI of 30 or higher. Another important way to know is waist size in inches. Having too much fat around the waist may increase health risks more than fat in other parts of the body. Women having a waist size of more than 35 inches and men with a waist size of more than 40 inches may have higher chances of developing diseases associated obesity. Energy imbalances, some genetic or endocrine medical conditions are known to cause overweight or obesity. Energy imbalances may develop over time when you take in more calories than you use, or when energy intake is more than energy expenditure causing body to store fat. Several genetic syndromes are associated with overweight and obesity, including Prader-Willi syndrome, Bardet-Biedl syndrome, Alstr?m syndrome and Cohen syndrome. Endocrine disorders such as hypothyroidism and Cushing?s syndrome can cause overweight. Risk factors for overweight potential are unhealthy lifestyle habits and environments, age, family history and genetics, race and ethnicity, and sex. Healthy lifestyle changes reduce the risk of developing overweight.

## Genetic risk analysis

28.0



Slightly Enhanced

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

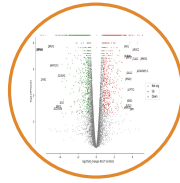
## Dietary Sources / What To Do ?





# Polyunsaturated Fats Increased Benefits Diet And Metabolism

## About



Polyunsaturated fats contain more than one double bond in their backbone. Omega-3 and omega-6 fatty acids, are the main polyunsaturated fatty acids (PUFAs) characterized by the presence of a double bond three atoms and 6 atoms away respectively from the terminal methyl group in their chemical structure. Some of the PUFAs are alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA), Linoleic acid (LA), Arachidonic Acid (ARA), (Gamma linoleic (GLA). Omega -3 fatty acid helps maintain normal blood levels of cholesterol, normal function of the heart, helps maintain normal blood pressure, normal brain development and vision. The functions of omega 6 include vasoconstriction, coagulation of the blood, cell signalling, inflammation, blood pressure regulation, lowering cholesterol levels, growth and repair processes. Both omega-3 and omega-6 fatty acids are the major components of cell membranes. Modern western diet has the omega-6 to omega-3 essential fatty acids (EFA) ratio of 15:1 to 16.7:1, evidences suggest that humans have evolved with a diet of a 1:1 ratio of omega-6 to omega-3 and the optimal ratio is thought to be 4:1 or lower. Increased benefit from polyunsaturated fat is achieved by eliminating saturated fat and trans-fat from the diet alongside increasing polyunsaturated fat intake, which in turn is effective in lowering LDL cholesterol and triglycerides. The main dietary sources of omega-3 fats are fatty fish like salmon, mackerel, anchovies, sardines, arctic char and trout, eggs, flaxseeds, walnuts, soybeans, tofu, and canola oil. Safflower and sunflower oils, soybeans, corn, nuts and seeds, poultry, fish and eggs are a good source of omega-6 fats.

## Genetic risk analysis

22.0



Slightly Enhanced

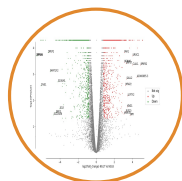
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Starch is a major dietary polysaccharide, consisting only of glucose units and is thus a homopolysaccharide. It is actually composed of two homopolymers: amylose, which has linear (1-4) linked alpha-D-glucose, and amylopectin, a highly branched form containing both (1-4) and (1-6) linkages at the branch points. The salivary and pancreatic amylases act on only interior (1-4) linkages but cannot break the outer glucose-glucose links. Thus, the final breakdown products formed by the amylases are alpha-(1-4)-linked disaccharides (maltose) and trisaccharides (maltotriose). Starch is generally eaten after cooking. The heat of cooking gelatinizes the starch granules and thus increases their susceptibility to enzymatic (alpha-amylase) digestion. The breakdown of starch begins in the mouth with salivary amylase enzyme secreted by parotid gland. Pancreatic alpha-amylase action produces large oligosaccharides (alpha-limit dextrins). These alpha-limit dextrins are split by the enzymatic action of glucoamylase (alpha-limit dextrinase), which sequentially removes one glucose unit from the nonreducing end of a linear alpha-(1-4)-glucosyl oligosaccharide forming maltose and maltotriose. Maltose and maltotriose are then broken down by secreted and brush-border disaccharidases, mainly sucrase-isomaltase, into free glucose, which is then transported into and across the enterocytes by hexose transporters. Body uses carbohydrates are the main source of energy. Starch is a complex carbohydrate and take longer to break down, causing a slower increase in blood sugar levels. Incorporation of unprocessed carbs - such as whole grains, legumes, vegetables, fruits and low-fat dairy products and avoidance of processed and refined foods; refined grains and foods with added sugars - are generally healthier choices.

## Genetic risk analysis

0.0



Typical

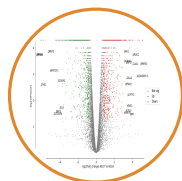
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Satiety is a sense of fullness and the suppression of hunger for a period of time after eating. Satiety plays an important role in controlling how much we eat. The feeling of satiety occurs due to a variety of bodily signals that begin when food is ingested or drink is consumed and continue as it enters the gut and is digested and absorbed. These satiety signals are generated in response to sensory experience (appearance, smell, taste, texture etc.) of consuming the food or drink; distension of the stomach; hormones released during the digestion and absorption of the food or drink, emotional states, and physical activity levels. Though we can feel the stomach filling up as we eat, it takes some time for the full range of satiety signals to reach the brain. Even in the presence of these sophisticated mechanisms that exist to regulate energy intake, people still eat even when they feel satiated or resist eating when hungry. Foods high in protein and fibre make you feel more satiated than foods high in fat or carbohydrate, so it is ideal to include some protein at every meal to keep satisfied. Protein-rich foods include meats, such as chicken, ham or beef, and fish, eggs, nuts, beans and pulses. Foods high in fibre include whole grain bread and cereals, beans and pulses and fruit and vegetables.

## Genetic risk analysis

30.0



**Slightly Enhanced**

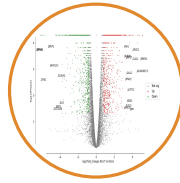
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



## Genetic risk analysis



Typical

### How do these results connect?

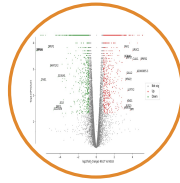
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?





## About



## Genetic risk analysis



Typical

### How do these results connect?

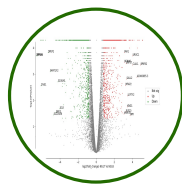
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



# Blood Pressure Response To Exercise **Exercise** **response**

## About



Blood pressure refers to the force that heart uses to pump the blood around body. Blood pressure is measured in mmHg (millimetres of mercury) and is expressed as systolic pressure (pressure when heart pushes blood out) and diastolic pressure (pressure when heart rests between beats). At rest, over 60% of blood flow is directed to the liver, kidneys and brain and only about 20% of our total circulating blood is directed to skeletal muscle. As the exercise is commenced, cardiac output increases, blood flow is shunted from the organs of the body to the working muscles. Systolic blood pressure increases linearly with increase in exercise intensity, in response to increased demand of oxygen from working muscles. The assessment of blood pressure (BP) response during exercise is a crucial diagnostic measure of cardiovascular health. High blood pressure, also known as hypertension is prevalent medical condition in which blood pressure is consistently elevated. It serves as a major risk factor for stroke, kidney disease, heart failure. Hypertension is a result complex interaction between environmental factors and genes. Lifestyle factors that increase the risk of hypertension are consumption of excess salt in the diet, excess body weight, smoking, and alcohol consumption. Physical activity and exercise play an important role in high blood pressure control. Low intensity aerobic exercise training increases systolic pressure slowly, and is therefore the safest training for new exercisers or those with cardiovascular risk factors.

## Genetic risk analysis



## Actual blood analysis



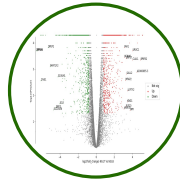
## How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



The most commonly reported cholesterol levels are - high-density lipoprotein (HDL) cholesterol, low-density lipoprotein (LDL) cholesterol and triglycerides. High levels of LDL cholesterol indicate increased risk of cardiovascular complications. HDL cholesterol transports lipids back to the liver for their recycling and disposal; consequently, high HDL cholesterol level is an indicator of a healthy cardiovascular system. Triglycerides in plasma pose a risk factor for heart disease and stroke, including obesity and metabolic syndrome. Exercise refers to planned or structured physical activity, performed for a reason, which can be aerobic exercise, resistance training or combined aerobic and resistance training. Aerobic exercise involves cardiorespiratory endurance exercises like jogging, running and cycling. Resistance training is a strength-developing exercise utilizing external resistance or one's own weight. One of the major benefits of exercise is improvement in the lipid profile. Exercise has the greatest effect on triglycerides by lowering them, and by increasing HDL cholesterol. Combining exercise with weight loss and dietary changes decrease LDL cholesterol level. Regular physical activity has been shown to maintain increased HDL cholesterol level, and decreasing, LDL cholesterol and triglycerides.

## Genetic risk analysis

0.0  
● ● ● ● ● ●

Typical

### How do these results connect?

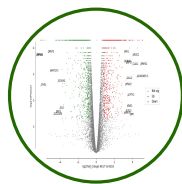
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



# Exercise Benefits For Maximal Oxygen Uptake Response

## About



Maximal oxygen uptake (VO<sub>2</sub>max) serves as the best index of aerobic fitness, maximal cardiorespiratory function and general health. As the exercise rate is increased, oxygen uptake increases linearly and reaches an upper limit to oxygen uptake which is known as maximal oxygen uptake (VO<sub>2</sub>max). VO<sub>2</sub>max is an indication of the ability of the cardiovascular system to provide oxygen to working muscles and the ability of those muscles to extract oxygen for energy generation in the form of adenosine triphosphate (ATP). Improving your VO<sub>2</sub> max can potentially improve overall health. Higher VO<sub>2</sub>max is associated with a reduced risk of lifestyle-related diseases, including breast, colon, and prostate cancer, cardiovascular diseases, and type II diabetes. VO<sub>2</sub>max can be improved by exercising at a high intensity, incorporating continuous and interval training. Training results in an efficient rise in oxygen transport within the body.

## Genetic risk analysis



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

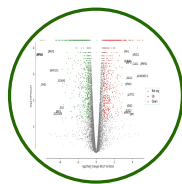




# HDL (Good) Cholesterol Response To Exercise

## Exercise response

## About



HDL cholesterol or "good" cholesterol picks up excess cholesterol (including LDL) in blood and takes it back to liver where it's broken down and excreted into the faeces via the bile. HDL play a major role in this reverse cholesterol transport (RCT) pathway. HDL is known for its athero-protective properties, higher levels of which reduce the risk of heart disease. Low HDL-C is often a clinical indicator of cardiovascular disease risk. HDL levels are usually lower in people who have metabolic syndrome - that include obesity, increased blood pressure and high blood glucose levels. One of the major benefits of exercise is improvement in the lipid profile. It is well established that aerobic exercises increase plasma HDL-cholesterol levels, with exercise volume, rather than intensity, having a greater influence on HDL-C response to exercise.<sup>3,4</sup> While exercise is an important element of cardiovascular health, genetic variants also determine individual's HDL cholesterol response to exercise.

## Genetic risk analysis

40.0



Slightly Enhanced

### How do these results connect?

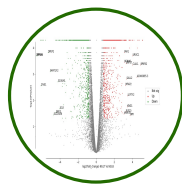
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



# Insulin Sensitivity Response To Exercise **Exercise** **response**

## About



Insulin is a peptide hormone which regulates the absorption of glucose from the blood. Insulin sensitivity is body's response to insulin. A person who is insulin-sensitive needs comparatively small amount of insulin to keep blood glucose levels within the normal range and to keep the body's cells furnished with the glucose they need. A person who is insulin-resistant, on the other hand, needs a lot more insulin to get the same blood-glucose-lowering effects, potentially leading to type 2 diabetes. Physical activity has a significant positive effect on insulin sensitivity in normal as well as insulin resistant populations. Combining aerobic activities - such as brisk walking, swimming, and cycling - with resistance training, or weight training, tends to have the greatest effect. Therefore, to enhance the insulin sensitivity on a continuing basis, one should plan on exercising a minimum of every other day, with near-daily workouts for even more beneficial effect.

## Genetic risk analysis

100.0  
  
**Enhanced**

### How do these results connect?

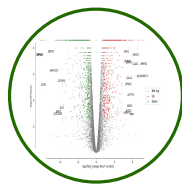
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



# Loss Of Body Fat Response To Exercise **Exercise response**

## About



Achieving and maintaining a healthy body weight has been a significant, yet difficult, goal for many people as evidenced by the high prevalence of obesity. Accumulation of fat is more often associated with metabolic syndrome, diabetes, and cardiovascular disease. Age and sex are also possible factors associated with fat accumulation. It is well-established that a reduction in energy intake is the primary dietary factor that is necessary to promote weight and fat loss and maintenance, a strategy that plays a key role in weight management. Aerobic exercise training and endurance training are the well-established method of reducing body fat, combined with diet,<sup>2</sup> but loss of body fat in response to exercise varies from individual to individual and ascribed to genetics.

## Genetic risk analysis



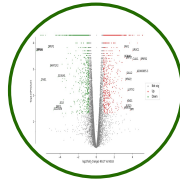
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Exercise is the cornerstone of weight loss programs, and preventing diseases. Unhealthy and sedentary lifestyle habits like lack of physical activity and excessive energy intake may result in overweight and obesity. Physical exercise plays a critical role in maintaining cardiovascular health and physically active individuals are less likely to develop stroke, some forms of cancer, type 2 diabetes, high blood pressure to name a few. Intentional weight loss is the loss of total body mass as a result of efforts to improve fitness and health. Weight loss is the main treatment for obesity.

## Genetic risk analysis



**Typical**

### How do these results connect?

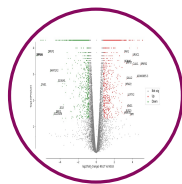
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?





## About



Maximal oxygen uptake (VO<sub>2</sub>) max is the defining measure of cardiorespiratory fitness and aerobic performance capacity. As the exercise rate is increased, oxygen uptake increases linearly and reaches an upper limit to oxygen uptake which is known as maximal oxygen uptake (VO<sub>2</sub>max). Aerobic exercise or exercise done in the presence of oxygen provide cardiovascular conditioning and increases the oxidative capacity of muscle cells, decreases the amount of lipid products stored in skeletal muscles, increases glucose uptake by muscle during physical activity, and enhances the storage of glucose in muscle after exercise. Benefits of aerobic exercise include, lowers blood pressure, increases HDL level, reduces the risk of risk of obesity, cardiovascular disease, diabetes, increases physical functioning. Aerobic exercise or endurance exercises such as walking, jogging, swimming, cycling and jumping rope includes activities that increase your breathing and heart rate. Endurance activity improves overall fitness.

### Genetic risk analysis



Typical

### Actual blood analysis



Slightly Enhanced

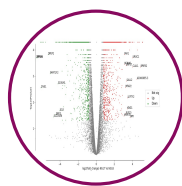
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Muscular power is the ability to overcome resistance, over a shortest period of time, as in fast leg kicks and explosive jumping. Having muscle power, or explosiveness, is important for athletes, as most sports require a great amount of force generation in little time. Type II muscle fiber in the body, also called fast-twitch fibers provide bigger and more powerful forces, but for shorter durations and fatigue quickly. They have the ability to produce energy in the absence of oxygen (glycolytic oxidation). This allows them to produce energy quicker using phosphocreatine and glycogen, to fuel the power activities such as jumping and sprinting. Amount of type II fibers varies from person to person, and this inter-individual difference is attributed to genetics. Type II muscle fibers can be developed through muscle power specific training. Training to improve power include lifting weights, running against a resistance.

## Genetic risk analysis



Typical

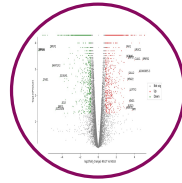
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Muscular strength refers to the ability to overcome resistance, in a single contraction, such as lifting a weight. Muscular power is the ability to overcome resistance, over a shortest period of time, as in fast leg kicks and explosive jumping. While strength is the maximal force which is applied against a load, power is the speed at which this maximal force is applied. The amount of muscle strength which can be achieved depends on gender, age, and genetics. Benefits of strong muscles include: ease of movement, good posture, easier performance of work, and decreased risk of injury, decreased risk of falls. Having muscle power, or explosiveness, is important for athletes, as most sports require a great amount of force generation in little time. So, while lifting weights is a strength-based activity, when the weight is moved quickly, it is more of a power-based activity. Skeletal muscles are made up of individual muscle fibers and the two types are slow-twitch (type I) and fast-twitch (type II). Slow-twitch muscle fibers are focused on sustained and smaller movements, posture-control and are fatigue resistant. They are aerobic in nature as they contain more mitochondria and myoglobin compared to fast-twitch fibers which provide bigger and more powerful forces, but for shorter durations and fatigue quickly. Fast-twitch fibers are more anaerobic with less blood supply. Endurance activities like marathon running are supported by slow-twitch muscle fibers, quick powerful movements such as sprinting or weightlifting are supported by fast-twitch muscle fibers. Amount of type II fibers varies from person to person, and this inter-individual difference is attributed to genetics. Type II muscle fibers can be developed through muscle power specific training. Training to improve power include lifting weights, running against a resistance. Weight training is the fastest and efficient way to build strength and explosive power, which athletes need for power sports. Strength training not only increases power but also enhances endurance.

## Genetic risk analysis



Typical

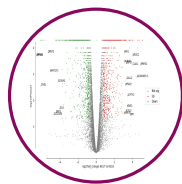
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Strength training also referred to as resistance or weight training, involves a physical activity which uses external resistance, such as free-weights, weight machines, or one's own body weight to build muscular fitness which targets a specific muscle or group of muscles. Strength training significantly provides overall fitness and benefits including increased bone, ligament and muscular strength, reduced potential for injury and improved joint function. Strength training particularly benefits people with health issues such as obesity, arthritis, or a heart condition.

## Genetic risk analysis



Typical

### How do these results connect?

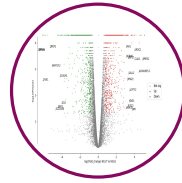
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?





## About



A sport or an activity that demand the ability to perform physical activity for long periods of time, such as marathon running and cross-country skiing. Endurance is affected by an individual muscle, a group of muscles, or the total body. Total body endurance or cardiopulmonary endurance, reflects the ability of the heart to deliver a constant supply of oxygen to a working muscle. Muscle endurance is referred to as the ability to sustain repeated muscle contraction and is a measure of muscle strength. Endurance can be improved in response to training; however, genetic factors also play a role in the success. Endurance activities like marathon running, cycling, power walking, are supported by slow-twitch muscle fibers. Slow-twitch muscle fibers are focused on sustained and smaller movements, posture-control and are fatigue resistant. They are aerobic in nature as they contain more mitochondria and myoglobin. Endurance exercises such as marathon, walking, jogging, swimming, cycling, and jumping rope increase your breathing and heart rate. Endurance activity keeps the lungs, heart, and circulatory system healthy and improves the overall fitness.

## Genetic risk analysis

0.0  
● ● ● ● ● ●

Typical

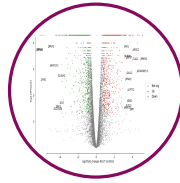
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Fitness is defined as the state or quality of being fit and healthy. The major components of overall fitness include muscular strength, total endurance, flexibility, and mobility. To achieve overall fitness, it takes some effort and lifestyle changes such as maintaining a healthy weight, having a balanced diet, getting quality sleep, exercising. Exercise can be aerobic exercise, resistance training or combined aerobic and resistance training. Aerobic exercise involves cardiorespiratory endurance exercises like jogging, running and cycling. Resistance training is a strength-developing exercise utilizing external resistance or one's own weight. Benefits of regular exercise include improves lipid profile; strengthen bone and muscle health; reduce the risk of overweight, hypertension, coronary heart disease, stroke, diabetes, various types of cancer; improves mental health, reduces the risk of anxiety and depression; improves the ability to do daily activities and prevent falls; reduce the risk of hip or vertebral fractures; maintain energy balance and weight control; can help prevent excess weight gain or help maintain weight.

## Genetic risk analysis

0.0  
● ● ● ● ● ●

Typical

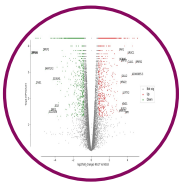
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



About



Genetic risk analysis



Slightly Enhanced

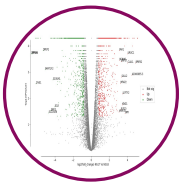
How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

Dietary Sources / What To Do ?



About



Genetic risk analysis



Slightly Enhanced

How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

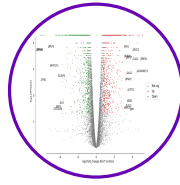
Dietary Sources / What To Do ?





# Response to monounsaturated fats **Macronutrient requirement**

## About



Monounsaturated fatty acids (MUFA) are at least 12 carbon atoms in length typically contain one double bond. Monounsaturated fatty acids include palmitic, oleic, and elaidic acid. MUFAs are liquid at room temperature. Sources of monounsaturated fats are olive oil, peanut oil, canola oil, safflower and sunflower oils, avocados, and most nuts, as well as red meat, whole milk products. Eating foods high in monounsaturated fats help lowering "bad" LDL cholesterol and keep "good" HDL cholesterol levels high.

## Genetic risk analysis

0.0  
● ● ● ● ● ●

Typical

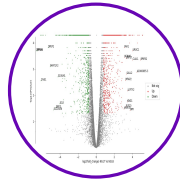
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Protein is an essential macronutrient needed by the human body for growth and maintenance. Protein acts as a building block for muscles, blood, skin, hair, nails, and for enzymes, hormones, and vitamins. Proteins have a wide array of functions some of which include, builds and repairs tissues, reduces muscle loss, builds a lean muscle and plays an important role in hormone regulation. Protein is the most satiating macronutrient, the reason why you feel fuller following a high protein meal, consequently helps with weight maintenance. Protein intake allows the body to acquire essential amino acids for supporting vital physiological processes. Foods rich in animal protein are meat, fish, eggs, poultry, and dairy products, while plant foods high in protein are mainly legumes, nuts, and grains. Eating required amount of protein is recommended to support body cells, structure, and function. This requirement will be different for each person based on factors like age, sex, genes and physical activity levels. Choosing nutritious protein sources is recommended for optimal health and fitness.

## Genetic risk analysis

0.0  
● ● ● ● ● ●

Typical

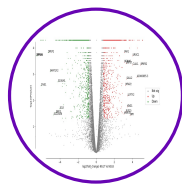
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

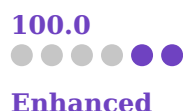


## About



Polyunsaturated fats contain more than one double bond in their backbone. Omega-3 and omega-6 fatty acids, are the main polyunsaturated fatty acids (PUFAs). Some of the PUFAs are alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA), Linoleic acid (LA), Arachidonic Acid (ARA), (Gamma linoleic (GLA). The main dietary sources of omega-3 fats are fatty fish like salmon, mackerel, anchovies, sardines, arctic char and trout, eggs, flaxseeds, walnuts, soybeans, tofu, and canola oil. Safflower and sunflower oils, soybeans, corn, nuts and seeds, poultry, fish and eggs are a good source of omega-6 fats. Key functions of PUFAs include, maintaining normal blood levels of cholesterol and normal function of the heart, blood pressure regulation, brain development and vision, vasoconstriction, coagulation of the blood, cell signalling, and inflammation. Increased benefit from polyunsaturated fat is achieved by eliminating saturated fat and trans-fat from the diet alongside increasing polyunsaturated fat intake, which in turn is effective in lowering LDL cholesterol and triglycerides.

## Genetic risk analysis



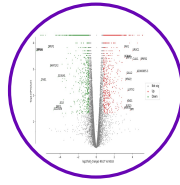
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Saturated fats are saturated with hydrogen molecules and contain only single bonds between carbon molecules. This saturation of hydrogen molecules results in saturated fats being solid at room temperature. Saturated fats are found in animal fats, baked goods, condiments, dairy products, desserts etc. Consuming high saturated fat compared to other fats, may leads to raise in LDL cholesterol and increase the risk of heart disease. Replacing saturated fat with good fats, especially, polyunsaturated fats is good for health cardiovascular disease prevention.

## Genetic risk analysis

0.0



Typical

### How do these results connect?

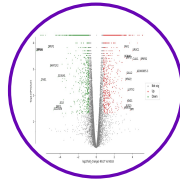
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?





## About



Carbohydrates are macronutrients which are essential for proper body functioning. Carbohydrates serve as long-term food storage molecules and as structural components; play key roles in the immune system, fertilization, preventing pathogenesis, blood clotting, and development. Sufficient fiber intake is vital to maintain a healthy digestive system. The glycaemic index is a measure of the change in blood glucose following ingestion of carbohydrate-containing foods. There are 2 kinds of carbohydrates, refined (simple) and unprocessed (complex). Simple carbohydrates include sugary foods, pasta, bread, and white rice. Complex carbohydrates include whole grains, legumes, brown rice, and whole wheat breads. Complex carbohydrates take longer to break down, causing a slower increase in blood sugar levels. When carbohydrate is consumed, it is broken down into glucose. In response to raise in glucose levels in the blood, insulin hormone is secreted which regulates the absorption of glucose from the blood for energy or storage. As glucose is absorbed by cells, it's levels in the bloodstream begin to drop, in response to which glucagon hormone is secreted. Glucose hormone signals liver to release stored glucose. So, the interplay between glucose and insulin ensures that there is a steady supply of blood sugar throughout the body. When the body cannot produce enough insulin or can't use the produced insulin efficiently, it paves the way for the development of type 2 diabetes.

## Genetic risk analysis



**Typical**

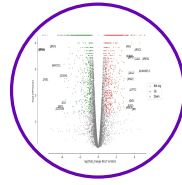
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Dietary fiber is the indigestible portion of plant-derived foods, which cannot be digested by human enzymes in the small intestine. There are 2 types of fibers: soluble (beta-glucans from oats and barley, raw guar gum, psyllium, inulin, wheat dextrin) and insoluble fibers (wheat bran, cellulose, lignin). Biological functions include lowering blood glucose, lowering cholesterol levels, lowering blood pressure, increased mineral absorption in the intestinal tract, reduced energy intake (due to feeling of fullness after consuming fiber. Fiber alleviates constipation by adding bulk to the stool, which accelerates bowel movements. When pain, gas, and bloating predominate, use of fiber may actually be counterproductive because fermentation of fiber generates increased gas production. Fiber supplementation is a commonly prescribed dietary remedy for Irritable bowel syndrome (IBS).

## Genetic risk analysis



Typical

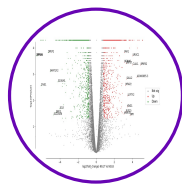
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Diet which works for one, might not work for the other person. Matching diet meets people's common dietary requirements in order to live a healthier life. Types of diet include "The Paleo Diet", "The Blood Type Diet", "The Vegan Diet", "The Mediterranean Diet", "Balanced diet", "Raw Food Diet", "Low fat diet" and "Low carb diet". By evaluating of many genetic variations and by determining metabolic health factors such as HDL, LDL and triglyceride level, caffeine consumption etc, individual's best-suited diet type is selected unique to your genes.

## Genetic risk analysis

42.839999999999996



**Slightly Enhanced**

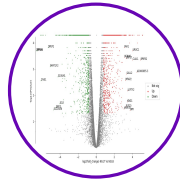
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Omega-3 fatty acids, also called Omega-3 oils or n-3 fatty acids, are polyunsaturated fatty acids (PUFAs) characterized by the presence of a double bond three atoms away from the terminal methyl group in their chemical structure. Several different omega-3s exist, but the majority of scientific research focuses on three: alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA). ALA contains 18 carbon atoms, whereas EPA and DHA are considered "long-chain" (LC) omega-3s because EPA contains 20 carbons and DHA contains 22. ALA is needed for children's normal growth and development, and helps maintain normal blood levels of cholesterol. DHA contributes to the normal function of the heart. DHA and EPA helps maintain normal blood pressure, and blood levels of triglycerides, a type of fat in the blood. It also contributes to normal brain development and vision, and baby's brain and eye development during pregnancy.

## Genetic risk analysis

0.0  
● ● ● ● ● ●

Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

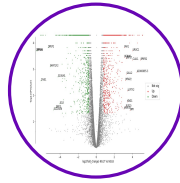
## Dietary Sources / What To Do ?





# Omega-6 And Omega-3 Levels **Macronutrient** requirement

## About



Omega-3 and omega-6 fatty acids, are the main polyunsaturated fatty acids (PUFAs) characterized by the presence of a double bond three atoms and 6 atoms away respectively from the terminal methyl group in their chemical structure. Several different omega-3s exist, but the majority of scientific research focuses on three: alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA). There are four important types of omega-6 fats are LA (Linoleic acid), ARA (Arachidonic Acid), GLA (Gamma linoleic) and CLA (Conjugated linoleic acid). Omega -3 fatty acid helps maintain normal blood levels of cholesterol, normal function of the heart, helps maintain normal blood pressure, normal brain development and vision, and baby's brain and eye development during pregnancy. The functions of omega 6 include vasoconstriction, coagulation of the blood, cell signalling, inflammation, blood pressure regulation, lowering cholesterol levels, growth and repair processes. Both omega-3 and omega-6 fatty acids are important components of cell membranes and are precursors to many other substances in the body such as those involved in regulating blood pressure and inflammatory responses. Modern western diet has the omega-6 to omega-3 essential fatty acids (EFA) ratio of 15:1 to 16.7:1, evidences suggest that humans have evolved with a diet of a 1:1 ratio of omega-6 to omega-3 and the optimal ratio is thought to be 4:1 or lower. Western diets are deficient in omega-3 fatty acids, and have excessive amounts of omega-6 fatty acids.<sup>2</sup> The main dietary sources of omega-3 fats are fatty fish like salmon, mackerel, anchovies, sardines, arctic char and trout, eggs, flaxseeds, walnuts, soybeans, tofu, and canola oil. Omega-6 fats are found in soybeans, corn, safflower and sunflower oils, nuts and seeds, meat, poultry, fish and eggs.

## Genetic risk analysis

100.0



Enhanced

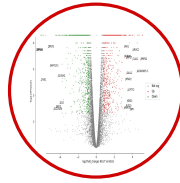
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Elevated blood sugar or hyperglycemia that results from higher than normal levels of the sugar (glucose) in the blood plasma. Hyperglycemia is defined as a blood glucose greater than 140 mg/dl in oral glucose tolerance test or a fasting plasma glucose level of greater than 100 mg/dl. It results when the body does not produce or use enough insulin, increased hepatic glucose production and impaired glucose utilization in peripheral tissues. Reduced insulin and excess counterregulatory hormones (glucagon, cortisol, catecholamines and growth hormone) increase lipolysis and protein breakdown (proteolysis), and impair glucose utilization by peripheral tissues.

## Genetic risk analysis

50.0



Slightly Enhanced

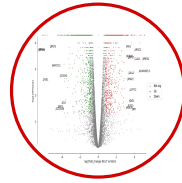
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



High-density lipoprotein (HDL) is one of the major groups of lipoproteins. The density of the lipoproteins is directly proportional to the protein content. Chylomicrons are the largest in size among the lipoproteins, followed by VLDL, LDL and HDL. HDL is the smallest of the lipoprotein particles. It is the densest because it contains the highest proportion of protein to lipids. Its most abundant apolipoproteins are apo A-I and apo A-II. HDL cholesterol is often referred to as "good" cholesterol. HDL picks up excess cholesterol (including LDL) in blood and takes it back to liver where it's broken down and excreted into the faeces via the bile. HDL play a key role in this pathway, known as reverse cholesterol transport (RCT). HDL is known for its athero-protective properties, higher levels of which reduce the risk of heart disease. HDL directly or indirectly transports cholesterol to steroidogenic organs such as adrenals, ovary, and testes for the synthesis of steroid hormones. Low HDL-C is often a clinical indicator of disturbed metabolism of triglyceride-rich lipoproteins (e.g. in diabetes mellitus) or a chronic inflammation. HDL levels are typically lower in people who have metabolic syndrome - a cluster of conditions that include obesity, increased blood pressure and high blood sugar levels; who lead a sedentary lifestyle, who smoke. In patients with diabetes mellitus, coronary disease, chronic renal insufficiency, cardiovascular risk factors and disorders, the function of HDL is impaired. The standard method for the determination of cholesterol in HDL in the clinical laboratory is the combined method of precipitation and ultracentrifugation (beta quantification). A low HDL is under 40 mg/dL of blood. The positive vascular effects of HDL have been an attractive target for the treatment of chronic or acute vascular disease. HDL-C can be increased through a number of lifestyle modifications, smoking cessation, increased physical activity and dietary changes. Increasing HDL-C through these changes is associated with vascular protective effects. Eating the right food can help you reduce your bad cholesterol and improve your good cholesterol.

## Genetic risk analysis

50.0



Slightly Enhanced

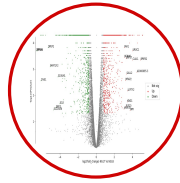
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Low-density lipoprotein (LDL) is one of the major groups of lipoproteins, carries cholesterol particles in the plasma responsible for supplying cholesterol to tissues with the highest sterol demands. The density of the lipoproteins is directly proportional to the protein content. Chylomicrons are the largest in size among the lipoproteins, followed by VLDL, LDL and HDL. LDL particles are formed when triglycerides are removed from VLDL by the lipoprotein lipase enzyme (LPL) and they become smaller and denser containing a core of cholesterol ester and one apolipoprotein, apoB-100, per LDL particle. LDL carries cholesterol to various tissues such as gonads, adrenal gland, muscle and adipose tissue. LDL receptor on the cell surface recognized apoB-100 and LDL is taken by endocytosis. Expression of LDL receptor is finely regulated by the level of intracellular cholesterol in order to prevent excess cholesterol deposition. Lipoproteins are also crucial for the transport of toxic foreign hydrophobic and amphipathic compounds, including bacterial endotoxin from areas of invasion and infection. The LDL which are not taken up by the cells and tissues are returned to the liver via LDL receptors present on the membranes of hepatocytes. In liver, cholesterol may be converted to bile acids or neutral sterols or re-esterified and stored in the liver. Defects in LDL receptor function can cause hypercholesterolemia, known as familial hypercholesterolemia, an autosomal dominant disorder. When LDL cholesterol concentration is high, it builds up on the walls of blood vessels, resulting in plaque formation. Over time plaques build up and narrows the blood vessels. This narrowing blocks the blood flow, causing, chest pain or a heart attack. Since most of the cholesterol in serum is transported via LDL, measuring serum LDL levels could be useful to predict the risk for atherosclerotic cardiovascular diseases (ASCVD). Lifelong exposure to increased concentrations of LDL cholesterol increases cardiovascular event rates. Maintaining the right diet, exercising and smoking cessation are proven effective in reducing LDL level. Medications may be needed for high LDL cholesterol level.

## Genetic risk analysis

50.0



Slightly Enhanced

### How do these results connect?

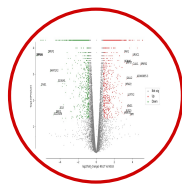
You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?





## About



Triglyceride molecules represent the major form of storage and transport of fatty acids within cells and in the plasma. Triglycerides are major components of triglyceride-rich lipoproteins including VLDL and chylomicrons, which are further processed by LPL protein to LDL. Triglycerides main functions are to provide energy, primary form of energy storage in the body, aid in the absorption and transport of fat-soluble vitamins. Hypertriglyceridemia is high blood levels of triglycerides. Elevated levels of triglycerides are associated with atherosclerosis, even in the absence of hypercholesterolemia, and predispose to cardiovascular disease. TG levels higher than 200 mg/dL are associated with an increase in the risk of heart attack, stroke, and death. Low triglyceride levels may be due to low fat diet, hyperthyroidism, malabsorption, malnutrition. Most people with elevated triglycerides experience no symptoms. Habitual overeating causes high triglycerides. Other triggers are excessive alcohol consumption, adverse side effect of particular medications, poorly managed diabetes, and genetics. Weight loss and dietary modification are effective first-line lifestyle modification treatments for hypertriglyceridemia. Exercising regularly, eating less high fat foods, increase intake of fibre, fish rich in omega-3 fatty acids, cut back alcohol and smoking cessation are some modifications to be incorporated. Medications may be needed for high triglyceride levels, sometimes when healthy eating and regular exercise can't lower high triglyceride levels.

## Genetic risk analysis

45.480000000000004



Slightly Enhanced

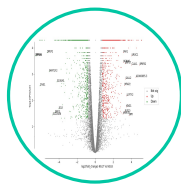
### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?



## About



Vitamin A (also called all-trans-retinol or all-trans-retinoic acid) is an essential micronutrient and a fat-soluble vitamin that plays an important role in a wide array of physiologic processes. Preformed vitamin A (all-trans-retinol and its esters) and provitamin A (beta-carotene) are essential dietary nutrients that provide a source of retinol. Oxidation of retinol provides retinal, which is essential for vision, and retinoic acid, a transcription factor ligand that has important roles in regulating genes involved in cell morphogenesis, differentiation, and proliferation. In addition to serving as a metabolic source of retinol, beta-carotene, along with other dietary carotenoids, function as antioxidants that can prevent carcinogenesis by decreasing the levels of the free-radicals that cause DNA damage. Vitamin A metabolism is important for vital processes such as vision, embryonic development, immunity, and membrane and skin protection.

## Genetic risk analysis

50.0



Slightly Enhanced

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

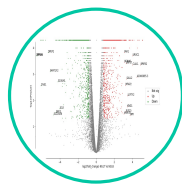
**Plant Source :** kale, spinach, broccoli, carrots, sweet potatoes, pumpkin, tomatoes, cheddar cheese, asparagus

**Animal Source :** eggs, red meat

**Other Source :**



## About



Thiamine also known as vitamin B1 is a water-soluble a sulphur-containing vitamin that participates in energy metabolism, converting carbohydrates, lipids and proteins into energy. Thiamin also plays a key role in muscle contraction and conduction of nerve signals. Thiamine is present in the body as free thiamine, as well as in several phosphorylated forms: thiamine monophosphate (ThMP), thiamine diphosphate (ThDP), and thiamine triphosphate (ThTP). ThDP, also called thiamine pyrophosphate, is the metabolically active form, constituting some 80% of total body thiamine. ThDP is an essential cofactor in multiple enzyme complexes involved in the metabolism of carbohydrates and amino acids. Thiamin is essential for the metabolism of pyruvate. Thiamin concentrations are highest in yeast and in the pericarp and germ of cereals. Because thiamine is a water-soluble vitamin, significant amounts are lost in discarded cooking water.

## Genetic risk analysis

0.0



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

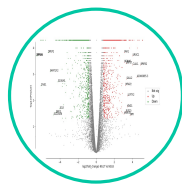
**Plant Source :** whole grain cereals and rice, nuts, legumes, bran, yeast, and wheat germ

**Animal Source :** pork, beef, poultry and organ meats

**Other Source :**



## About



Vitamin B2, or riboflavin is a water-soluble vitamin. This vitamin is an essential component of two major coenzymes, flavin mononucleotide (FMN; also known as riboflavin-5'-phosphate) and flavin adenine dinucleotide (FAD). These coenzymes play major roles in energy production; cellular function, growth, and development; and metabolism of fats, drugs, and steroids. Plasma membrane transporter mediating the uptake by cells of the water-soluble vitamin B2/riboflavin that plays a key role in biochemical oxidation-reduction reactions of the carbohydrate, lipid, and amino acid metabolism. The conversion of the amino acid tryptophan to niacin requires FAD. Similarly, the conversion of vitamin B6 to the coenzyme pyridoxal 5'-phosphate needs FMN. In addition, riboflavin helps maintain normal levels of homocysteine, an amino acid in the blood.

## Genetic risk analysis



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

**Plant Source** : milk, cheese, plain yogurt, fortified breakfast cereals, mushrooms, asparagus, broccoli, and spinach

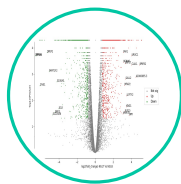
**Animal Source** : egg, poultry and lean meats, fatty fish

**Other Source** :





## About



Nicotinic acid and nicotinamide, collectively referred to as niacin or Vitamin B3, are nutritional precursors of the bioactive molecules nicotinamide adenine dinucleotide (NAD) and nicotinamide adenine dinucleotide phosphate (NADP). NAD and NADP are important cofactors for most cellular redox reactions, and as such are essential to maintain cellular metabolism and respiration. It also protects against neurological degeneration. Niacin can also be synthesized from the amino acid tryptophan. Niacin can interact with certain medications, like isoniazid and pyrazinamide and antidiabetic medications.

## Genetic risk analysis



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

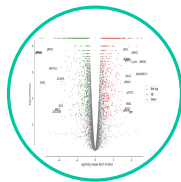
**Plant Source** : nuts, legumes, grains, milk, enriched breads and cereals

**Animal Source** : poultry, beef, egg and fish

**Other Source** :



## About



Vitamin B5 or pantothenic acid is water soluble vitamin. Pantothenate, in the form of Coenzyme A, performs multiple roles in cellular metabolism. CoA facilitates the transfer of acetyl or acyl groups. Beta-Oxidation of fatty acids and the oxidative degradation of amino acids depend on CoA and thereby make the catabolic products available to the TCA cycle. The condensation of three acetyl CoA molecules yields 3-hydroxy-3-methylglutaryl-CoA (HMG CoA), an intermediate in cholesterol synthesis. Vitamin B5 is involved in more than 100 different steps in the synthesis of lipids, neurotransmitters, steroid hormones, and haemoglobin and is important for maintenance and repair of tissues and cells of the skin and hair, helps in healing of wounds and lesions, and pantethine, which is a form of vitamin B5, normalizes blood lipid profiles.

## Genetic risk analysis



### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

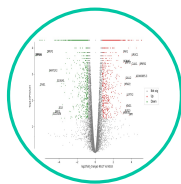
**Plant Source :** Mushrooms, avocados, sunflower seeds, whole milk, sweet potatoes

**Animal Source :** Salmon, lean chicken breast, beef

**Other Source :**



## About



Vitamin B6 are a group of water-soluble vitamins that are essential for the transformation of energy and regulation of metabolism. It is the generic name for six compounds (vitamers) with vitamin B6 activity: pyridoxine, an alcohol; pyridoxal, an aldehyde; and pyridoxamine, which contains an amino group; and their respective 5'-phosphate esters. Pyridoxal 5'-phosphate (PLP) and pyridoxamine 5'-phosphate (PMP) is the active coenzyme forms of vitamin B6. Vitamin B6 functions as a coenzyme in various enzymatic reactions in the metabolism of amino acids, one-carbon units, lipids, and the pathways of gluconeogenesis, heme, and neurotransmitter biosynthesis.

## Genetic risk analysis



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

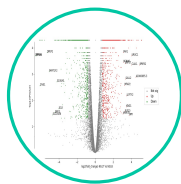
**Plant Source** : Fortified cereals, chickpeas, dark leafy greens, bananas, papayas, oranges, and cantaloupe, peanut butter

**Animal Source** : Beef liver, tuna, salmon, poultry

**Other Source** :



## About



Vitamin B7, biotin or vitamin H is a water-soluble vitamin that belongs to the vitamin B complex and which is an essential nutrient. In eukaryotic cells biotin functions as a prosthetic group of enzymes, collectively known as biotin-dependent carboxylases that catalyze key reactions in gluconeogenesis, fatty acid synthesis, and amino acid catabolism. Biotin is involved in many cellular reactions, particularly in fat and protein metabolism of hair roots, finger nails, and skin. Biotin must be obtained from the diet as it can be only synthesized by plants, bacteria, yeast and algae.

## Genetic risk analysis



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

**Plant Source :** Avocados, sweet potato, nuts and seeds

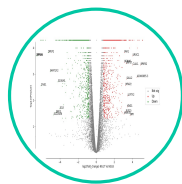
**Animal Source :** Beef liver, cooked eggs, salmon, pork

**Other Source :**





## About



Vitamin B9 (folate) is a water-soluble B group vitamin. Folic acid is the synthetic form of folate. Folates (Folic Acid, Methotrexate, 10-formyl-tetrahydrofolate diglutamate) function as a family of enzyme cofactors that carry and chemically activate single carbons (referred to as one-carbons) for biosynthetic reactions. Folate is required for the biosynthesis of ribonucleotides and deoxyribonucleotide precursors for DNA synthesis. It is also required for amino acid metabolism, including the remethylation of homocysteine to methionine, and therefore functions in the regulation of gene expression by methylation. Collectively, the network is referred to as folate-mediated one-carbon metabolism.

## Genetic risk analysis



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

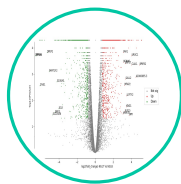
## Dietary Sources / What To Do ?

**Plant Source** : Dark green leafy vegetables (turnip greens, spinach, romaine lettuce, asparagus, Brussels sprouts, broccoli), beans, peanuts, sunflower seeds, fresh fruits, fruit juices

**Animal Source** : Liver, kidney, seafood, eggs

**Other Source** :

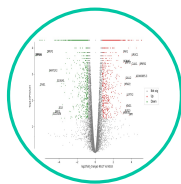




**Other Source :**



## About



Vitamin C (L-ascorbic acid, ascorbate), a water-soluble essential micronutrient. Vitamin C is required for the biosynthesis of collagen, L-carnitine, and certain neurotransmitters; vitamin C is also involved in protein metabolism. Collagen is an essential component of connective tissue, which plays a vital role in wound healing. Vitamin C is also an important physiological antioxidant. High levels of vitamin C are found in pituitary and adrenal glands, eyes, white blood cells, and the brain. Vitamin C has multiple roles - in the synthesis of collagen, absorption of iron, free radical scavenging, and defence against infections and inflammation.

## Genetic risk analysis



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

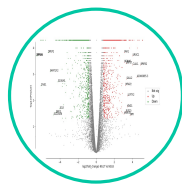
**Plant Source :** Citrus fruits (oranges, kiwi, lemon, grapefruit), tomatoes, strawberries, cruciferous vegetables (broccoli, Brussels sprouts, cabbage, cauliflower), asparagus

**Animal Source :** A diet of only animal foods usually doesn't contain enough vitamin C. However, sufficient amounts of vitamin C can be acquired from raw liver, fish roe and eggs

**Other Source :**



## About



Vitamin D (also referred to as ?calciferol?) is a fat-soluble vitamin that regulates calcium homeostasis and is vital for bone health. It is also produced endogenously when ultraviolet (UV) rays from sunlight strike the skin and trigger vitamin D synthesis. Vitamin D obtained from sun exposure, foods, and supplements is biologically inert and must undergo two hydroxylation?s in the body for activation. The first hydroxylation, which occurs in the liver, converts vitamin D to 25-hydroxyvitamin D [25(OH)D], also known as ?calcidiol.? The second hydroxylation occurs primarily in the kidney and forms the physiologically active 1,25-dihydroxyvitamin D [1,25(OH)2D], also known as ?calcitriol?. Most, if not all, actions of vitamin D are mediated through the vitamin D receptor (VDR). Vitamin D is essential for maintenance of bone mineralization through the regulation of calcium and phosphorus homeostasis. Vitamin D also exhibits many non-skeletal effects, particularly on the immune, endocrine, and cardiovascular systems.

## Genetic risk analysis

23.700000000000003



Slightly Enhanced

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

**Plant Source** : cheese, some mushrooms, orange juice, dairy and plant milks fortified with vitamin D

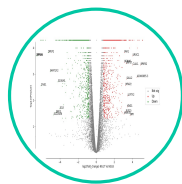
**Animal Source** : Cod liver oil, beef liver, egg yolks, tuna, mackerel, trout, herring, sardines, kipper, anchovies

**Other Source** :





## About



Vitamin E is the major lipid-soluble antioxidant in the cell antioxidant system and is exclusively obtained from the diet. Naturally occurring vitamin E exists in eight chemical forms (alpha-, beta-, gamma-, and delta-tocopherol and alpha-, beta-, gamma-, and delta-tocotrienol) that have varying levels of biological activity. Alpha- (or  $\alpha$ -) tocopherol is the only form that is recognized to meet human requirements. Vitamin E protects cell membranes, proteins, and DNA from oxidation and thereby contributes to cellular health. It prevents oxidation of the polyunsaturated fatty acids and lipids in the cells. Vitamin E exerts its antioxidant activity by inhibiting the production of reactive oxygen species (ROS). Vitamin E is stored in the liver and it preferentially resecretates only alpha-tocopherol via the hepatic alpha-tocopherol transfer protein.

## Genetic risk analysis



Enhanced

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

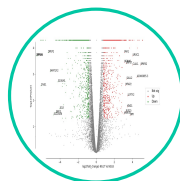
**Plant Source :** Wheat germ oil, sunflower, safflower, and soybean oil, sunflower seeds, almonds, peanuts, peanut butter, beet greens, collard greens, spinach, pumpkin, red bell pepper, asparagus, mango, avocado

**Animal Source :** Goose meat, Atlantic salmon

**Other Source :**



## About



Vitamin K, the generic name for a family of compounds with a common chemical structure of 2-methyl-1,4-naphthoquinone, is a fat-soluble vitamin. These compounds include phyloquinone (vitamin K1) and a series of menaquinones (vitamin K2). Phyloquinone, which is the major dietary source, is concentrated in leafy plants. In contrast, menaquinones are the product of bacterial production or conversion from dietary phyloquinone. Vitamin K functions as a coenzyme for vitamin K-dependent gamma-glutamylcarboxylase (matrix Gla protein), an enzyme required for the synthesis of proteins involved in haemostasis (blood clotting) and bone metabolism, and other diverse physiological functions and, is a necessary cofactor for the activation of coagulation factors II, VII, IX, X, and protein C and S. Osteocalcin is another vitamin K-dependent protein that is present in bone and may be involved in bone mineralization or turnover.

## Genetic risk analysis

0.0



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

**Plant Source** : Green leafy vegetables including collard and turnip greens, kale, spinach, broccoli, brussels sprouts, cabbage, lettuces, soybean and canola oil, natto (fermented soybeans)

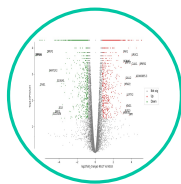
**Animal Source** : Smaller amounts in meat, cheese, eggs

**Other Source** :



# Lutein And Zeaxanthin Deficiency **Micronutrient** requirement

## About



Lutein and zeaxanthin (LZ) are the two major fat-soluble antioxidants belonging to xanthophyll carotenoids or macular pigments. They are found in high concentrations in the macula of the human eye. As the human body cannot produce lutein and zeaxanthin, they need to be obtained through food and are transported in blood to the different tissues by lipoproteins. Lutein is present in the eye, blood, skin, brain and breast. Unlike beta-carotene, lutein and zeaxanthin cannot be converted in the body into vitamin A (retinol). As antioxidants, a sufficient intake of lutein and zeaxanthin is important as they may help the body to protect against the damaging effects of free radicals, potentially leading to diseases involving the heart or blood vessels (cardiovascular diseases), and cancer. In addition, lutein and zeaxanthin protect the eye from harmful ultraviolet light by filtering out blue light, thereby protecting the eye from light-induced oxidative damage. Lutein and zeaxanthin play an important role in visual and cognitive development. Maternal blood and milk provide lutein and zeaxanthin to the growing foetus/infant. Current evidence suggests that higher dietary intakes of lutein and zeaxanthin are likely to play an important role in protecting against age-related macular degeneration (AMD).

## Genetic risk analysis

0.0  
● ● ● ● ● ●

Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

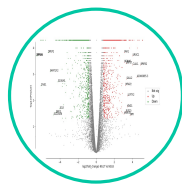
**Plant Source** : Dark green leafy vegetables, broccoli, spinach, yellow pepper, kale, sweet corn, pumpkin

**Animal Source** : Egg yolk and animal fats

**Other Source** :



## About



Lycopene is a bright red bioactive carotenoid found in red-coloured fruits and vegetables, including, carrots, watermelons, grapefruits, apricots and papayas. Foods that are not red may also contain lycopene, such as asparagus, guava and parsley. Lycopene has the greatest antioxidant potential among carotenoids. The main activity profile of lycopene includes antiatherosclerotic, antioxidant, anti-inflammatory, antihypertensive, antiplatelet, anti-apoptotic, and protective endothelial effects, the ability to improve the metabolic profile, and reduce arterial stiffness. High blood lycopene concentrations are also associated with lower risks of developing prostate, lung, uterine and breast cancer. Lycopene does not only inhibit proliferation of neoplastic cells, but it also induces their apoptosis and prevents metastasis. The health effects attributed to this compound are mostly derived from its antioxidant properties. It is a strong singlet oxygen quencher, and it thwarts lipid oxidation. Experimental and clinical studies have also confirmed lycopene's positive effects on the skeletal system and on neurodegenerative diseases, including Alzheimer's and Parkinson's.

## Genetic risk analysis

0.0  
● ● ● ● ● ●

Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

**Plant Source :** Tomato, carrot, watermelon, grapefruit, apricot, papaya, asparagus, red bell peppers, guava and parsley

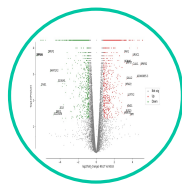
**Animal Source :**

**Other Source :**





## About



Coenzyme Q or ubiquinone is a benzoquinone compound found in mitochondria that has a critical role in producing energy for the body. Ubiquinones are fat-soluble molecules with anywhere from 1 to 12 isoprene (5-carbon) units. The ubiquinone found in humans, ubiquinol or coenzyme Q10, has a "tail" of 10 isoprene units (a total of 50 carbon atoms) attached to its benzoquinone "head". It is present in human body with highest levels in the heart, liver, kidneys, and pancreas. Coenzyme Q10 plays a central role in mitochondrial oxidative phosphorylation and the production of adenosine triphosphate (ATP). It plays an important role in the endogenous antioxidant system and also in the transport of protons across lysosomal membranes to maintain the optimal pH.

## Genetic risk analysis

0.0  
● ● ● ● ● ●

Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

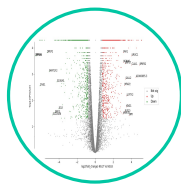
**Plant Source** : Soy and canola oils, peanuts, pistachios and sesame seeds, broccoli, cauliflower, orange, strawberries

**Animal Source** : chicken, herring, beef, boiled egg and in organ meats such as heart, liver, and kidney

**Other Source** :



## About



Calcium is an essential mineral which is a major constituent of bones and teeth and also plays an essential role as second messenger in cell-signalling pathways. It is the 5th most abundant element in the body with >99% residing in the skeleton as hydroxyapatite, a complex calcium phosphate molecule. This mineral supplies the strength to bones that support locomotion, but it also serves as a reservoir to maintain serum calcium levels. Calcium metabolism is regulated by 3 major transport systems: intestinal absorption, renal reabsorption, and bone turnover. Calcium concentrations in the blood and fluid that surround cells are tightly controlled in order to preserve normal physiological function predominantly by the parathyroid hormone (PTH), 1,25 dihydroxyvitamin D, ionized calcium, and the calcium sensing receptor<sup>1</sup>. Important functions of calcium are maintenance and repair of bone tissue, regulation of muscle contraction, nerve conduction, and normal blood clotting.

## Genetic risk analysis



## Actual blood analysis



### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

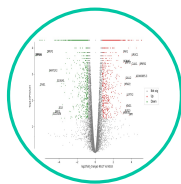
**Plant Source** : milk, cheese, tofu, yogurt, leafy greens, beans, okra, spinach, and acorn squash, chia seeds, almonds etc.

**Animal Source** : trout, sardines, salmon and clams

**Other Source** :



## About



Iron is an essential mineral that exists in one of two oxidation states: the ferrous form ( $\text{Fe}^{2+}$ ) or the ferric form ( $\text{Fe}^{3+}$ ). This chemical property results in iron's catalytic role in a multitude of redox reactions necessary to support basic metabolic functions for life. In fact, iron's central role in oxygen and energy metabolism underscores the biologic significance of this element and helps to explain why it is one of the best-studied metals in nutrition and health. Heme iron is the essential constituent for oxygen transport in haemoglobin, oxygen storage in myoglobin, and electron transport for cytochrome function in aerobic respiration, and it is even necessary for signal transduction as a cofactor for nitric oxide synthase and guanylyl cyclase. The second largest pool of iron is found in its storage form ferritin (also hemosiderin).

## Genetic risk analysis



### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

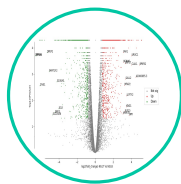
**Plant Source** : nuts, beans, fortified grain products, lentils, tofu, spinach and milk

**Animal Source** : beef, poultry, liver, oysters, salmon, tuna

**Other Source** :



## About



Sodium is the most common alkali metal and the sixth most abundant element on earth and never occurs as a free element in nature. It always occurs as part of a compound. Sodium is an essential element for cellular homeostasis and physiological function. Sodium, the primary element we get from salt. Most of the sodium in the body (about 85%) is found in blood and lymph fluid. Sodium ions are the major cation in the extracellular fluid (ECF) and as such are the major contributor to the ECF osmotic pressure and ECF compartment volume. Loss of water from the ECF compartment increases the sodium concentration, a condition called hypernatremia. The kidney is critical to maintain overall fluid and electrolyte balance and long-term regulation of blood pressure.

## Genetic risk analysis



Typical

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

**Plant Source :** Celery, beets and milk are a few of the foods where sodium is found naturally.

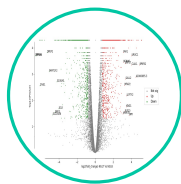
**Animal Source :**

**Other Source :** Salt and sodium are often used interchangeably, but they're not exactly the same thing. Sodium is a mineral that occurs naturally in foods or is added during manufacturing or both. Table salt is a combination of sodium and chloride. By weight, it's about 40% sodium and 60% chloride. Overall, more than 70 percent of the sodium we eat comes from processed, pre-packaged and restaurant foods and salt added during cooking.





## About



Choline is an essential nutrient that supports various bodily functions, including cellular growth and metabolism. It is usually grouped under Vitamin B-complex. This quaternary amine is important for the structural integrity and signalling functions of cell membranes; plays a key role in methyl group metabolism; it directly affects cholinergic neurotransmission as a precursor for the important neurotransmitter acetylcholine; and it is required for lipid transport (as a component of lecithin)/metabolism. Choline is synthesized in the body as a by-product of the biosynthesis of phosphatidylcholine. The production of choline via this pathway, however, is insufficient to meet metabolic needs, and thus, dietary supplementation of choline is necessary.

### Genetic risk analysis



Slightly Enhanced

### Actual blood analysis



Slightly Enhanced

### How do these results connect?

You have an average genetic risk for lower magnesium, but you don't have any blood test results for magnesium. Find out how your genetic risk compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for magnesium done.

## Dietary Sources / What To Do ?

**Plant Source** : Soybeans, vegetables including carrots, broccoli, Brussels sprouts, potatoes, cabbage and mushrooms, whole grains, such as quinoa, rice, and whole wheat bread, nuts and sunflower seeds, peanut, kiwi fruit, apples, tangerine, milk, cottage cheese

**Animal Source** : Proteins such as beef, fishes such as cod and tuna, poultry, and eggs

**Other Source** :



dffdg



## Genetic Data

Your genetic data table shows your genotype for each gene, which is identified by its rsID number. Your genotype is characterized by an allele combination. The effect allele is the allele that has an effect on your genetic risk analysis

\* Indicates a missing SNP from your DNA data. DNA sampling and analysis is complex and subject to occasional technical errors. Missing some data is not unusual, and it won't affect the accuracy of your genetic analysis.

### Allergy To Milk

Rs Id Number	Your Genotype	Alternate Allele
rs1800896	TT	0 A

### Lactose Intolerance

Rs Id Number	Your Genotype	Alternate Allele
rs4988235	GG	8 A
rs182549	CC	2 A

### Gluten

Rs Id Number	Your Genotype	Alternate Allele
rs7454108	TT	0 A
rs2395182	GT	1 A
rs7775228	CC	2 A
rs2187668	CC	0 A
rs4713586	AA	0 A

### Caffeine sensitivity

Rs Id Number	Your Genotype	Alternate Allele
rs2472300	AG	2.5 A

### Adiponectin Levels

Rs Id Number	Your Genotype	Alternate Allele
rs17366568	GG	0 A
rs12051272	GG	0 A
rs4783244	GG	0 A
rs17300539	GG	0 A

### Physical Activity

Rs Id Number	Your Genotype	Alternate Allele
rs9939609	TT	0 A

### Total Fat

Rs Id Number	Your Genotype	Alternate Allele
rs7903146	CT	5 A

### Low Protein Intake Risk

Rs Id Number	Your Genotype	Alternate Allele
rs838133	GG	0 A

### Overweight Potential

Rs Id Number	Your Genotype	Alternate Allele
rs10830963	CG	0.8 A
rs1042714	CC	0 A
rs1421085	TT	0 A
rs1801282	CC	0 A
rs9939609	TT	0 A
rs12970134	AA	1 A
rs17782313	CC	1 A

### Polyunsaturated Fats Increased Benefits

Rs Id Number	Your Genotype	Alternate Allele
rs10761785	GT	0.8 A
rs174570	TT	0 A
rs174550	CC	0 A
rs174546	TT	0 A
rs174547	CC	1.4 A
rs174548	GG	0 A

Starch Metabolism

Rs Id Number	Your Genotype	Alternate Allele
rs4244372	TT	0 A

Satiety

Rs Id Number	Your Genotype	Alternate Allele
rs9939609	TT	0 A
rs1137101	GG	3 A

Fat Metabolism

Rs Id Number	Your Genotype	Alternate Allele
rs4994	AA	0 A
rs1042714	CC	0 A
rs1801282	CC	0 A

Carbohydrate Metabolism

Rs Id Number	Your Genotype	Alternate Allele
rs1042714	CC	0 A

Exercise Benefits For Lowering Cholesterol

Rs Id Number	Your Genotype	Alternate Allele
rs1800588	CC	0 A

HDL (Good) Cholesterol Response To Exercise

Rs Id Number	Your Genotype	Alternate Allele
rs2016520	TT	0 A
rs1800588	CC	4 A

Insulin Sensitivity Response To Exercise

Rs Id Number	Your Genotype	Alternate Allele
rs1800588	CC	10 A

Loss Of Body Fat Response To Exercise

Rs Id Number	Your Genotype	Alternate Allele
rs328	CC	0 A

Strength Training

Rs Id Number	Your Genotype	Alternate Allele
rs7136446	TT	0 A
rs7566605	GG	0 A

Speed

Rs Id Number	Your Genotype	Alternate Allele
rs8192678	CC	5 A

Cell detoxification capability

Rs Id Number	Your Genotype	Alternate Allele
rs4880	AG	2.5 A

Response to monounsaturated fats

Rs Id Number	Your Genotype	Alternate Allele
rs17300539	GG	0 A
rs1801282	CC	0 A

Response to protein

Rs Id Number	Your Genotype	Alternate Allele
rs9939609	TT	0 A

Response to polyunsaturated fats

Rs Id Number	Your Genotype	Alternate Allele
rs1801282	CC	10 A

Matching Diet Type

Rs Id Number	Your Genotype	Alternate Allele
rs17300539	GG	0 A
rs9939609	TT	1.428 A
rs10850219	GG	0 A
rs1800588	CC	1.428 A
rs2241201	CC	1.428 A
rs1801282	CC	0 A

Omega-6 And Omega-3 Levels

Rs Id Number	Your Genotype	Alternate Allele
rs174547	CC	10 A

Elevated Blood Sugar

Rs Id Number	Your Genotype	Alternate Allele
rs11708067	AA	0.77 A
rs10885122	GG	0.77 A
rs11605924	AC	0.385 A
rs174550	CC	0 A
rs560887	CC	0.769 A
rs4607517	GG	0 A
rs780094	TT	0 A
rs7944584	AA	0.769 A
rs10830963	CG	0.384 A
rs11920090	TT	0.769 A
rs7903146	CT	0.384 A

HDL Cholesterol

Rs Id Number	Your Genotype	Alternate Allele
rs1883025	CC	0 A
rs2967605	TT	0.716 A
rs247616	CC	0.714 A
rs174547	CC	0.714 A
rs1800961	CC	0 A
rs2338104	CC	0.714 A
rs2271293	GG	0.714 A
rs10468017	CC	0.714 A
rs12678919	AA	0.714 A
rs7679	TT	0 A
rs471364	TT	0 A
rs964184	CC	0 A

LDL Cholesterol

Rs Id Number	Your Genotype	Alternate Allele
rs6544713	CC	0 A
rs515135	CC	1 A
rs12740374	TT	0 A
rs3846663	CT	0.5 A
rs2650000	AC	0.5 A
rs1501908	CC	0 A
rs6511720	GG	1 A
rs6102059	TT	0 A
rs10401969	TT	1 A
rs11206510	TT	1 A
rs11206510	TT	0 A

Triglycerides

Rs Id Number	Your Genotype	Alternate Allele
rs10889353	AC	0.456 A
rs174547	CC	0.91 A
rs1260326	TT	0.91 A
rs12678919	AA	0.91 A
rs714052	AA	0.908 A
rs17216525	CT	0.454 A
rs7679	TT	0 A
rs2954029	TT	0 A
rs7819412	GG	0 A
rs964184	CC	0 A

Vitamin A

Rs Id Number	Your Genotype	Alternate Allele
rs10882272	CC	1 A
rs6420424	GG	0 A
rs7501331	CC	0 A
rs11645428	GG	3 A
rs12934922	AT	1 A

Vitamin B2

Rs Id Number	Your Genotype	Alternate Allele
rs1801394	AA	0 A

Vitamin B6

Rs Id Number	Your Genotype	Alternate Allele
rs1256335	AA	0 A
rs1772719	AA	0 A
rs1801131	TT	0 A

Vitamin B12

Rs Id Number	Your Genotype	Alternate Allele
rs602662	GG	3 A
rs1047781	AT	0.875 A
rs601338	GG	1.75 A
rs1801131	TT	0 A
rs526934	AA	0 A

**Vitamin D**

Rs Id Number	Your Genotype	Alternate Allele
rs1544410	CC	0 A
rs2282679	TT	0 A
rs2060793	AG	0.47 A
rs10741657	AG	0.49 A
rs1007392	AG	0.47 A
rs3829251	GG	0 A
rs705117	CC	0.94 A

**Vitamin E**

Rs Id Number	Your Genotype	Alternate Allele
rs7834588	CT	1.5 A
rs12272004	CC	5 A
rs6025	CC	0 A

**Lutein And Zeaxanthin Deficiency**

Rs Id Number	Your Genotype	Alternate Allele
rs7501331	CC	0 A

**Sodium**

Rs Id Number	Your Genotype	Alternate Allele
rs4343	AA	0 A

**Choline**

Rs Id Number	Your Genotype	Alternate Allele
rs10791957	AA	5 A





