Cover Page

SCIENTIFIC
WELLNESS CENTER

About the report

Summary of Genetic test results

SCIENTIFIC WELLNESS CENTER

Diet And Metabolism	
0.0 Low Protein Intake Risk	
45.0 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	
30.0 Snacking	
0.0 Hunger	
0.0 Food desire	
0.0 Sweet tooth	
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 Carbohydrate overconsumption	
100.0 Omega-6 And Omega-3 Levels	
50.0 Response To Total Fat	

Macronutrient	
0.0 Fat Metabolism	
0.0 Carbohydrate Metabolism	

Micronutrient	
50.0 Vitamin A	
0.0 Vitamin B1	
0.0 Vitamin B2	
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	
17.5 Coenzyme Q10 Deficiency	
0.0 Calcium	
0.0 Iron	
0.0 Sodium	
50.0 Choline	
0.0 Glutathione Deficiency	

Metabolic health factors	
50.0 Risk Of Elevated Blood Sugar Levels	
50.0 Risk Of Reduced HDL Cholesterol Levels	
50.0 Risk Of Elevated LDL Cholesterol Levels	
45.480000000000004 Risk Of Elevated Triglycerides Levels	

Body and weight	
0.0 Risk Of Decreased Adiponectin Levels	
0.0 Resting Metabolic Rate	
100.0 Weight Loss-regain	
0.0 Lean Body Mass Potential	

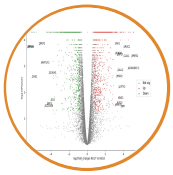
Exercise response	
0.0 Blood Pressure Response To Exercise	
0.0 Exercise Benefits For Lowering Cholesterol	
0.0 Exercise Benefits For Maximal Oxygen Uptake Response	
40.0 HDL (Good) Cholesterol Response To Exercise	
100.0 Insulin Sensitivity Response To Exercise	
0.0 Loss Of Body Fat Response To Exercise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

Fitness	
0.0 Muscle Power	
0.0 Strength Training	
30.76 Endurance	
0.0 Overall Fitness Benefits	
50.0 Speed/Power Performance	
25.0 Cell Detoxification Capability	

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

Low Protein Intake Risk Diet And Metabolism

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 variations in some genes are associated with a tendency of low protein intake, on the contrary some genetic variations are associated with high of protein intake.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

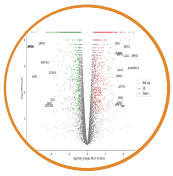
You have an Typical genetic potential for Low Protein Intake Risk, but you don't have any blood test results for Low Protein Intake Risk. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Low Protein Intake Risk.

Your genetic profile indicates you do not have urge for low protein intake risk

Dietary Sources / What To Do ?

nan

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

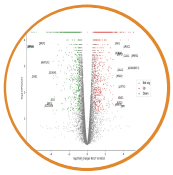
You have an Slightly Enhanced genetic potential for Low-Carb Diet Effectiveness, but you don't have any blood test results for Low-Carb Diet Effectiveness. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Low-Carb Diet Effectiveness.

Your genetic profile indicates you are at moderately enhanced benefit from low-carb diet. Limit your daily carb intake to less than 40% of total calories consumed. Low-carb diets may help prevent or improve serious health conditions, such as metabolic syndrome, diabetes, high blood pressure and cardiovascular disease. Choosing a low-carb diet may improve blood cholesterol or blood sugar levels, at least temporarily.

Dietary Sources / What To Do ?

nan

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 â€œenergy,â€ 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 weight1. 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Low-Fat Diet Effectiveness, but you don't have any blood test results for Low-Fat Diet Effectiveness. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Low-Fat Diet Effectiveness.

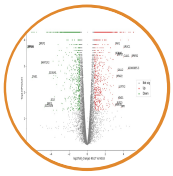
Your genetic profile indicates you are at typical benefit from low-fat diet for weight loss and healthy weight maintenance.

Dietary Sources / What To Do ?

nan

Overweight Potential Diet And Metabolism

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, AlstrÃ¶m syndrome and Cohen syndrome. Endocrine disorders such as hypothyroidism and Cushingâ€™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. Heathy lifestyle changes reduce the risk of developing overweight.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Overweight Potential, but you don't have any blood test results for Overweight Potential. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Overweight Potential.

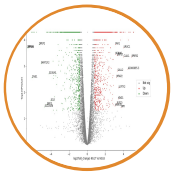
Your genetic profile indicates you are at moderately enhanced risk for overweight potential. Develop healthy eating habits, looking for ways to make favorite dishes healthier, reducing calorie-rich temptations, engage in an appropriate amount of physical activity, and avoid too much sedentary time.

Dietary Sources / What To Do ?

nan

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

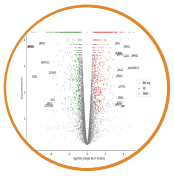
You have an Slightly Enhanced genetic potential for Polyunsaturated Fats Increased Benefits, but you don't have any blood test results for Polyunsaturated Fats Increased Benefits. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Polyunsaturated Fats Increased Benefits.

Your genetic profile indicates you carry moderately enhanced benefits for enhanced polyunsaturated fats.

Dietary Sources / What To Do ?

nan

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-(l-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. 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

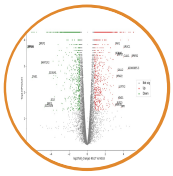
You have an Typical genetic potential for Starch Metabolism, but you don't have any blood test results for Starch Metabolism. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Starch Metabolism.

Your genetic profile indicates you carry typical starch metabolism.

Dietary Sources / What To Do ?

nan

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 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 food 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

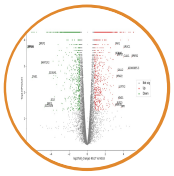
You have an Slightly Enhanced genetic potential for Satiety, but you don't have any blood test results for Satiety. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Satiety.

Your genetic profile indicates you will be having difficulty in feeling full. You are more likely to be eating more without feeling full and satisfied. Maintain a well-balanced diet with the three macronutrients but focus more on Protein and Fats which increase satiety. Try to include more fiber (from plants, vegetables, beans, pulses) in your diet since it increases the sense of satiety. You can also develop strategies like sitting down for a meal, slowing down when eating, chew your food more, introducing more proteins and fibers in your diet, high response costs foods such as soups, non starchy veggies and salads, healthy drinks and water in between meals.

Dietary Sources / What To Do ?

nan

About



nan
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

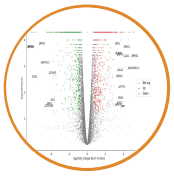
You have an Slightly Enhanced genetic potential for Snacking, but you don't have any blood test results for Snacking. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Snacking.

Your genetic profile indicates you are associated with moderately enhanced susceptibility towards snacking behavior.

Dietary Sources / What To Do ?

nan

About



nan
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

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

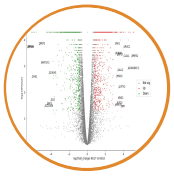
Your genetic profile indicates you are associated with typical levels of susceptibility to hunger.

Dietary Sources / What To Do ?

nan

Food desire Diet And Metabolism

About



nan
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

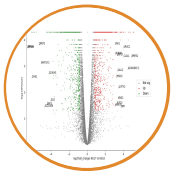
You have an Typical genetic potential for Food desire, but you don't have any blood test results for Food desire. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Food desire.

Your genetic profile indicates you are associated with typical desire or willingness to put forth additional effort to obtain your favorite foods.

Dietary Sources / What To Do ?

nan

About



nan
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

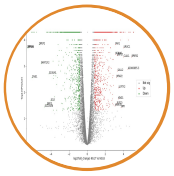
You have an Typical genetic potential for Sweet tooth, but you don't have any blood test results for Sweet tooth. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Sweet tooth.

Your genetic profile indicates you are associated with typical craving sweet foods (Sweet tooth).

Dietary Sources / What To Do ?

nan

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. In addition to tremendous health benefits of omega-3 (alpha linoleic acid) and omega-6 (linoleic acid) fats, there are several other fats that are important for good health. These include monounsaturated fatty acids such as omega-7 (palmitoleic acid found in macadamia nuts, for example), omega-9 (oleic acid found in olive oil), as well as some saturated fats (for example, those found in coconut oil or peanuts). These fats are known for their anti-inflammatory properties, lowering triglycerides, reducing blood pressure. The Mediterranean Diet, known for its numerous health benefits, is heavily influenced by monounsaturated fats. They are also good for keeping heart healthy. Good quality monounsaturated fats are also beneficial for skin as they maintain water level in the epidermis and supply the ceramides and fats that keep the bricks and mortar of the skin and hair healthy and intact.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Response to monounsaturated fats, but you don't have any blood test results for Response to monounsaturated fats. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Response to monounsaturated fats.

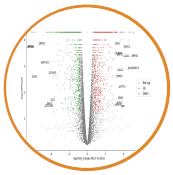
Your genetic profile indicates you are associated with typical benefit from monounsaturated fats intake. The amount of dietary monounsaturated fat you eat is not likely to affect your body weight. However, avoiding trans fats and substituting some saturated fats with monounsaturated fats is still recommended, as it has several health benefits.

Dietary Sources / What To Do ?

nan

Response to protein Diet And Metabolism

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Response to protein, but you don't have any blood test results for Response to protein. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Response to protein.

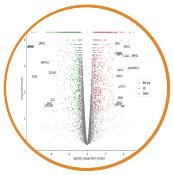
Your genetic profile indicates you are associated with typical benefit from moderate-to high protein intake

Dietary Sources / What To Do ?

nan

Response to polyunsaturated fats 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). 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Enhanced

How do these results connect?

You have an Enhanced genetic potential for Response to polyunsaturated fats, but you don't have any blood test results for Response to polyunsaturated fats. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Response to polyunsaturated fats.

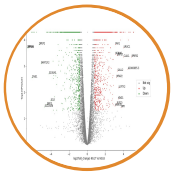
Your genetic profile indicates you are associated with moderately enhanced benefit from polyunsaturated fat intake. People with your profile who have a diet that includes more polyunsaturated fats, rather than saturated fats, tend to have a lower body weight, compared to those who do not.

Dietary Sources / What To Do ?

nan

Response to saturated fat Diet And Metabolism

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

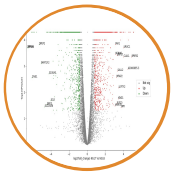
You have an Typical genetic potential for Response to saturated fat, but you don't have any blood test results for Response to saturated fat. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Response to saturated fat.

Your genetic profile indicates you are associated with typical response to saturated fat diet (no increased risk of high BMI and obesity with a diet high in saturated fat). However, you should still limit saturated fat intake to less than 10% of total energy intake, as recommended, in order to reduce the general risk of other associated health issues such as cardiovascular disease.

Dietary Sources / What To Do ?

nan

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, its 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 canâ€™t use the produced insulin efficiently, it paves the way for the development of type 2 diabetes. Individuals with specific genetic variations are more likely to crave carbs than others. This may result in over-consumption of carbs for such individuals.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

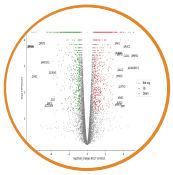
You have an Typical genetic potential for Carbohydrate overconsumption, but you don't have any blood test results for Carbohydrate overconsumption. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Carbohydrate overconsumption.

Your genetic profile indicates you are associated with typical impulse for higher carbohydrate consumption.

Dietary Sources / What To Do ?

nan

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 babyâ€™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.2 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Enhanced

How do these results connect?

You have an Enhanced genetic potential for Omega-6 And Omega-3 Levels, but you don't have any blood test results for Omega-6 And Omega-3 Levels. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Omega-6 And Omega-3 Levels.

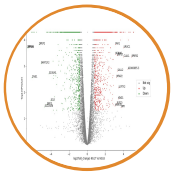
Your genetic profile indicates you are associated with highly decreased omega-6 and omega-3 level.

Dietary Sources / What To Do ?

nan

Response To Total Fat Diet And Metabolism

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 â€œenergy,â€ 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Response To Total Fat, but you don't have any blood test results for Response To Total Fat. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Response To Total Fat.

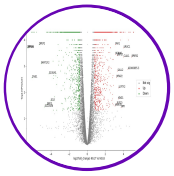
Your genetic profile indicates you are associated with moderately enhanced weight loss response when you consume lower-to-moderate fat diets in comparison to higher fat diets.

Dietary Sources / What To Do ?

nan

Fat Metabolism Macronutrient

About



Fat metabolism (adipogenesis and lipolysis) is a complex biological process that involves biosynthesis and breakdown of ingested fats into fatty acids and glycerol, later into simpler compounds, which are eventually processed and broken down to produce energy to the body cells, as well as various physiological and biochemical effects. Cholesterol and fatty acids are important building blocks of cell membranes and these lipids act as precursors for a wide variety of molecules, such as fatty acids which are utilized in the synthesis of energy-rich triglycerides and signaling molecules like prostaglandins. Cholesterol is an important precursor of steroid hormones and bile acids. Fatty acids and triacylglycerols are important carriers of energy, which are stored in adipose tissue. If there is energy requirement, fatty acids and triacylglycerols are mobilized and degraded via beta oxidation releasing energy in the form of ATP. Fat metabolism is mediated by complex regulatory mechanism which involves insulin, growth hormone, adrenocorticotropic hormone, and glucocorticoids. Dysregulation in this system results in various disorders such as obesity, type II diabetes, and atherosclerosis.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Fat Metabolism, but you don't have any blood test results for Fat Metabolism. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Fat Metabolism.

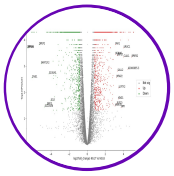
Your genetic profile indicates you are associated with typical fat metabolism.

Dietary Sources / What To Do ?

nan

Carbohydrate Metabolism Macronutrient

About



Carbohydrates consist of simple sugars such as glucose and fructose and complex sugars or polysaccharides such as starch, glycogen, and cellulose. Polysaccharides exist in the storage form as well as storage component. Carbohydrate metabolism refers to the fundamental set of biochemical reactions which are involved in the metabolic formation, breakdown, and interconversion of carbohydrates in the body to ensure constant supply of energy. Carbohydrate digestion is initiated in the mouth by the action of salivary amylase enzyme and ends with the intestinal absorption of monosaccharides. These soluble sugars are transported into the bloodstream and cellular respiration is initiated. Glycolysis is the first step of carbohydrate catabolism, which results in the formation of pyruvate, NADH, and ATP. Under anaerobic condition, the pyruvate is converted into lactate to continue glycolysis. Under aerobic condition, pyruvate enters the Krebs cycle, or the citric acid cycle to produce ATP along with high-energy FADH2 and NADH molecules. When glucose level falls down, such as fasting, starvation, or low carb diet, glucose is synthesized by from lactate, pyruvate, glycerol, alanine, or glutamate by a process called gluconeogenesis. Dysregulation of carbohydrate metabolism results in various disorders including diabetes, obesity and galactosemia.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Carbohydrate Metabolism, but you don't have any blood test results for Carbohydrate Metabolism. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Carbohydrate Metabolism.

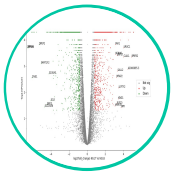
Your genetic profile indicates you are associated with typical carbohydrate metabolism.

Dietary Sources / What To Do ?

nan

Vitamin A Micronutrient

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Vitamin A deficiency (VAD) results primarily from inadequate Vitamin A intake. VAD is one of the most prevalent nutrition-related health problems. Vitamin A deficiency can cause blindness. It can also increase the risk of serious, sometimes fatal, infections. Symptoms include night blindness, dry skin and frequent infections. The classic manifestation of VAD is xerophthalmia, which is a disorder related to dryness of the eye. Other major health consequences of VAD include severely reduced immune competence, which leads to an increased susceptibility to infectious diseases and a higher risk of mortality, particularly in children and lactating women. Vitamin A is a precursor of rhodopsin, the photopigment found in rods within the retina of our eye that helps us to see at night. Deficiency of vitamin A, causes night blindness. Vitamin A toxicity generally occurs after chronic intakes because of the long half-life of Vitamin A in the body. Toxicity symptoms include dry skin, headaches, anorexia, nausea, bone pain, and cerebral edema. Treatments may include supplements and diet changes.

Genetic risk analysis

Slightly Enhanced

Actual blood analysis

Decreased

How do these results connect?

You have an Slightly Enhanced genetic potential for Vitamin A, and your blood test results for Vitamin A looks Decreased. Consult the nutritionist to know more about the genetic and blood test results correlation.

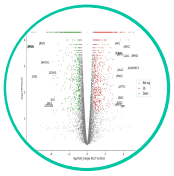
Your genetic profile indicates you are associated with moderately enhanced risk of vitamin A deficiency

Dietary Sources / What To Do ?

nan

Vitamin B1 Micronutrient

About



Thiamine also known as vitamin B1 is a water-soluble sulphur-containing vitamin that participates in energy metabolism, converting carbohydrates, lipids and proteins into energy. Thiamine 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. Thiamine is essential for the metabolism of pyruvate. Thiamine 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Clinical vitamin B1 deficiency is called beriberi which has two major clinical manifestations, dry beriberi characterized by neurologic manifestations that include peripheral neuropathy and acute encephalopathy, and wet beriberi with cardiovascular involvement including high cardiac output heart failure. Symptoms include loss of appetite, weakness, pain in the limbs, shortness of breath and swollen feet or legs. Rarely, a fulminant or pernicious variant, termed Shoshin beriberi may occur, and is characterized by cardiovascular collapse. Appropriate management of this form is mandatory since thiamine supplementation leads to rapid recovery while untreated forms are fatal. Wernicke-Korsakoff Syndrome, also known as Korsakoff syndrome, is related to Wernicke encephalopathy and amnestic disorder, and has symptoms including ataxia and ophthalmoplegia. No adverse effects have been associated with excessive thiamine intakes. Treatments include B1 supplements and eating more B1-rich foods, such as wholegrain cereals, beans and beef.

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Vitamin B1, but you don't have any blood test results for Vitamin B1. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Vitamin B1.

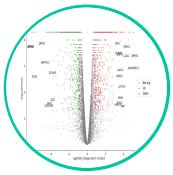
Your genetic profile indicates you are associated with typical risk of vitamin B1 deficiency

Dietary Sources / What To Do ?

nan

Vitamin B2 Micronutrient

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-5â€™-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 5â€™-phosphate needs FMN. In addition, riboflavin helps maintain normal levels of homocysteine, an amino acid in the blood.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Deficiency of riboflavin, ariboflavinosis, is often accompanied by other nutrient deficits. Clinical signs and symptoms include lesions on the outside of lips (cheilosis) and corners of the mouth (angular stomatitis), inflammation of the tongue (glossitis), redness or bloody (hyperemia) and swollen (edema) mouth or oral cavity, the inflammatory skin condition seborrheic dermatitis, anaemia, peripheral nerve dysfunction (neuropathy), skin disorders, hyperemia (excess blood) and edema of the mouth and throat, angular stomatitis (lesions at the corners of the mouth), cheilosis (swollen, cracked lips), hair loss, reproductive problems, sore throat, itchy and red eyes, and degeneration of the liver and nervous system. No toxic or adverse effects of high riboflavin intake in humans are known. People with riboflavin deficiency typically have deficiencies of other nutrients, so some of these signs and symptoms might reflect these other deficiencies. Severe riboflavin deficiency can impair the metabolism of other nutrients, especially other B vitamins, through diminished levels of flavin coenzymes. Anemia and cataracts can develop if riboflavin deficiency is severe and prolonged.

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Vitamin B2, but you don't have any blood test results for Vitamin B2. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Vitamin B2.

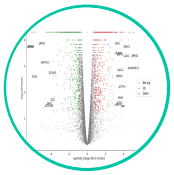
Your genetic profile indicates you are associated with typical risk of vitamin B2 deficiency

Dietary Sources / What To Do ?

nan

Vitamin B6 Micronutrient

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 5â€™-phosphate esters. Pyridoxal 5â€™ phosphate (PLP) and pyridoxamine 5â€™ 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Isolated vitamin B6 deficiency is uncommon; inadequate vitamin B6 status is usually associated with low concentrations of other B-complex vitamins. Vitamin B6 deficiency is associated with microcytic anaemia, electroencephalographic abnormalities, dermatitis with cheilosis (scaling on the lips and cracks at the corners of the mouth) and glossitis (swollen tongue), depression and confusion, and weakened immune function. Excessive vitamin B6 intakes include painful, disfiguring dermatological lesions; photosensitivity; and gastrointestinal symptoms, such as nausea and heartburn.

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Vitamin B6, but you don't have any blood test results for Vitamin B6. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Vitamin B6.

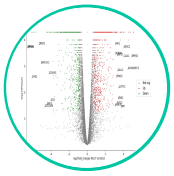
Your genetic profile indicates you are associated with typical risk of vitamin B6 deficiency

Dietary Sources / What To Do ?

nan

Vitamin B7 Micronutrient

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 catalyzes 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Deficiency due to lack of biotin dietary intake is rare in healthy populations. Symptoms of deficiency include general fatigue, nausea, neurological problems, brittle nails, poor skin, hair quality, hair loss and a characteristic scaly red rash in the face (around the eyes, nose, mouth), and in the genital area. No adverse effects have been reported with excessive intakes of biotin. Biotinidase deficiency is an inherited disorder in which the body is unable to recycle the vitamin biotin. If this condition is not recognized and treated, its signs and symptoms typically appear within the first few months of life, although it can also become apparent later in childhood.

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Vitamin B7, but you don't have any blood test results for Vitamin B7. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Vitamin B7.

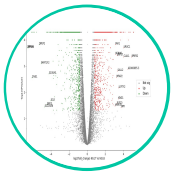
Your genetic profile indicates you are associated with typical risk of vitamin B7 deficiency

Dietary Sources / What To Do ?

nan

Vitamin B9 Micronutrient

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :In the case of folate deficiency, all of the reactions in one-carbon metabolism will be compromised to varying degrees depending on the relative affinities of the enzymes for the respective folate molecules involved. When there isnt enough, it can result in an insufficient number of healthy red blood cells (vitamin deficiency anaemia). Symptoms include fatigue and mouth sores. Clinically, severe folate deficiency yields a specific type of anaemia, a megaloblastic anaemia. Adequate folate intake is important for protecting against neural tube birth defects (NTDs). NTDs result from malformation or failed closure of the neural tube during central nervous system development in the third and fourth weeks of gestation. The etiology of NTDs is complex and multifactorial: genetics, chromosomal abnormalities and environmental factors have been implicated. However, there is conclusive evidence that increased folic acid intake before conception is associated with a significant decrease in the birth prevalence of NTDs.4 At the recommended daily allowance, side effects from folic acid are rare. Very high doses can cause stomach problems, sleep problems, skin reactions, confusion, loss of appetite, nausea, seizures. Treatments for folate deficiency typically include vitamin supplements and a vitamin-rich diet.

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Vitamin B9, but you don't have any blood test results for Vitamin B9. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Vitamin B9.

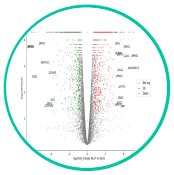
Your genetic profile indicates you are associated with typical risk of vitamin B9 deficiency

Dietary Sources / What To Do ?

nan

Vitamin B12 Micronutrient

About



Vitamin B12 is a water-soluble vitamin and contains the mineral cobalt, so compounds with vitamin B12 activity are collectively called â€œcobalaminsâ€. Methylcobalamin and 5-deoxyadenosylcobalamin are the forms of vitamin B12 that are active in human metabolism. Vitamin B12 is crucial for red blood cell formation, normal functioning of the nervous system via its role in the synthesis of myelin, and DNA synthesis and in both fatty acid and amino acid metabolism. Vitamin B12 binds to the protein in the foods we eat. In the stomach, hydrochloric acid and enzymes unbind vitamin B12 into its free form. From there, vitamin B12 combines with a protein called intrinsic factor so that it can be absorbed further down in the small intestine.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Symptoms are rare but can include tiredness, weakness, constipation, loss of appetite, weight loss, fatigue, breathlessness, numbness, poor balance and memory trouble. Vitamin B12 deficiency may lead to a reduction in healthy red blood cells (anaemia). The nervous system may also be affected. An increased vitamin B12 level is uncommon. Usually, excess vitamin B12 is removed in the urine.

Genetic risk analysis

Enhanced

How do these results connect?

You have an Enhanced genetic potential for Vitamin B12, but you don't have any blood test results for Vitamin B12. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Vitamin B12.

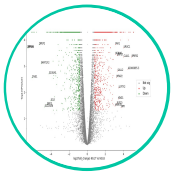
Your genetic profile indicates you are associated with highly enhanced risk of vitamin B12 deficiency

Dietary Sources / What To Do ?

nan

Vitamin C Micronutrient

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Individuals who do not consume sufficient quantities of fruits and vegetables are at risk for inadequate intakes of vitamin C. Because smoking generates free radicals, individuals who smoke have elevated requirements for vitamin C. Acute vitamin C deficiency leads to scurvy; signs of scurvy are bleeding gums, small haemorrhages below the skin, fatigue, loss of appetite and weight, and lowered resistance to infections. Vitamin C has low toxicity and is not believed to cause serious adverse effects at high intakes. Vitamin C has low toxicity and is not believed to cause serious adverse effects at high intakes.

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Vitamin C, but you don't have any blood test results for Vitamin C. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Vitamin C.

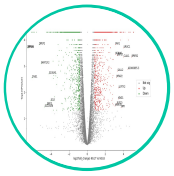
Your genetic profile indicates you are associated with typical risk of vitamin C deficiency

Dietary Sources / What To Do ?

nan

Vitamin D Micronutrient

About



Vitamin D (also referred to as â€œcalciferolâ€) 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 hydroxylationâ€™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 â€œcalcidiol.â€ The second hydroxylation occurs primarily in the kidney and forms the physiologically active 1,25-dihydroxyvitamin D [1,25(OH)2D], also known as â€œcalcitriolâ€. 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :People can develop vitamin D deficiency when usual intakes are lower over time than recommended levels, exposure to sunlight is limited, the kidneys cannot convert 25(OH)D to its active form, or absorption of vitamin D from the digestive tract is inadequate. In children, vitamin D deficiency is manifested as rickets, a disease characterized by a failure of bone tissue to become properly mineralized, resulting in soft bones and skeletal deformities. In adults, vitamin D deficiency increases the risk of osteomalacia and osteoporosis. Signs and symptoms of osteomalacia are similar to those of rickets and include bone deformities and pain, hypocalcaemia seizures, tetanic spasms, and dental abnormalities. Vitamin D toxicity (hypervitaminosis D) has not been observed to result from sun exposure. Vitamin D toxicity induces abnormally high serum calcium concentration (hypercalcemia), which could result in bone loss, kidney stones, and calcification of organs like the heart and kidneys if untreated over a long period of time.

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Vitamin D, but you don't have any blood test results for Vitamin D. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Vitamin D.

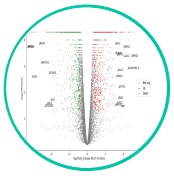
Your genetic profile indicates you are associated with moderately enhanced risk of vitamin D deficiency

Dietary Sources / What To Do ?

nan

Vitamin E Micronutrient

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 ?-) 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). Plasma vitamin E concentrations depend upon the secretion of vitamin E from the liver, and only one form of vitamin E, ?-tocopherol, is preferentially resecreted by the liver.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Because vitamin E is found in a variety of foods and supplements, deficiency is rare. People who have digestive disorders or do not absorb fat properly (e.g., pancreatitis, cystic fibrosis, celiac disease) can develop a vitamin E deficiency. The primary manifestations of human -tocopherol deficiency include spinocerebellar ataxia, skeletal myopathy, infertility and pigmented retinopathy. There is no evidence of toxic effects from vitamin E found naturally in foods. However, there is a risk of excess bleeding, particularly with doses greater than 1000 mg daily or if an individual is also using a blood thinning medication such as warfarin.

Genetic risk analysis

Enhanced

How do these results connect?

You have an Enhanced genetic potential for Vitamin E, but you don't have any blood test results for Vitamin E. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Vitamin E.

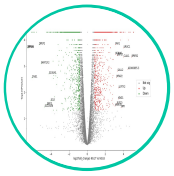
Your genetic profile indicates you are associated with highly enhanced risk of vitamin E deficiency

Dietary Sources / What To Do ?

nan

Vitamin K Micronutrient

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 phylloquinone (vitamin K1) and a series of menaquinones (vitamin K2). Phylloquinone, which is the major dietary source, is concentrated in leafy plants. In contrast, menaquinones are the product of bacterial production or conversion from dietary phylloquinone. 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Vitamin K deficiency can occur during the first few weeks of infancy due to low placental transfer of phylloquinone, low clotting factor levels, and low vitamin K content of breast milk. In neonatal period, vitamin K deficiency may lead to Vitamin K Deficiency Bleeding (VKDB). Thus, bleeding and haemorrhage are the classic signs of vitamin K deficiency, although these effects occur only in severe cases. Because vitamin K is required for the carboxylation of osteocalcin in bone, vitamin K deficiency could also reduce bone mineralization and contribute to osteoporosis. Clinically significant vitamin K deficiency in adults is very rare and is usually limited to people with malabsorption disorders or those taking drugs that interfere with vitamin K metabolism. Indications of toxicity following the ingestion of large amounts of vitamin K are not available.

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Vitamin K, but you don't have any blood test results for Vitamin K. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Vitamin K.

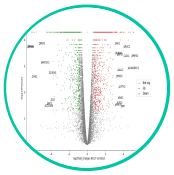
Your genetic profile indicates you are associated with typical risk of vitamin K

Dietary Sources / What To Do ?

nan

Lutein And Zeaxanthin Deficiency Micronutrient

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).
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :There is no well-established definition of lutein and zeaxanthin deficiency. No toxicities have been reported for lutein and zeaxanthin.

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Lutein And Zeaxanthin Deficiency, but you don't have any blood test results for Lutein And Zeaxanthin Deficiency. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Lutein And Zeaxanthin Deficiency.

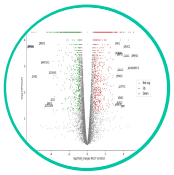
Your genetic profile indicates you are associated with typical risk of lutein and zeaxanthin deficiency

Dietary Sources / What To Do ?

nan

Lycopene Deficiency Micronutrient

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 lycopenes positive effects on the skeletal system and on neurodegenerative diseases, including Alzheimers and Parkinsons.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Plasma lycopene level can become significantly reduced during the process of ageing. Intestinal absorption of carotenoids is a complex multistage process which requires a fully intact and functioning gastrointestinal epithelium and subset of various enzymes. Acute and chronic gastritis and abnormal gastric acid secretion as well as deviations in intestinal enzyme spectrum during ageing are considered to be major causes of reduced intestinal carotenoid absorption in older individuals. When consumed in foods, lycopene is safe to eat for everyone. Eating excessive amounts of lycopene could lead to a condition called lycopenemia, which is an orange or red discoloration of the skin. The condition itself is harmless and goes away by eating a diet lower in lycopene.

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Lycopene Deficiency, but you don't have any blood test results for Lycopene Deficiency. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Lycopene Deficiency.

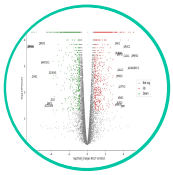
Your genetic profile indicates you are associated with typical risk of lycopene deficiency

Dietary Sources / What To Do ?

nan

Coenzyme Q10 Deficiency Micronutrient

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, ubidecaquinone 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Mild side effects might include upper abdominal pain, loss of appetite, nausea, diarrhea, headache, insomnia, rashes, fatigue, dizziness. The severity, combination of signs and symptoms, and age of onset of primary coenzyme Q10 deficiency vary widely. In the most severe cases, the condition becomes apparent in infancy and causes severe brain dysfunction combined with muscle weakness (encephalomyopathy) and the failure of other body systems. These problems can be life-threatening. The mildest cases of primary coenzyme Q10 deficiency can begin as late as a persons sixties and often cause cerebellar ataxia, which refers to problems with coordination and balance due to defects in the part of the brain that is involved in coordinating movement (cerebellum). Other neurological abnormalities that can occur in primary coenzyme Q10 deficiency include seizures, intellectual disability, poor muscle tone (hypotonia), involuntary muscle contractions (dystonia), progressive muscle stiffness (spasticity), abnormal eye movements (nystagmus), vision loss caused by degeneration (atrophy) of the optic nerves or breakdown of the light-sensing tissue at the back of the eyes (retinopathy), and sensorineural hearing loss (which is caused by abnormalities in the inner ear). In individuals with primary CoQ10 deficiency early treatment with high-dose oral CoQ10 supplementation (ranging from 5 to 50 mg/kg/day) can limit disease progression and reverse some manifestations; however, established severe neurologic and/or renal damage cannot be reversed.

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Coenzyme Q10 Deficiency, but you don't have any blood test results for Coenzyme Q10 Deficiency. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Coenzyme Q10 Deficiency.

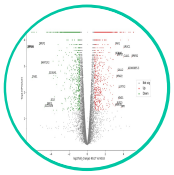
Your genetic profile indicates you are associated with moderately enhanced risk of coenzyme Q10 deficiency

Dietary Sources / What To Do ?

nan

Calcium Micronutrient

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. Important functions of calcium are maintenance and repair of bone tissue, regulation of muscle contraction, nerve conduction, and normal blood clotting.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Calcium insufficiency manifests as decreased bone mass and osteoporotic fracture. A low blood calcium level (hypocalcemia) is an inadequate calcium ingestion but rather by a disorder of calcium metabolism involving the parathyroid gland, calcitriol, and, in infants and children, calcitonin. In the rapidly growing child, calcium deficiency causes rickets. Hypercalcemia caused by excessive calcium intake is uncommon even in those ingesting large doses of calcium supplements. However, the combination of calcium supplements with sodium bicarbonate increases risk of nephrolithiasis.

Genetic risk analysis

Typical

How do these results connect?

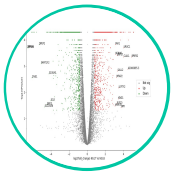
You have an Typical genetic potential for Calcium, but you don't have any blood test results for Calcium. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Calcium.

Your genetic profile indicates you are associated with typical risk of calcium deficiency

Dietary Sources / What To Do ?

nan

About



Iron is an essential mineral that exists in one of two oxidation states: the ferrous form (Fe2) or the ferric form (Fe3). This chemical property results in ironâ€™s catalytic role in a multitude of redox reactions necessary to support basic metabolic functions for life. In fact, ironâ€™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).
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Iron deficiency progresses from depletion of iron stores (mild iron deficiency), to iron-deficiency erythropoiesis (erythrocyte production), and finally to iron deficiency anaemia (IDA). IDA is particularly problematic in women and children. Iron deficiency increases the incidence of preterm delivery and low birth weight, and patients with very severe cases are at increased risk of maternal and child mortality. The converse problem of iron overload or hemochromatosis is a condition where the body absorbs too much iron and can result in liver disease, arthritis and heart conditions. Iron overload can be caused by inherited or acquired disease. Hereditary hemochromatosis arises from defective HFE, TfR2, HJV, HAMP, and FPN genes.

Genetic risk analysis

Typical

How do these results connect?

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

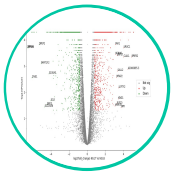
Your genetic profile indicates you are associated with typical risk of Iron deficiency

Dietary Sources / What To Do ?

nan

Sodium Micronutrient

About



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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Excess dietary sodium has been linked to elevations in blood pressure (BP). The mechanisms underlying sodium-induced increases in BP are not completely understood but may involve alterations in renal function, fluid volume, fluid-regulatory hormones, the vasculature, cardiac function, and the autonomic nervous system. Hypernatremia is a high concentration of sodium in the blood. Early symptoms may include a strong feeling of thirst, weakness, nausea, and loss of appetite. Severe symptoms include confusion, muscle twitching, and bleeding in or around the brain. Hyponatremia is a low sodium concentration in the blood. The symptoms of hyponatraemia are related to both the severity and the rapidity of the fall in the plasma sodium concentration. A decrease in plasma sodium concentration creates an osmotic gradient between extracellular and intracellular fluid in brain cells, causing movement of water into cells, increasing intracellular volume, and resulting in tissue oedema, raised intracranial pressure, and neurological symptoms.

Genetic risk analysis

Typical

How do these results connect?

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

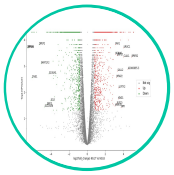
Your genetic profile indicates you are associated with typical risk of sodium deficiency

Dietary Sources / What To Do ?

nan

Choline Micronutrient

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :Choline deficiency causes muscle damage and abnormal deposition of fat which results in nonalcoholic fatty liver disease (NAFLD or hepatosteatosis). Excessive intake of choline is associated with excessive sweating and salivation, hypotension, a fishy body odour, vomiting and hepatotoxicity. Choline consumption has been shown to increase production of Trimethylamine N-oxide, a substance that poses a risk factor for cardiovascular disease.

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Choline, but you don't have any blood test results for Choline. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Choline.

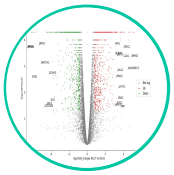
Your genetic profile indicates you are associated with moderately enhanced risk of choline deficiency

Dietary Sources / What To Do ?

nan

Glutathione Deficiency Micronutrient

About



nan
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Glutathione Deficiency, but you don't have any blood test results for Glutathione Deficiency. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Glutathione Deficiency.

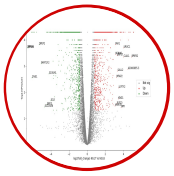
Your genetic profile indicates you are associated with typical risk of glutathione deficiency

Dietary Sources / What To Do ?

nan

Risk Of Elevated Blood Sugar Levels Metabolic health factors

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. Early symptoms of hyperglycemia, or high blood glucose (sugar) include, increased thirst and/or hunger, frequent urination, sugar in the urine, headache, blurred vision, fatigue. Elevated blood sugar may be a serious problem if not treated which leads to diabetic coma (ketoacidosis). Signs and symptoms include fruity-smelling breath, nausea and vomiting, shortness of breath, dry mouth, weakness, confusion, coma, abdominal pain. Many risk factors contribute to hyperglycemia, including not using oral diabetes medication or enough insulin, having an illness or infection, experiencing emotional stress etc. Blood sugar level can be kept within the target range by following the diabetes meal plan, taking medication as prescribed.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

Actual blood analysis

Decreased

How do these results connect?

You have an Slightly Enhanced genetic potential for Risk Of Elevated Blood Sugar Levels, and your blood test results for Risk Of Elevated Blood Sugar Levels looks Decreased. Consult the nutritionist to know more about the genetic and blood test results correlation.

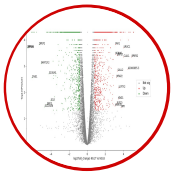
Your genetic profile indicates you are associated with moderately enhanced risk of elevated blood sugar levels.

Dietary Sources / What To Do ?

nan

Risk Of Reduced HDL Cholesterol Levels Metabolic health factors

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 its 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

Actual blood analysis

Decreased

How do these results connect?

You have an Slightly Enhanced genetic potential for Risk Of Reduced HDL Cholesterol Levels, and your blood test results for Risk Of Reduced HDL Cholesterol Levels looks Decreased. Consult the nutritionist to know more about the genetic and blood test results correlation.

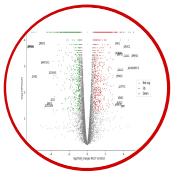
Your genetic profile indicates you are associated with moderately enhanced risk of reduced HDL cholesterol levels.

Dietary Sources / What To Do ?

nan

Risk Of Elevated LDL Cholesterol Levels Metabolic health factors

About



Low-density lipoprotein (HDL) 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

Actual blood analysis

Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Risk Of Elevated LDL Cholesterol Levels, and your blood test results for Risk Of Elevated LDL Cholesterol Levels looks Enhanced. Consult the nutritionist to know more about the genetic and blood test results correlation.

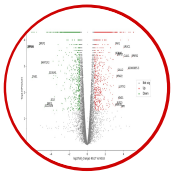
Your genetic profile indicates you are associated with moderately enhanced risk of elevated LDL cholesterol levels.

Dietary Sources / What To Do ?

nan

Risk Of Elevated Triglycerides Levels Metabolic health factors

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 canâ€™t lower high triglyceride levels.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

Actual blood analysis

Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Risk Of Elevated Triglycerides Levels, and your blood test results for Risk Of Elevated Triglycerides Levels looks Enhanced. Consult the nutritionist to know more about the genetic and blood test results correlation.

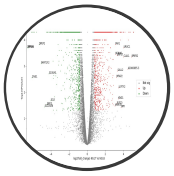
Your genetic profile indicates you are associated with moderately enhanced risk of elevated triglycerides levels.

Dietary Sources / What To Do ?

nan

Risk Of Decreased Adiponectin Levels Body and weight

About



Adiponectin is a protein hormone that modulates a number of metabolic processes, including glucose regulation and fatty acid oxidation. Adiponectin is secreted from adipose tissue (and also from the placenta in pregnancy into the bloodstream and is very abundant in plasma relative to many hormones. Adiponectin is the most abundant peptide secreted by adipocytes, with insulin-sensitizing, anti-inflammatory and anti-atherogenic property. 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. Adiponectin exerts its favourable effects on insulin sensitivity in vivo through a decrease in hepatic glucose production. Adiponectins 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 arterial stiffness in hypertensive individuals, 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Risk Of Decreased Adiponectin Levels, but you don't have any blood test results for Risk Of Decreased Adiponectin Levels. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Risk Of Decreased Adiponectin Levels.

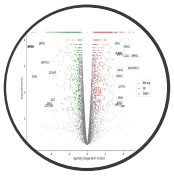
Your genetic profile indicates you do not seem to have risk of decreased adiponectin levels.

Dietary Sources / What To Do ?

nan

Resting Metabolic Rate Body and weight

About



nan
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

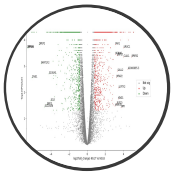
You have an Typical genetic potential for Resting Metabolic Rate, but you don't have any blood test results for Resting Metabolic Rate. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Resting Metabolic Rate.

Your genetic profile indicates you do not seem to have higher resting metabolic rate.

Dietary Sources / What To Do ?

nan

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 persons 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Enhanced

How do these results connect?

You have an Enhanced genetic potential for Weight Loss-regain, but you don't have any blood test results for Weight Loss-regain. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Weight Loss-regain.

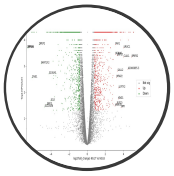
Your genetic profile indicates you are more likely to gain weight back. It is best after losing weight to maintain a healthy diet, exercise and nutrition plan to keep the extra pounds off and support long-term health.

Dietary Sources / What To Do ?

nan

Lean Body Mass Potential Body and weight

About



nan
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Lean Body Mass Potential, but you don't have any blood test results for Lean Body Mass Potential. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Lean Body Mass Potential.

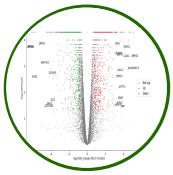
Your genetic profile indicates you are associated with typical advantage for leaner body mass.

Dietary Sources / What To Do ?

nan

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Blood Pressure Response To Exercise, but you don't have any blood test results for Blood Pressure Response To Exercise. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Blood Pressure Response To Exercise.

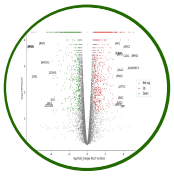
Your genetic profile indicates you are associated with typical reduction in blood pressure in response to exercise in individuals with predisposition to hypertension.

Dietary Sources / What To Do ?

nan

Exercise Benefits For Lowering Cholesterol Exercise response

About



The most commonly reported cholesterols 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 oneâ€™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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Exercise Benefits For Lowering Cholesterol, but you don't have any blood test results for Exercise Benefits For Lowering Cholesterol. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Exercise Benefits For Lowering Cholesterol.

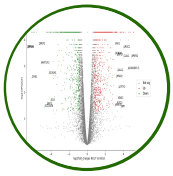
Your genetic profile indicates you are associated with typical benefit from exercise to lower cholesterol.

Dietary Sources / What To Do ?

nan

Exercise Benefits For Maximal Oxygen Uptake Response Exercise response

About



Maximal oxygen uptake (VO2max) 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 (VO2max). 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. VO2max 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 VO2 max can potentially improve overall health. Higher VO2max is associated with a reduced risk of lifestyle-related diseases, including breast, colon, and prostate cancer, cardiovascular diseases, and type II diabetes. VO2max 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Exercise Benefits For Maximal Oxygen Uptake Response, but you don't have any blood test results for Exercise Benefits For Maximal Oxygen Uptake Response. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Exercise Benefits For Maximal Oxygen Uptake Response.

nan

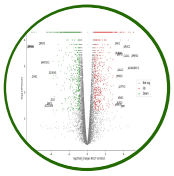
Dietary Sources / What To Do ?

nan

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 its 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. While exercise is an important element of cardiovascular health, genetic variants also determine individualâ€™s HDL cholesterol response to exercise.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for HDL (Good) Cholesterol Response To Exercise, but you don't have any blood test results for HDL (Good) Cholesterol Response To Exercise. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for HDL (Good) Cholesterol Response To Exercise.

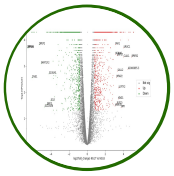
Your genetic profile indicates you are associated with moderately enhanced benefit in HDL cholesterol level in response to exercise.

Dietary Sources / What To Do ?

nan

Insulin Sensitivity Response To Exercise Exercise response

About



Insulin sensitivity is a good thing. Insulin in your body helps control your response to glucose, commonly known as sugar. Having an increased insulin sensitivity means that the body has a better ability to process sugar. The opposite of insulin sensitivity is called insulin resistance, which is linked to obesity and type 2 diabetes. Insulin is a peptide hormone which regulates the absorption of glucose from the blood. Insulin sensitivity is bodyâ€™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 bodyâ€™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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Enhanced

How do these results connect?

You have an Enhanced genetic potential for Insulin Sensitivity Response To Exercise, but you don't have any blood test results for Insulin Sensitivity Response To Exercise. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Insulin Sensitivity Response To Exercise.

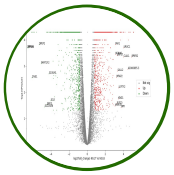
Your genetic profile indicates you are associated with highly enhanced benefit for insulin sensitivity in response to exercise.

Dietary Sources / What To Do ?

nan

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, but loss of body fat in response to exercise varies from individual to individual and ascribed to genetics.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Loss Of Body Fat Response To Exercise, but you don't have any blood test results for Loss Of Body Fat Response To Exercise. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Loss Of Body Fat Response To Exercise.

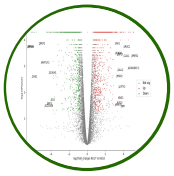
Your genetic profile indicates you are associated with typical benefit from exercise to lose body fat.

Dietary Sources / What To Do ?

nan

Weight Loss Response To Exercise Exercise response

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Weight Loss Response To Exercise, but you don't have any blood test results for Weight Loss Response To Exercise. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Weight Loss Response To Exercise.

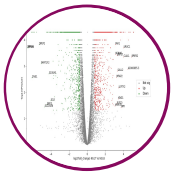
Your genetic profile indicates you are associated with typical benefit from exercise to lose weight.

Dietary Sources / What To Do ?

nan

Muscle Power Fitness

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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

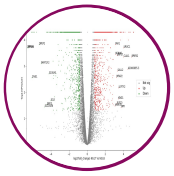
You have an Typical genetic potential for Muscle Power, but you don't have any blood test results for Muscle Power. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Muscle Power.

Your genetic profile indicates you are associated with typical muscle power. If you want to increase your power you may want to consider sports and exercises. As always, only change your fitness exercises under the supervision of a professional trainer.

Dietary Sources / What To Do ?

nan

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 oneâ€™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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

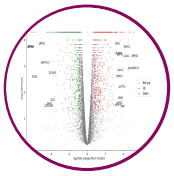
You have an Typical genetic potential for Strength Training, but you don't have any blood test results for Strength Training. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Strength Training.

Your genetic profile indicates you are associated with beneficial response to strength training.

Dietary Sources / What To Do ?

nan

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 require endurance. 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Endurance, but you don't have any blood test results for Endurance. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Endurance.

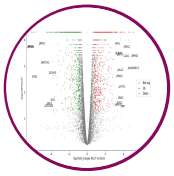
Your genetic profile indicates you are associated with moderately enhanced endurance (ability to exercise continuously for extended periods without tiring). Consult with your fitness trainer on how to leverage this advantage to improve your fitness routines. As always, keep in mind that any substantial changes to your fitness routines may affect other parts of your well-being and should be done with proper oversight. Make sure to check your injury reports.

Dietary Sources / What To Do ?

nan

Overall Fitness Benefits Fitness

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 oneâ€™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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Overall Fitness Benefits, but you don't have any blood test results for Overall Fitness Benefits. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Overall Fitness Benefits.

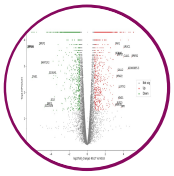
Your genetic profile indicates you are associated with typical overall fitness benefits. You may not see quick benefits from moderate exercise on your health, in particular if you have issues with cholesterol, triglycerides, and hypertension. You may need to boost your exercise frequency and perhaps intensity in combination to a healthy diet to see a significant impact on your cholesterol, triglycerides, and blood pressure levels. Always consult with your physician before changing the intensity and frequency of your workouts.

Dietary Sources / What To Do ?

nan

Speed/Power Performance Fitness

About



Speed is one of the main fitness components, which is defined as the ability to accelerate from the stationary position in the shortest time and maximum efficiency. Speed is an important factor for athletic sports such as cyclists, sprint swimmers, sprinters. Speed has a direct relationship with neuro-muscular system. Type II muscle fiber in the body, also called fast-twitch fibers provide bigger and more powerful forces, but for shorter durations and prone to 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.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Speed/Power Performance, but you don't have any blood test results for Speed/Power Performance. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Speed/Power Performance.

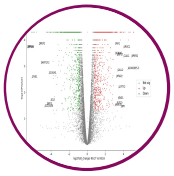
Your genetic profile indicates you are associated with moderately advantageous speed/power athlete status (ability to excel in the following power modalities and to excel in quick movements across the ground or move limbs rapidly). This is observed in people that often gain elite performance status in sprint type exercises.

Dietary Sources / What To Do ?

nan

Cell Detoxification Capability Fitness

About



Cellular detoxification is fundamental cleansing process that involves the removal of harmful toxins at the cellular level. Cellular detoxification is intricate process that involves harmoniously operating aspects such as cellular fluid and electrolyte balance, organ and system equilibrium, cellular functions, and supply of sufficient nutrients through diet. Cellular detoxification is an essentially a defence mechanism to eliminate end-products of cellular respiration and metabolic processes. Cellular anti-oxidants such as glutathione, catalase, superoxide dismutase, Coenzyme Q10 essentially function in the prevention of oxidative by-products formation. Environmental toxins such as vehicle exhaust, mercury, cadmium, radiation as well as chemical toxins pose potential health risk. So, it is important to reduce the exposure to these toxins. Polymorphisms in detoxification genes may affect the function of enzymes coded by them, and in turn, the cellular metabolism.
Symptoms/Diagnosis/Treatment : nan
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Cell Detoxification Capability, but you don't have any blood test results for Cell Detoxification Capability. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Cell Detoxification Capability.

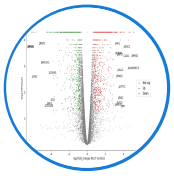
Your genetic profile indicates you are associated with moderately decreased cell detoxification capability (ability to reduce free oxygen radicals, and eliminate oxidative damage). You should still maintain the 50% of your diet from vegetables and fruit, nuts seeds, herbs and spices. Look for more organic beauty and cleaning supplies.

Dietary Sources / What To Do ?

nan

Allergy To Milk Sensitivity/Intolerance

About



Milk allergy is immune-mediated response to proteins in milk that occurs consistently with ingestion. Its one of the most common food allergies in children. Milk allergy is different form lactose intolerance unlike a milk allergy, lactose intolerance does not involve the immune system. But, the share common symptoms like bloating, gas, or diarrhoea after consuming milk and dairy products. Cows milk allergy (CMA) is the usual cause of milk allergy, but milk from sheep, goats, buffalo and other mammals also can cause a reaction. A major problem of CMA is the fact that the human IgE response to CM proteins is characterized by a great variability and that no single allergen or particular structure has been identified that accounts for a major part of allergenicity in milk. The major cow's allergens belong to the casein fraction of proteins and to whey proteins.
Symptoms/Diagnosis/Treatment : Symptoms of milk allergy includes: digestive problems, vomiting, hives, bloating, diarrhoea, abdominal cramps, loose stools, skin rash, indigestion, vomiting, or flatulence. The symptoms can occur in a span of few minutes to a few hours after drinking milk or ingesting milk products or sometimes longer times to develop. Two basic mechanisms explain allergic reactions to cow's milk allergy as well as to other food allergens: those mediated by immunoglobulin E (IgE) and those not mediated by IgE. The most common IgE-mediated manifestations of CMA are acute urticaria and angioedema. Symptoms of non-IgE-mediated cow's milk allergy are mostly delayed reactions that occur beyond 2 h following ingestion and usually involve the gastrointestinal tract and/or skin. Symptoms such as urticaria and/or angioedema with vomiting and/or wheezing are suggestive of IgE-mediated milk allergy, which generally occur within minutes and up to 2 h of cow's milk protein ingestion. The majority of reactions are mild to moderate, but life-threatening anaphylaxis can also occur. Avoidance of milk or items containing milk products is the only way to manage a milk allergy. In the case of breastfed infants, the mother should eliminate all dairy products from her own diet. The treatment of cows milk allergy includes oral antihistamine for mild cutaneous or digestive reactions. Milk or dairy allergies and lactose intolerance are not related.
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

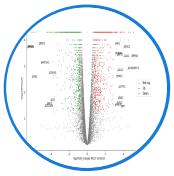
You have an Typical genetic potential for Allergy To Milk, but you don't have any blood test results for Allergy To Milk. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Allergy To Milk.

Your genetic profile indicates you do not seem to have allergy to milk.

Dietary Sources / What To Do ?

Allergy To Peanuts Sensitivity/Intolerance

About



Peanut allergy is the hypersensitivity to dietary substances from peanuts causing an overreaction of the immune system. It often starts in childhood and continues in adults. Peanut allergy is a growing public health concern in westernized countries. The most common cause of peanut allergy is eating peanuts or peanut-containing foods and unintended introduction of peanuts into a product. Sometimes direct skin contact with peanuts can trigger an allergic reaction. 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.
Symptoms/Diagnosis/Treatment : Symptoms occur rapidly, usually within 2 h of exposure, due to the release of vasoactive cytokines from mast cells and basophils. Mild or moderate signs are rash, itching or tingling in or around the mouth and throat, hives, runny nose, itchy or watery eyes, tightening of the throat, and coughing. Severe signs are coughing, choking, gagging, wheezing, trouble breathing, cramps, vomiting, diarrhoea, swelling around mouth and rest of body. Anaphylaxis signs and symptoms can include constriction of airways, swelling of the throat that makes it difficult to breathe, a severe drop in blood pressure (shock), rapid pulse, dizziness, light-headedness or loss of consciousness. Three peanut?specific storage proteins (Ara h 1, 2, 3) and two cross?reactive proteins (Ara h 8 and 9) are used in diagnostic testing. IgE?mediated peanut allergy causes reactions of varying severity, including life threatening anaphylactic reactions. Management of peanut allergy requires strict avoidance of peanut and readily available access to rescue medications to treat accidental reactions. While research has demonstrated that early introduction and regular consumption of peanut can significantly reduce the risk of developing a peanut allergy in high-risk infants, once an individual has developed a peanut allergy strict avoidance is usually recommended. Allergic reactions to peanut are unpredictable and may vary in severity depending on factors such as dose, route of exposure, food preparation techniques, and the presence of modifying cofactors such as asthma, infection, exercise and alcohol.

Genetic risk analysis

Typical

How do these results connect?

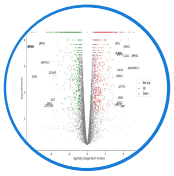
You have an Typical genetic potential for Allergy To Peanuts, but you don't have any blood test results for Allergy To Peanuts. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Allergy To Peanuts.

Your genetic profile indicates you do not seem to have allergy to peanuts

Dietary Sources / What To Do ?

General Food Allergies Sensitivity/Intolerance

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.
Symptoms/Diagnosis/Treatment : Food allergy is classified on the basis of the involvement of IgE antibodies in allergic pathophysiology, either as classic IgE, mixed pathophysiology or non-IgE-mediated food allergy. The most common food allergens are milk, peanut, eggs, tree nuts, fish, shellfish, wheat, and soy. Expression of food allergy is influenced by genetics, environment, and genome-environment interactions, including epigenetic effects. Numerous risk factors have been identified or proposed to contribute to food allergy or sensitization, including sex, race/ethnicity, increased hygiene, the influence of the microbiome, vitamin D insufficiency, dietary fat, obesity (being an inflammatory state), and the timing and route of exposure to foods etc. The most common childhood food allergies are typically outgrown by adolescence or adulthood. However, peanut/tree nut allergies appear to more commonly persist into adulthood. Diagnosis requires both a careful history and supportive testing with laboratory studies and possibly oral food challenges. Symptoms of food allergies typically appear from within a few minutes to 2 hours after a person has eaten the food to which the individual is allergic. Manifestations of IgE-mediated food allergy include urticaria, angioedema, pruritus, difficulty in breathing, laryngeal oedema, vomiting, diarrhoea and/or hypotension within minutes to two hours of the offending foods ingestion. They comprise food-induced anaphylaxis, which is mediated by IgE and the acute form of the food-protein-induced enterocolitis syndrome (FPIES), thought to be mediated by cells. There is no cure for food allergies. Strict avoidance of food allergens - and early recognition and management of allergic reactions to food - are important measures to prevent serious health consequences.
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for General Food Allergies, but you don't have any blood test results for General Food Allergies. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for General Food Allergies.

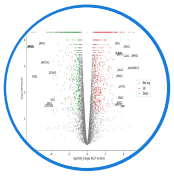
Your genetic profile indicates you do not seem to have general food allergy.

Dietary Sources / What To Do ?

nan

Lactose Intolerance Sensitivity/Intolerance

About



Lactose intolerance is the insufficient breakdown of lactose sugar in the small intestine which is usually caused by a deficiency of an enzyme in the body called lactase. Lactose is found in dairy products and is normally broken-down during digestion by lactase enzyme. If lactase levels are low, undigested lactose moves through your gut undigested is fermented by colon bacteria and causes digestive symptoms, creating gases and other by-products, leading to bloating, cramps, and diarrhoea.
Symptoms/Diagnosis/Treatment : Symptoms can include abdominal cramps, bloating and diarrhoea. The diagnosis is confirmed by several tests, such as a hydrogen breath test, which measures the level of hydrogen gas in a patientâ€™s breath as a sign of bacterial breakdown of undigested lactose, or a lactose tolerance test, which measures a patientâ€™s blood sugar (glucose) levels after they are given a dose of lactose. The mainstay of treating lactose intolerance is reducing lactose-containing foods in the diet. There is no universal amount of lactose that causes symptoms. Most clinicians and researchers agree that 12 to 15 g of lactose (about the amount in 1 to 2 cups of milk) is generally tolerated by people with lactose intolerance. Dairy products with the highest levels of lactose include milk and ice cream. Yogurt and cheeses, especially hard cheeses, contain much lower amounts. Eating small quantities of these products, especially with other products without lactose, can help reduce symptoms. Lactose-reduced products, such as lactose-reduced milk, are available. Treatment focuses on avoidance of dairy products, use of lactose-free products or the use of lactase supplements. Patients are often advised to not completely eliminate dairy products, since they are important sources of calcium and vitamin D.
Deficiency/Overage :nan

Genetic risk analysis

Enhanced

How do these results connect?

You have an Enhanced genetic potential for Lactose Intolerance, but you don't have any blood test results for Lactose Intolerance. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Lactose Intolerance.

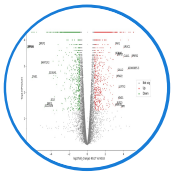
Your genetic profile indicates you have a higher than average genetic risk of lactose intolerance. Avoid dairy products and use of lactose-free products to manage lactose intolerance.

Dietary Sources / What To Do ?

nan

Gluten Intolerance Sensitivity/Intolerance

About



Gluten intolerance is a fairly common problem. It is characterized by adverse reactions to gluten, a protein found in wheat, barley and rye. Celiac disease is the most severe form of gluten intolerance. It is an autoimmune disease that affects about 1% of the population and may lead to damage in the digestive system. However, 0.5â€“13% of people may also have non-celiac gluten sensitivity, a milder form of gluten intolerance that can still cause problems. Both forms of gluten intolerance can cause widespread symptoms, many of which have nothing to do with digestion. 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.
Symptoms/Diagnosis/Treatment : Gluten intolerance or non-celiac gluten sensitivity, as it is also known, shares some of the same symptoms as celiac disease but is a less severe condition. Gluten intolerance can still cause considerable discomfort, however, and people sometimes use lifestyle changes to try and manage its symptoms. Gluten intolerance is often mistaken for celiac disease, but they are separate conditions. Celiac disease is a severe autoimmune disease, and it can damage a personâ€™s digestive system. The symptoms of gluten intolerance are less severe than celiac disease or a wheat allergy, and people know much less about the condition. Main signs and symptoms of gluten intolerance includes: bloating, diarrhoea, constipation and smelly feces, abdominal pain, headaches, feeling tired, skin problems, depression, unexplained weight loss, iron-deficiency anemia, anxiety, autoimmune disorders, joint and muscle pain, leg or arm numbness, and brain fog. Adults and children often experience different symptoms due to celiac disease. Children will most commonly have digestive symptoms. These can include: abdominal bloating and gas, chronic diarrhea, constipation, pale, foul-smelling stool, stomach pain, and nausea and vomiting. The failure to absorb nutrients during critical years of growth and development can lead to other health problems. These can include: failure to thrive in infants, delayed puberty in adolescents, short stature, irritability in mood, weight loss and dental enamel defects. Adults may also have digestive symptoms if they have celiac disease. However, adults are more likely to experience symptoms such as: fatigue, anemia, depression and anxiety, osteoporosis, joint pain, headaches, canker sores inside the mouth, infertility or frequent miscarriages, missed menstrual periods, and tingling in the hands and feet. Recognizing celiac disease in adults can be difficult because its symptoms are often broad. They overlap with many other chronic conditions. The mainstay of treatment is a strict gluten-free diet that can help manage symptoms and promote intestinal healing.
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Gluten Intolerance, but you don't have any blood test results for Gluten Intolerance. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Gluten Intolerance.

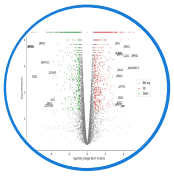
Your genetic profile indicates you have a slightly higher than average genetic risk of gluten intolerance. Strictly use gluten-free diet to manage gluten Intolerance.

Dietary Sources / What To Do ?

nan

Sensitivity To Salt Sensitivity/Intolerance

About



Salt is the main source of sodium, a mineral your body needs, but too much sodium can result in your body holding onto excess water, a load that puts a strain on your heart and blood vessels and can raise your blood pressure. 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. 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.
Symptoms/Diagnosis/Treatment : Salt sensitivity may be as dangerous for your heart as high blood pressure, research has shown, even if your resting blood pressure is normal. 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. People who are salt-sensitive should pay more attention to dietary sodium in order to reduce their risk for high blood pressure and related cardiovascular diseases. They should monitor their sodium and limit high-sodium foods while increasing high-potassium foods in their diet.
Deficiency/Overage :nan

Genetic risk analysis

Typical

How do these results connect?

You have an Typical genetic potential for Sensitivity To Salt, but you don't have any blood test results for Sensitivity To Salt. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Sensitivity To Salt.

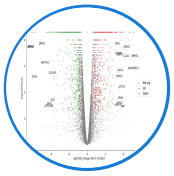
Your genetic profile indicates you do not seem to have sensitivity to salt.

Dietary Sources / What To Do ?

nan

Caffeine Sensitivity Sensitivity/Intolerance

About



Coffee is one of the worldâ€™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 canâ€™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.
Symptoms/Diagnosis/Treatment : 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 liverâ€™s ability to metabolize caffeine, gender, age, and weight. Caffeine sensitivity isnâ€™t the same thing as caffeine allergy. Caffeine sensitivity may have a genetic link. While symptoms arenâ€™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-thats 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.
Deficiency/Overage :nan

Genetic risk analysis

Slightly Enhanced

How do these results connect?

You have an Slightly Enhanced genetic potential for Caffeine Sensitivity, but you don't have any blood test results for Caffeine Sensitivity. Find out how your genetic potential compares to what is actually happening in your body by uploading recent blood test results or by getting a blood test for Caffeine Sensitivity.

Your genetic profile indicates you have a slightly higher than average genetic risk of caffeine sensitivity. Be aware of how caffeine affects their health and accordingly reduce the consumption or avoid caffeine. To reduce caffeine intake without experiencing withdrawal symptoms, people should reduce their consumption slowly.

Dietary Sources / What To Do ?

nan

Blood & Allergy Result

SCIENTIFIC WELLNESS CENTER

Blood Result

Trait Name	Data	Result
Vitamin A	6	Decreased
Risk Of Elevated Blood Sugar Levels	21	Decreased
Risk Of Reduced HDL Cholesterol Levels	12	Decreased
Risk Of Elevated LDL Cholesterol Levels	211	Enhanced
Risk Of Elevated Triglycerides Levels	212	Enhanced

Allergy Result

Trait Name	Data	Result
Allergy To Milk	53	No allergy
Allergy To Peanuts	43	No allergy

Vitamin A is a group of unsaturated nutritional organic compounds that includes retinol, retinal, and several provitamin A carotenoids (most notably beta-carotene).[1][2][3] Vitamin A has multiple functions: it is important for growth and development, for the maintenance of the immune system, and for good vision.[4][5] Vitamin A is needed by the retina of the eye in the form of retinal, which combines with protein opsin to form rhodopsin, the light-absorbing molecule[6] necessary for both low-light (scotopic vision) and color vision.[7] Vitamin A also functions in a very different role as retinoic acid (an irreversibly oxidized form of retinol), which is an important hormone-like growth factor for epithelial and other cells.[5][8]

In foods of animal origin, the major form of vitamin A is an ester, primarily retinyl palmitate, which is converted to retinol (chemically an alcohol) in the small intestine. The retinol form functions as a storage form of the vitamin, and can be converted to and from its visually active aldehyde form, retinal.[3]

All forms of vitamin A have a beta-ionone ring to which an isoprenoid chain is attached, called a *retinyl group*.[1] Both structural features are essential for vitamin activity.[9] The orange pigment of carrots (beta-carotene) can be represented as two connected retinyl groups, which are used in the body to contribute to vitamin A levels.[3] Alpha-carotene and gamma-carotene also have a single retinyl group, which give them some vitamin activity. None of the other carotenes have vitamin activity. The carotenoid beta-cryptoxanthin possesses an ionone group and has vitamin activity in humans.

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.

Low Protein Intake Risk

Rs Id Number	Your Genotype	Alternate Allele
rs838133	GG	0.0 A

Low-Carb Diet Effectiveness

Rs Id Number	Your Genotype	Alternate Allele
rs10850219	GG	1.8 G
rs7903146	CT	0.9 C
rs1042714	CC	0.0 G
rs2241201	CC	1.8 C

Low-Fat Diet Effectiveness

Rs Id Number	Your Genotype	Alternate Allele
rs9939609	TT	0.0 A
rs1801282	CC	0.0 G
rs1800588	CC	0.0 T

Overweight Potential

Rs Id Number	Your Genotype	Alternate Allele
rs10830963	CG	0.8 G
rs1042714	CC	0.0 G
rs1421085	TT	0.0 C
rs1801282	CC	0.0 G
rs9939609	TT	0.0 A
rs12970134	AA	1.0 A
rs17782313	CC	1.0 C

Polyunsaturated Fats Increased Benefits

Rs Id Number	Your Genotype	Alternate Allele
rs10761785	GT	0.8 T
rs174570	TT	0.0 C
rs174550	CC	0.0 T
rs174546	TT	0.0 C
rs174547	CC	1.4 C
rs174548	GG	0.0 C

Starch Metabolism

Rs Id Number	Your Genotype	Alternate Allele
rs4244372	TT	0.0 A

Satiety

Rs Id Number	Your Genotype	Alternate Allele
rs9939609	TT	0.0 A
rs1137101	GG	3.0 G

Snacking

Rs Id Number	Your Genotype	Alternate Allele
rs17782313	CC	3.0 C

Response to monounsaturated fats

Rs Id Number	Your Genotype	Alternate Allele
rs17300539	GG	0.0 A
rs1801282	CC	0.0 G

Response to protein

Rs Id Number	Your Genotype	Alternate Allele
rs9939609	TT	0.0 A

Response to polyunsaturated fats

Rs Id Number	Your Genotype	Alternate Allele
rs1801282	CC	10.0 C

Carbohydrate overconsumption

Rs Id Number	Your Genotype	Alternate Allele
rs838133	GG	0.0 A

Omega-6 And Omega-3 Levels

Rs Id Number	Your Genotype	Alternate Allele
rs174547	CC	10.0 C

Response To Total Fat

Rs Id Number	Your Genotype	Alternate Allele
rs7903146	CT	5.0 T

Fat Metabolism

Rs Id Number	Your Genotype	Alternate Allele
rs4994	AA	0.0 G
rs1042714	CC	0.0 G
rs1801282	CC	0.0 G

Carbohydrate Metabolism

Rs Id Number	Your Genotype	Alternate Allele
rs1042714	CC	0.0 G

Vitamin A

Rs Id Number	Your Genotype	Alternate Allele
rs10882272	CC	1.0 C
rs6420424	GG	0.0 A
rs7501331	CC	0.0 T
rs11645428	GG	3.0 G
rs12934922	AT	1.0 T

Vitamin B2

Rs Id Number	Your Genotype	Alternate Allele
rs1801394	AA	0.0 G

Vitamin B6

Rs Id Number	Your Genotype	Alternate Allele
rs1256335	AA	0.0 G
rs1772719	AA	0.0 C
rs1801131	TT	0.0 G

Vitamin B9

Rs Id Number	Your Genotype	Alternate Allele
rs1801394	AA	0.0 G
rs1801131	TT	0.0 G
rs526934	AA	0.0 G

Vitamin B12

Rs Id Number	Your Genotype	Alternate Allele
rs602662	GG	3.0 G
rs1047781	AT	0.875 A
rs601338	GG	1.75 G
rs1801131	TT	0.0 G
rs526934	AA	0.0 G

Vitamin D

Rs Id Number	Your Genotype	Alternate Allele
rs1544410	CC	0.0 T
rs2282679	TT	0.0 G
rs2060793	AG	0.47 A
rs10741657	AG	0.49 G
rs1007392	AG	0.47 A
rs3829251	GG	0.0 A
rs705117	CC	0.94 C

Vitamin E

Rs Id Number	Your Genotype	Alternate Allele
rs7834588	CT	1.5 C
rs12272004	CC	5.0 C
rs6025	CC	0.0 T

Lutein And Zeaxanthin Deficiency

Rs Id Number	Your Genotype	Alternate Allele
rs7501331	CC	0.0 T

Coenzyme Q10 Deficiency

Rs Id Number	Your Genotype	Alternate Allele
rs7501331	CC	0.0 T
rs12934922	AT	1.75 A

Sodium

Rs Id Number	Your Genotype	Alternate Allele
rs4343	AA	0.0 G

Choline

Rs Id Number	Your Genotype	Alternate Allele
rs10791957	AA	5.0 A

Risk Of Elevated Blood Sugar Levels

Rs Id Number	Your Genotype	Alternate Allele
rs11708067	AA	0.77 A
rs10885122	GG	0.77 G
rs11605924	AC	0.385 A
rs174550	CC	0.0 T
rs560887	CC	0.769 C
rs4607517	GG	0.0 A
rs780094	TT	0.0 C
rs7944584	AA	0.769 A
rs10830963	CG	0.384 G
rs11920090	TT	0.769 T
rs7903146	CT	0.384 T

Risk Of Reduced HDL Cholesterol Levels

Rs Id Number	Your Genotype	Alternate Allele
rs1883025	CC	0.0 T
rs2967605	TT	0.716 T
rs247616	CC	0.714 C
rs174547	CC	0.714 C
rs1800961	CC	0.0 T
rs2338104	CC	0.714 C
rs2271293	GG	0.714 G
rs10468017	CC	0.714 C
rs12678919	AA	0.714 A
rs7679	TT	0.0 C
rs471364	TT	0.0 C
rs964184	CC	0.0 G

Risk Of Elevated LDL Cholesterol Levels

Rs Id Number	Your Genotype	Alternate Allele
rs6544713	CC	0.0 T
rs515135	CC	1.0 C
rs12740374	TT	0.0 G
rs3846663	CT	0.5 T
rs2650000	AC	0.5 A
rs1501908	CC	0.0 G
rs6511720	GG	1.0 G
rs6102059	TT	0.0 C
rs10401969	TT	1.0 T
rs11206510	TT	1.0 T
rs11206510	TT	0.0 T

Risk Of Elevated Triglycerides Levels

Rs Id Number	Your Genotype	Alternate Allele
rs10889353	AC	0.456 A
rs174547	CC	0.91 C
rs1260326	TT	0.91 T
rs12678919	AA	0.91 A
rs714052	AA	0.908 A
rs17216525	CT	0.454 C
rs7679	TT	0.0 C
rs2954029	TT	0.0 A
rs7819412	GG	0.0 A
rs964184	CC	0.0 G

Risk Of Decreased Adiponectin Levels

Rs Id Number	Your Genotype	Alternate Allele
rs17366568	GG	0.0 A
rs12051272	GG	0.0 T
rs4783244	GG	0.0 T

Weight Loss-regain

Rs Id Number	Your Genotype	Alternate Allele
rs17300539	GG	10.0 G

Exercise Benefits For Lowering Cholesterol

Rs Id Number	Your Genotype	Alternate Allele
rs1800588	CC	0.0 T

Exercise Benefits For Maximal Oxygen Uptake Response

Rs Id Number	Your Genotype	Alternate Allele
rs8192678	CC	0.0 T

HDL (Good) Cholesterol Response To Exercise

Rs Id Number	Your Genotype	Alternate Allele
rs2016520	TT	0.0 C
rs1800588	CC	4.0 C

Insulin Sensitivity Response To Exercise

Rs Id Number	Your Genotype	Alternate Allele
rs1800588	CC	10.0 C

Loss Of Body Fat Response To Exercise

Rs Id Number	Your Genotype	Alternate Allele
rs328	CC	0.0 G

Weight Loss Response To Exercise

Rs Id Number	Your Genotype	Alternate Allele
rs9939609	TT	0.0 A

Muscle Power

Rs Id Number	Your Genotype	Alternate Allele
rs1042714	CC	0.0 G
rs4343	AA	0.0 G
rs1801282	CC	0.0 G

Strength Training

Rs Id Number	Your Genotype	Alternate Allele
rs7136446	TT	0.0 C
rs7566605	GG	0.0 C

Endurance

Rs Id Number	Your Genotype	Alternate Allele
rs1800588	CC	0.769 C
rs328	CC	0.0 G
rs2016520	TT	0.0 C
rs4994	AA	0.769 A
rs4343	AA	0.769 A
rs8192678	CC	0.769 C

Overall Fitness Benefits

Rs Id Number	Your Genotype	Alternate Allele
rs1800588	CC	0.0 T

Speed/Power Performance

Rs Id Number	Your Genotype	Alternate Allele
rs8192678	CC	5.0 C

Cell Detoxification Capability

Rs Id Number	Your Genotype	Alternate Allele
rs4880	AG	2.5 G

Allergy To Milk

Rs Id Number	Your Genotype	Alternate Allele
rs1800896	TT	0.0 C

Lactose Intolerance

Rs Id Number	Your Genotype	Alternate Allele
rs4988235	GG	8.0 G
rs182549	CC	2.0 C

Gluten Intolerance

Rs Id Number	Your Genotype	Alternate Allele
rs7454108	TT	0.0 C
rs2395182	GT	1.0 T
rs7775228	CC	2.0 C
rs2187668	CC	0.0 T
rs4713586	AA	0.0 G

Caffeine Sensitivity

Rs Id Number	Your Genotype	Alternate Allele
rs2472300	AG	2.5 G

Disclaimer

SCIENTIFIC WELLNESS CENTER