Gene-Thing

Predictive
DNA REPORT

DISCOVER YOUR TRUE POTENTIAL

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Type of Report: Detailed Report

DISCLAIMER

Our recommendations in DNA Lifestyle report are based on the results of your Genetic Risk Assessment and other related information provided by you. This report does not take into account your existing health condition or any medication that have been prescribed to you. This report being neither a substitute to medical treatment nor physicians visit makes it necessary for you to consult your physician before adapting to its recommendations.

Any assertions or recommendations in the report as to an exercise regime or diet, whether specific or general, are based on the following assumptions.

- That you are in a good state of health and do not have any medical problems that you are aware of; That you have not had any recurring illness in the past 12months;
- That no medical practitioner has ever advised you not to exercise;
- That you are not on any prescribed medication that may affect your ability to exercise safely or your diet; That you do not have any food allergies; and
- That there is no other reason why you should not follow the assertions or recommendations in the report.

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The pharmacogenomic panel here refers to your genetic predisposition to the drugs mentioned in the report. This report is for investigational purpose only. It is to be interpreted by a qualified and licensed medical practitioner only. It does not constitute medical advice, diagnosis, or treatment. The assay includes limited set of polymorphisms and may not report for mutations not included in the test panel. This report does not take into account factors like drug-drug interactions, drug food interaction. These assays are carried out by trained individuals and use standard equipment and laboratory designed protocols. Licensed medical practitioners are trained and qualified to make therapeutic decisions pertaining to medications and or dosage based on patient information and medical history, including the pharmacogenetic report.

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How to Read Your Report

WHAT IS GENETICS?

Human are made up of cells

Cells are made up of nucleus

Nucleus is made up of chromosomes

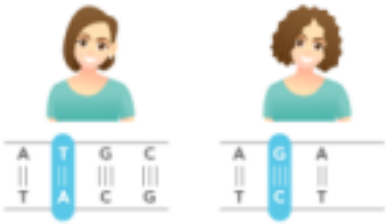
Chromosomes are made up of DNA

DNA is made up of genes

Genes are coded by nucleotides

Changes in nucleotides lead to genetic variations

Straight hair ——— Curly hair



WHAT IS PREDICTIVE GENETICS?

Population with predisposition to curly hair

Population with predisposition to blue eyes

Genetic Variations Make Us All Unique

Population with high risk of obesity

Population with high risk of heart attack

SCORE INTERPRETATIONS

	SCORE	Lastname	Savings
	0-2	Excellent / Protective	An 'excellent / protective’ score indicates a very favorable response or ability for a trait
	2.1-4	Good / Lower Risk	A 'good / lower risk’ score indicates a favorable response or ability for a trait
	4.1-6	Typical	A 'typical’ score indicates a typical response or ability for a trait
	6.1-8	Poor / Slightly Elevated	A 'poor / slightly elevated’ score indicates an unfavorable response or ability for a trait
	8.1-10	Very Poor / Highly Elevated	A 'very poor / highly elevated’ score indicates a very unfavorable response or ability for a trait

GENERAL GUIDELINES

Genetic risk or predisposition given in the report is based on statistically relevant genomics research studies, which should not be taken as a diagnosis of any health condition or overall wellness.

Traits in the report are not genetically interlinked; their genetic associations are independent of each other. Therefore, every trait score and interpretation are independent of each other.

This report provides information The information in the report may provide an Please consult with your doctor, or other about genetic predispositions only and may not indicate current conditions or characteristics.

understanding of one’s genetic risks and may help in making informed decisions regarding one’s wellness and goals.

qualified health care professional before making any dietary, fitness, health and wellness related changes.

NUTRIGENOMICS

Category Summary

Food Intolerances and Sensitivities

9.0

Caffeine Metabolism

7.0

Gluten Intolerence

5.9

Lactose Intolerence

9.0

Salt Metabolism

Caffeine Metabolism

What is Caffeine Metabolism?

Caffeine is a central nervous system stimulant, present in beverages such as coffee, tea, energy drinks, and aerated drinks like cola. Caffeine invokes a sense of alertness and wakefulness upon consumption. However,it can also produce a mild form of dependence. Generally,up to 400 mg of caffeine appears to be a safe dose for adults, but great variability is observed in terms of how much caffeine can be tolerated by an individual, which in turn is governed by genetic variations. Excess caffeine consumption can cause several side effects such asanxiety ,insomnia, digestive issues, high blood pressure, and rapid heartrate.

9.0

Caffeine Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : Near CYP1A2 | Your Genotype : CC, CC

Encodes a type of human polycyclic aromatic hydrocarbon-inducible cytochrome P450(CYP1) family called the CYP1A2 enzyme. CYP1A2 demethylates caffeine molecules into substances like paraxanthine & methylxanthine(which can be excreted through urine), reduci

Gene Name : CYP1A2 | Your Genotype : AA

The CYP1A2 gene encodes a liver enzyme that is critical for the breakdown of caffeine molecules into substances that can be excreted through urine. This function influences the amount of caffeine its effects in the body. Variations in the CYP1A2 gene can

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
- Increase the protein and fiber content in your meals so that excessive intake of simple carbohydrates and fats is avoided.
- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
- Avoid binging on empty calories, snacks with a high salt content, and high calorie meals.
- Avoid improper chewing of food and finishing meals very quickly.

Gluten Intolerence

What is Gluten Intolerence?

Gluten is a form of storage protein that is stored together with starch in the seeds of various cereals such as wheat, barley, rye, and oats. Gluten in wheat is responsible for providing the elasticity and making it rise during baking process. Gluten intolerance is characterized by adverse reactions to gluten. Celiac disease is the most severe form of gluten intolerance. Symptoms of gluten intolerance upon consumption of gluten-containing products include bloating, diarrhea, constipation, and abdominal pain. Celiac disease has also been associated with other diseases such as diabetes, thyroid disorders, and other autoimmune diseases. People intolerant to gluten can consume gluten-free cereals. A gluten-free diet is essential for managing signs and symptoms of celiac disease and other medical conditions associated with gluten. Genetic variations can influence an individual?s risk of developing celiac disease.

9.0

Gluten Intolerence

Interpretation

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Gene Table

Gene Name : TAGAP | Your Genotype : AA

The TAGAP gene encodes for a protein that may play a role in Rho GTPase-activating protein. Variations in the TAGAP gene may lead to an increase in GTPase activity, which can eventually result in the development of celiac disease (CD). Variants of this ge

Gene Name : HLA-DRA | Your Genotype : TT

The HLA-DRA gene (major histocompatibility complex, class II, DR alpha) encodes for a protein that plays a crucial role in the regulation of the immune system. Variations may lead to an immune response in response to gluten intake and may influence an ind

Gene Name : REL | Your Genotype : AA

The REL gene encodes a protein, c-Rel, which belongs to the Rel/NF-?B transcription factor family, which helps in the regulation of genes involved in important processes like inflammation and immune response. Studies have suggested an association of c-RE

Gene Name : Intergenic – RGS1 | Your Genotype : AA

RGS1 belongs to a family of RGS genes. It attenuates the signaling activity of G-proteins, blocking the homing of Intra Epithelial Lymphocytes (IELs), and it is specifically expressed both in human small intestinal mucosa and in murine IELs, key players i

Gene Name : FUT2 | Your Genotype : GG

The FUT2 gene encodes for a protein that influences the production of H antigen, which is an antigen essential for the synthesis of soluble A and B antigen. These antigens act as anchors and as sources of carbon for intestinal bacteria in the intestinal l

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Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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Lactose Intolerence

What is Lactose Intolerence?

Lactose, commonly called milk sugar,is a form of carbohydrate present in milk and other dairy products. It makes dairy products taste mildly sweet. The body starts metabolizing lactose in the intestines with the help of lactase, an enzyme produced and released by the cells that line the small intestine. When the body does not produce enough lactase enzyme, lactose is fermented by the intestinal bacteria. This leads to formation of lactic acid and various gases in the stomach, causing symptoms related to lactose intolerance. Symptoms of lactose intolerance are bloating, gas formation in the stomach ,and diarrhea. Genetic variation scanin fluencean individual's risk of developing lactose intolerance.

9.0

Lactose Intolerence

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : MCM6 | Your Genotype : CC,CC

A regulatory element (which is a specific DNA sequence), within the MCM6 gene, plays a key role in regulating the activity or expression of the LCT gene. The LCT gene encodes an enzyme, lactase, which helps in the metabolism of lactose. Reduced activity o

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Don'ts

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Salt Metabolism

What is Salt Metabolism?

Table salt is a mineral composed primarily of sodium chloride. Sodium is an important electrolyte and an essential nutrient for human health, whose role in the body is primarily as an electrolyte and maintaining fluid balance. Sodium enables the transmission of nerve impulses around thebody,regulating the electrical charges moving in and out of the cells. The presence of sodium ions is essential for the contraction of muscles including the most important muscle, the heart. Excess sodium in the body has many side effects such as hypertension, fluid retention, swelling, and edema. Severe sweating, vomiting, and diarrhea are also markedly associated with increased sodium levels. The food sources rich in sodium are cured meats, salted fish, cheese, and canned foods. Genetic variations can influence how an individual responds to salt intake, thereby influencing how much salt can be tolerated in their diet.

9.0

Salt Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : near SGK1 | Your Genotype : CT

This variant is located near the SGK1 gene. The SGK1 gene encodes a protein that plays a key role in cellular stress response. It is also known to activate certain sodium, chloride, and potassium channels, which suggests its involvement in regulating seve

Do's and Don'ts

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Category Summary

Macronutrient Requirements

9.0

Response to Carbohydrates

7.0

Response to fibre

5.9

Response to Monosaturated fats

9.0

Response to polysaturated fats

7.0

Response to protein

5.9

Response to saturated fats

Response to Carbohydrates

What is Response to Carbohydrates?

Carbohydrates are important macro nutrients and the primary source of energy and calories for the body. Carbohydrates are primarily divided into simple carbohydrate and complex carbohydrate groups. Simple carbohydrates are quickly broken down and absorbed by the body, which leads to a spike in the blood sugar levels and insulin secretion. Increased consumption of simple carbohydrates such as refined flour, table sugar, syrups, and fruit drinks could increase the risk of developing diabetes and obesity. Complex carbohydrates, due to their complex structure, cannot be quickly broken down, causing slow and sustained release of sugar and insulin into the bloodstream. Complex carbohydrate sources include oats, quinoa, brown rice, barley, and legumes. Genetic variations can influence the risk of developing insulin resistance and obesity in response to carbohydrate consumption.

9.0

Response to Carbohydrates

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : ACE | Your Genotype : GG

The ACE gene provides instructions for making the angiotensin-converting enzyme. The renin-angiotensin system (RAS) is involved in most of the pathological processes that lead to pathogenesis of diabetes. Angiotensin II (Ang II) is the major peptide of RA

Gene Name : ADRB2 | Your Genotype : CC

This gene encodes beta-2-adrenergic receptor which is a member of the G protein-coupled receptor superfamily. Receptors involved in catecholamine function have a role in thermogenesis and energy balance, thus affecting obesity and glucose metabolism. Adre

Gene Name : MMAB | Your Genotype : CC

The MMAB gene encodes an enzyme that aids in the production of adenosylcobalamin, which is important for the breakdown of cholesterol. The MMAB gene may play a role in modulating concentrations of HDL-C which can affect the risk of developing dyslipidemia

Gene Name : SREBP1C | Your Genotype : TT, CC

Sterol regulatory element binding protein-1c (SREBP1C) is a transcription factor involved in the regulation of lipid, glucose metabolism and in sterol homoeostasis in cells. SREBP1C expression is regulated by nutritional stimuli like polyunsaturated fatty

Gene Name : PPARA | Your Genotype : GG

The shift between glucose storage and synthesis during fasting and feeding is essential for maintaining blood glucose levels. PPARA contributes to the adaptation of hepatic carbohydrate metabolism during the fasting-to-fed and fed-to-fasting transition. H

Gene Name : PPARG | Your Genotype : CC

PPAR (peroxisome proliferator-activated receptor) is involved in regulating the carbohydrate and lipid homeostasis, adipogenesis, fatty acid storage, and maintaining energy balance. The PPARG gene encodes a protein (PPAR-gamma) which plays a role in the r

Gene Name : TCF7L2 | Your Genotype : AA, CC, GG

The TCF7L2 gene encodes a protein that influences the secretion of a hormone (glucagon-like peptide-1) which has insulinotropic effects (stimulates insulin secretion) and plays a role in regulating blood glucose homeostasis. Carbohydrate digestion causes

Gene Name : FTO | Your Genotype : CC

The expression of the FTO gene in the hypothalamus is indicative of its potential role in regulating energy homeostasis by modifying the appetite. Carbohydrates influence various aspects such as body weight, appetite, and endocrinology. Carbohydrates inta

Do's and Don'ts

Do's

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Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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Response to fibre

What is Response to fibre?

Dietary fiber is a type of carbohydrate that cannot be digested by the body. The primary role of dietary fiber is in bowel function. Dietary fiber,particularly insoluble fiber,helps prevent constipation by increasing stool weight and decreasing the time of transit of stools in the gut. It also helps in lowering the risks of heart disease and diabetes. Fiber based foods retain water in the intestine which helps to fee lfuller,thereby keeping excessive calorie intake in check, which reduces the risk of developing obesity. It is commonly found in fruits, vegetable, pulses, and whole grains. Genetic variations can influence the extent of benefit that increased fiber intake can have on keeping weight in check.

9.0

Response to fibre

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : FTO | Your Genotype : AA

The FTO gene has strong associations with conditions such as obesity and type II diabetes. Studies have shown that people with certain variations in the FTO gene are found to have beneficial results with increased fiber intake; variations may also be asso

Do's and Don'ts

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Don'ts

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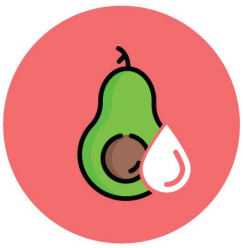
Response to Monosaturated fats



What is Response to Monosaturated fats?

Monounsaturated fatty acids (MUFA) are a type of fat which contain one double bond in their backbone. These fats are usually liquid at room temperature. Monounsaturated fats also play a critical role in regulating the body?s immune function. Eating monounsaturated fats instead of saturated fats and trans fats can lower cholesterol levels and reduce the risk of heart disease and stroke. Monounsaturated fats are also high in vitamin E, an antioxidant vitamin that keeps the body healthy by protecting cells from damage. Foods like avocados, peanut butter, nuts, seeds, olive oil, peanut oil, canola oil, sesame oil, and sunflower oil are particularly high in monounsaturated fats. Genetic variations can influence the degree of health benefits observed with MUFA intake.

9.0

Response to Monosaturated fats

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : APOA1 | Your Genotype : AA

The APOA1 gene encodes for a protein, apolipoprotein A-I (ApoA-1), which is the major protein component of high-density lipoprotein (HDL) in the plasma. High levels of HDL can reduce the risk of developing cardiovascular conditions. HDL transports cholest

Gene Name : ADIPOQ | Your Genotype : GG, GG

The ADIPOQ gene encodes for a protein, adiponectin, which is a plasma protein secreted by the visceral adipose tissue. Adiponectin increases insulin sensitivity and tissue fat oxidation, resulting in reduced circulating fatty acid levels. Therefore, varia

Gene Name : APOB | Your Genotype : AA

The APOB gene encodes for a protein, apolipoprotein B, which is the main apolipoprotein of chylomicrons and low-density lipoproteins. This protein is involved in transporting fat molecules, including cholesterol in the bloodstream.

Do's and Don'ts

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Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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Response to polysaturated fats

What is Response to polysaturated fats?

Polyunsaturated Fatty Acids (PUFA) are a type of fat which contain more than one double bond in their backbone. PUFA rich sources include olive oil, soybean oil, corn oil, and sunflower oil. Other sources include seeds such as walnuts and flax seeds. PUFAs at room temperatures are liquids. PUFAs can help reduce LDL cholesterol levels in the blood which can subsequently lower the risk of heart disease and stroke. Oils rich in polyunsaturated fats also contribute vitamin E, an antioxidant vitamin that keeps the body healthy by protecting cells from damage. There are two main types of PUFA, omega 3 and omega 6 fatty acids. Omega 3 PUFAs are anti-inflammatory and found in fatty fish, shellfish, liver, and in some seeds like flax seed. Omega 6 rich foods are predominantly present in animal fats. The ideal ratio of omega 6 to omega 3 is around 2:1 to 4:1, but modern diets contain ratios ranging from 15:1 to even 25:1, which leads to a much increased dietary need for omega 3 intake for most individuals. Genetic variations can influence the dietary requirement for omega 3 PUFA intake.

9.0

Response to polysaturated fats

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : APOA4	Your Genotype : AA

'Variations in the APOA4 gene tend to have an influence on the particle size of low-density lipoprotein and its propensity for oxidative modifications in response to one"s diet. Thus, variants of the APOA4 gene may modify the concentration of plasma LDL

Gene Name : CETP | Your Genotype : GT, CT

The CETP gene encodes for a protein that is involved in the transfer of cholesteryl ester from high-density lipoprotein (HDL) to other lipoproteins. Variations in the CETP gene may influence the responses of lipids (fats) and lipoproteins to the alteratio

Gene Name : AGT | Your Genotype : CT

The AGT gene encodes for a protein, angiotensinogen, which plays a role in the regulation of blood pressure and fluid balance in the body. Variations in the AGT gene have found to be associated with concentrations of total cholesterol and low-density lipo

Gene Name : FADS1 | Your Genotype : GG, TT

This gene encodes the enzyme Fatty acid desaturase 1(?5 desaturase) which catalyses the conversion of omega-3 & omega-6 parent fatty acids namely alpha-linolenic acid (ALA) & linoleic acid (LA) to their longer chain derivatives (eicosapentaenoic acid or

Gene Name : APOC3 | Your Genotype : CC

The APOC3 gene encodes for a protein, apolipoprotein C-3 (APOC3), which is a component of very-low-density lipoprotein (VLDL). This gene plays a role in inhibiting the activities of proteins that are required for the hydrolysis of triglycerides and theref

Gene Name : APOA5 | Your Genotype : AA, TT

The APOA5 gene encodes for a protein, apolipoprotein A-5 (APOA5), which is a major component of VLDL (very low-density lipoprotein), chylomicrons, and HDL (high-density lipoprotein). APOA5 functions as an activator of a key enzyme in triglyceride cataboli

Gene Name : ADIPOQ | Your Genotype : TT

The ADIPOQ gene encodes for a protein, adiponectin, which is a plasma protein secreted by the visceral adipose tissue. Adiponectin increases insulin sensitivity and tissue fat oxidation, resulting in reduced circulating fatty acid levels. Therefore, varia

Do's and Don'ts

Do's

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Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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Response to protein

What is Response to protein?

Protein is an essential macro nutrient required by the body for growth and maintenance. It acts as a building block for all the cells in the body and can also serve as a fuel source. When broken down into amino acids, they are used as precursors to several other molecules essential for life. A protein-rich diet boosts metabolism and reduces appetite. Therefore, consumption of proteins invokes a feeling of fullness, decreases total calorie consumption, and reduces appetite over time, which aids in fat loss and weight maintenance. Dietary sources of protein include both animals and plant proteins, which include meats, dairy products, fish, eggs, grains, legumes, and nuts. Genetic variations can lead to altered response to increased protein consumption in terms of maintaining lost weight.

9.0

Response to protein

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : MTNR1B | Your Genotype : CG

This gene encodes one of two high affinity forms of a receptor for melatonin, the primary hormone secreted by the pineal gland. Given that melatonin is a hormone involved in energy balance and body weight status, this gene is implicated in body weight reg

Gene Name : TFAP2B | Your Genotype : AA

The TFAP2B gene encodes a protein (transcription factor AP-2?), which in conjunction with other proteins from the AP-2 family binds to specific regions of DNA and helps to control the activity of genes involved in the stimulation of cell proliferation an

Gene Name : FTO | Your Genotype : TT

This gene encodes for a nuclear protein of the AlkB related non-haem iron and 2-oxoglutarate-dependent oxygenase superfamily. RNA demethylase that mediates oxidative demethylation of different RNA species, such as mRNAs, tRNAs and snRNAs, and acts as a re

Do's and Don'ts

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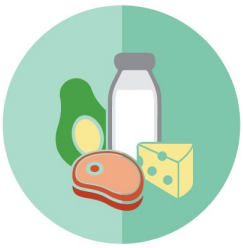
Response to saturated fats



What is Response to saturated fats?

Saturated fats are a class of macro nutrients which are used for energy generation by the body. Saturated fats are found in butter,ghee, margarine, and in animal fats. They differ from other types of fats with respect to the number of double bonds in their backbone, with saturated fats having none. They tend to have higher melting points compared to unsaturated fats, which are generally liquid at room temperature. Saturated fats, when consumed in higher amounts compared to other fats are known to increase LDL cholesterol, which leads to deposition of plaques along the walls of the blood vessels, causing narrowing of blood vessels. This directly leads to an increase in the risk of developing cardiovascular diseases. Genetic variations can influence how the body responds to saturated fat intake, in terms of developing abnormal lipid profiles and obesity.

9.0

Response to saturated fats

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : PCSK1 | Your Genotype : GG

The PCSK1 gene encodes for a protein that has been associated with the cleavage of proteins that play a role in the hypothalamic regulation of appetite. Variations in the PCSK1 gene have been associated with the modulation of fasting fat oxidation.

Gene Name : LTA | Your Genotype : TA

Variations that influence the function of the gene have been identified in several genes, including the lymphotoxin-? (LTA) gene, which affects the cytokine production. The variations may interact with dietary fatty acids to regulate the production and s

Gene Name : THRA | Your Genotype : AA

The THRA gene encodes for a protein which is a nuclear hormone receptor for triiodothyronine (T3 thyroid hormone). It is shown to mediate certain activities of the thyroid hormone. Thyroid hormones, Triiodothyronine (T3) and tetraiodothyronine (T4) hormon

Gene Name : LRP1 | Your Genotype : CT

The LRP1 gene encodes a protein, which is involved in the formation of a mature receptor. This receptor is involved in many cellular processes including intracellular signaling, lipid homeostasis, and clearance of apoptotic cells (biochemical events leadi

Gene Name : AHSG | Your Genotype : CC

The AHSG gene is involved in the regulation of body fat and insulin sensitivity. Variations in the AHSG gene has been shown to be associated with reduced plasma levels as well as lower body fat.

Gene Name : LPL | Your Genotype : CC

Lipoprotein lipase (LPL), associated with the luminal endothelial surface of arteries and capillaries of peripheral tissues,it is a key enzyme in the metabolism of lipoproteins. It hydrolyzes plasma lipoprotein triglycerides into free fatty acids and glyc

Gene Name : CD36 | Your Genotype : AG

The CD36 gene encodes for a membrane-bound protein; CD36 is expressed in several cell types, including fat cells and muscle cells. The primary function of this protein is in the uptake of fatty acids into cells for energy generation. CD36 and FA signaling

Gene Name : IL6 | Your Genotype : AA, CC, GG

The IL6 gene encodes for a protein that has a wide variety of biological functions. Following muscle contraction, it functions to increase the breakdown of fats and to improve insulin resistance.

Gene Name : APOA2 | Your Genotype : TT

The APOA2 gene encodes for a protein, apolipoprotein (apo-) A-II, which is the second most abundant protein of the high-density lipoprotein particles. Saturated fat can stimulate the production for APOA2 production in the postprandial phase (after eating

Gene Name : PPARA | Your Genotype : TT

The PPARA gene plays a key role in lipid homeostasis. The activation of PPARA contributes to the clearance of triglyceride-rich lipoproteins, improves HDL cholesterol concentrations, and reduces the oxidation of LDL cholesterol, thus influencing the activ

Gene Name : PPARG | Your Genotype : CC

This gene encodes a member of the peroxisome proliferator-activated receptor (PPAR) subfamily of nuclear receptors. The protein encoded by this gene is PPAR-gamma and is a regulator of adipocyte differentiation. PPARG regulates fatty acid storage and gluc

Gene Name : TCF7L2 | Your Genotype : GG

This gene encodes a transcription factor that influences the secretion of GLP 1 (glucagon like peptide 1) which is insulinotropic (stimulates insulin secretion) and has a role in blood glucose homeostasis. TCF7L2 is expressed in subcutaneous and visceral

Gene Name : FTO | Your Genotype : TT

The FTO gene has strong associations with conditions such as obesity and type II diabetes. It is known to contribute to the regulation of body size and body fat accumulation, specifically, thermogenesis (heat production), and adipocyte (fat cell) differen

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
- Increase the protein and fiber content in your meals so that excessive intake of simple carbohydrates and fats is avoided.
- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
- Avoid binging on empty calories, snacks with a high salt content, and high calorie meals.
- Avoid improper chewing of food and finishing meals very quickly.

Category Summary

Micronutrient Requirements

9.0

Antioxidant Metabolism

7.0

Calcium Metabolism

5.9

Iron Metabolism

9.0

Magnesium Metabolism

7.0

Phosphate Metabolism

5.9

Vitamin A Metabolism

9.0

Vitamin B12 Metabolism

7.0

Vitamin B6 Metabolism

5.9

Vitamin B9 Metabolism

9.0

Vitamin D Metabolism

7.0

Vitamin E Metabolism

5.9

Vitamin K metabolism

Antioxidant Metabolism

What is Antioxidant Metabolism?

9.0

Antioxidant Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : GSTP1 | Your Genotype : AG, CC

Glutathione S-transferase P1 is an enzyme encoded by the GSTP1 gene. This enzyme plays a key role in the process of detoxification and the antioxidant system.

Gene Name : PON1 | Your Genotype : TC

This gene encodes a member of the paraoxonase family of enzymes and exhibits lactonase and ester hydrolase activity. The HDL associated esterase/lactonase paraoxonase 1 (PON1) is implicated in contributing to the anti-inflammatory and antioxidant activiti

Gene Name : SOD2 | Your Genotype : TT

The SOD2 gene encodes an enzyme, manganese-dependent superoxide dismutase (MnSOD), which binds to the superoxide byproducts and helps in their conversion to hydrogen peroxide and diatomic oxygen. Superoxides are harmful to the body as they can damage DNA

Gene Name : CAT | Your Genotype : TC

The CAT gene encodes an enzyme, catalase, which is a key antioxidant enzyme that plays a role in the body’s defense against oxidative stress. Catalase is involved in the conversion of hydrogen peroxide to water and oxygen which reduces the toxic effects

Gene Name : GPX1 | Your Genotype : CT, CC

The GPX1 gene encodes an enzyme (glutathione peroxidase 1 - GPX1), which is an important antioxidant enzyme in the body. Glutathione peroxidase plays a role in the breakdown of hydrogen peroxide and thereby helps to protect cells against oxidative damage.

Do's and Don'ts

Do's

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- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
- Avoid binging on empty calories, snacks with a high salt content, and high calorie meals.
- Avoid improper chewing of food and finishing meals very quickly.

Calcium Metabolism

What is Calcium Metabolism?

Calcium is the most abundant mineral in the body,more than 90% of which is present in the bones and teeth. Calcium is alsoimportantforproperfunctioningofthethyroidgland.Calciumisabsorbedbythebodyintheformofphosphatesalts and it is crucial for the regulation of muscle contraction and heart functioning. Calcium levels in the blood are also important in the production of clotting factors and for nerve impulse transmission. Given its multitude of functions in the human body,deficiency of calcium can lead to problems such as osteoporosis, osteopenia, and muscle cramps. Excessive intake of calcium can cause constipation, increased thirst or urination, nausea, vomiting, and kidney stones. Foods rich in calcium include all dairy products, almonds, broccoli, cabbage, soybeans, tofu, salmons, and sardines. Genetic variations can lead to abnormal calcium absorption in the body.

9.0

Calcium Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : CYP24A1 | Your Genotype : AA

CYP24A1 encodes a cytochrome P450 enzyme that hydroxylates 1,25-(OH)2D, into metabolites targeted for degradation and appears to be one of the central regulator of 1,25-(OH)2-D metabolism. CYP24A1 is highly regulated by its own substrate 1,25(OH)2-D, as w

Gene Name : Near GATA3 | Your Genotype : CT

GATA3 belongs to a family of zinc finger transcription factors that are involved in vertebrate embryonic development. In addition, GATA3 is also expressed in the developing parathyroids, inner ear, and kidneys. GATA3 is implicated in monogenic disorders o

Gene Name : Near DGKH | Your Genotype : GG

This gene encodes a member of the diacylglycerol kinase (DGK) enzyme family. Members of this family are involved in regulating intracellular concentrations of diacylglycerol and phosphatidic acid.

Gene Name : GCKR | Your Genotype : CC

Glucokinase (GCK) controls the rate of glucose metabolism in pancreatic cells, and its activity is rate-limiting for insulin secretion.

Gene Name : CASR | Your Genotype : AA, GG

The CASR gene encodes for a protein (calcium-sensing receptor - CaSR), which is abundant in the cells within the parathyroid glands and the renal tubules of kidneys. The parathyroid hormone produced by the parathyroid glands helps in increasing blood calc

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
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- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
- Avoid binging on empty calories, snacks with a high salt content, and high calorie meals.
- Avoid improper chewing of food and finishing meals very quickly.

Iron Metabolism

What is Iron Metabolism?

Iron is an essential element required in the body for the production of red blood cells. About 70% of the body?s iron stores are found in the red blood cells. It is essential for the formation of hemoglobin and transport of oxygen to the cells in the body. Iron is also involved in immune-system related functions and is a critical nutrient for energy metabolism pathway. Deficiency of iron can lead to fatigue, weakness, pale skin, headache, and dizziness, while excess iron intake is toxic to the body. Dietary sources of iron include chicken, tofu, red meats, broccoli, brussel sprouts, legumes, and spinach. Genetics variations can affect iron metabolism and thereby influence the ability to absorb iron from the diet.

9.0

Iron Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : TMPRSS6 | Your Genotype : CT,AG

The TMPRSS6 gene encodes a protein called matriptase-2, which influences the levels of the protein, hepcidin. Hepcidin is important for the regulation of iron balance in the body. Low levels of iron in the blood, can decrease the production of hepcidin wh

Gene Name : HFE | Your Genotype : CC, GG

The HFE gene encodes for a membrane protein that binds to the transferrin receptor 1 protein. This process prevents the receptor from binding to another protein called transferrin. However, binding of transferrin receptor 1 to transferrin is required for

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
- Increase the protein and fiber content in your meals so that excessive intake of simple carbohydrates and fats is avoided.
- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
- Avoid binging on empty calories, snacks with a high salt content, and high calorie meals.
- Avoid improper chewing of food and finishing meals very quickly.

Magnesium Metabolism

What is Magnesium Metabolism?

Magnesium is the fourth most abundant mineral in the body. It helps in maintaining normal nerve and muscle function, supports a healthy immune system, keeps the heartbeat steady, and helps bones remain strong. Magnesium also works with calcium for regulation of muscle contraction. Deficiency of magnesium has been associated with improper nerve impulses, thereby resulting in poor coordination, muscle spasms, tremors, and loss of appetite. Meanwhile, excess magnesium intake has been associated with irregular heartbeats, low blood pressure, and slowed breathing. Sources rich in magnesium include salmon, mackerel, tuna, spinach, kale, nuts, and dark chocolate. Genetic variations can influence the absorption of magnesium, thereby affecting its serum levels.

9.0

Magnesium Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : CASR | Your Genotype : AA

The CASR gene encodes for a protein (calcium-sensing receptor - CaSR), which is abundant in the cells within the parathyroid glands and the renal tubules of kidneys. The CaSR protein can bind to magnesium, which can inhibit the secretion of parathyroid ho

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
- Increase the protein and fiber content in your meals so that excessive intake of simple carbohydrates and fats is avoided.
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Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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- Avoid improper chewing of food and finishing meals very quickly.

Phosphate Metabolism

What is Phosphate Metabolism?

Phosphate is an essential mineral that is necessary for the formation of bones and teeth. In the body,almost all of the phosphorus is combined with oxygen, forming phosphate. Phosphate is also used as a building block for several important substances including those used by the cell for energy generation, making cell membranes, and making DNA. Dietary sources of phosphate include milk, meat products, sea fish(salmon,mackerel,and sardines),seeds(pumpkin and sunflower seeds), legumes, eggs, and oatmeal. Genetic variations can influence serum phosphate levels, thereby leading to altered dietary requirement.

9.0

Phosphate Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : CASR | Your Genotype : AA

The CASR gene encodes for a protein (calcium-sensing receptor - CaSR), which is abundant in the cells within the parathyroid glands and the renal tubules of kidneys. Phosphate levels depend on parathyroid hormone (PTH) level and CaSR influences PTH levels

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
- Increase the protein and fiber content in your meals so that excessive intake of simple carbohydrates and fats is avoided.
- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
- Avoid binging on empty calories, snacks with a high salt content, and high calorie meals.
- Avoid improper chewing of food and finishing meals very quickly.

Vitamin A Metabolism

What is Vitamin A Metabolism?

Vitamin A is a group of nutritional organic compounds which are of primary importance in the process of vision. It also plays an important role in the immune function of the body and in maintaining skin health. Animal sources like organ meat, fish, and milk products provide vitamin A in the form of retinol or retinoic acid, while plant sources like carrots, sweet potatoes, spinach, kale, and cantaloupes provide the precursor of vitamin A in the form of carotenes, which are converted into retinol inside the body. Some symptoms related to vitamin A deficiency include night blindness, acne, or dry skin. Excess vitamin A in the body could lead to abdominal pain, muscle pain, nausea, vomiting, and diarrhea. Genetic variations can affect the process of beta-carotene conversion to retinol, thereby influencing dietary vitamin A requirement.

9.0

Vitamin A Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : near BCMO1 | Your Genotype : GG, TG

The protein encoded by this gene is a key enzyme in beta-carotene metabolism to vitamin A. It catalyzes the oxidative cleavage of beta-carotene into two retinal molecules. Vitamin A metabolism is important for vital processes such as vision, embryonic dev

Gene Name : BCMO1 | Your Genotype : AA, AA, CC

The protein encoded by this gene is a key enzyme in beta-carotene metabolism to vitamin A. It catalyzes the oxidative cleavage of beta-carotene into two retinal molecules. Vitamin A metabolism is important for vital processes such as vision, embryonic dev

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
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Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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Vitamin B12 Metabolism

What is Vitamin B12 Metabolism?

Vitamin B12, or cobalamin, is a water-soluble vitamin involved in many metabolism pathways in our body. It is particularly important in the nervous system functioning and synthesis of myelin. It also plays an important role in red blood cell formation and production of DNA. Along with folate and ribouavin, it also helps in eliminating homocysteine from the cell. Deficiency of vitamin B12 has known to cause impaired nervous system functioning, lethargy, and fatigue. Vitamin B12 sources include chicken, meat, tofu, eggs, salmon, dairy products, and almond milk. Genetic variations can affect its absorption from food, thereby influencing the risk of vitamin B12 deficiency.

9.0

Vitamin B12 Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : MTRR | Your Genotype : GG

Methionine synthase reductase also known as MSR is an enzyme that in humans is encoded by the MTRR gene. The Methionine Synthase Reductase (MTRR) gene primarily acts in the reductive regeneration of cobalamin (vitamin B12). Cob(I)alamin is a cofactor that

Gene Name : CD320 | Your Genotype : CC

This gene encodes the transcobalamin receptor that is expressed at the cell surface. It mediates the cellular uptake of transcobalamin bound cobalamin (vitamin B12), and is involved in B-cell proliferation and immunoglobulin secretion. Mutations in this g

Gene Name : MTR | Your Genotype : AA

The MTR gene provides instructions for making an enzyme called methionine synthase. This enzyme plays a role in processing amino acids, the building blocks of proteins. To function properly, methionine synthase requires methylcobalamin (a form of vitamin

Gene Name : CUBN | Your Genotype : AA

Vitamin B12 is not synthesized in the body and is obtained from dietary intake. The CUBN gene encodes a protein, cubilin, which is the intestinal receptor for vitamin B12 (also called cobalamin). Therefore, the CUBN gene plays a crucial role in vitamin B1

Gene Name : FUT2 | Your Genotype : AA, GG

The FUT2 gene encodes for an enzyme (galactoside 2-alpha-L-fucosyltransferase 2), which influences the synthesis of H-antigen. The H-antigen plays a role in the attachment of H. pylori bacteria to the gastric mucosa; H. pylori infection can cause decrease

Do's and Don'ts

Do's

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Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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Vitamin B6 Metabolism

What is Vitamin B6 Metabolism?

Vitamin B6 is a part of the vitamin B group of essential nutrients. Our bodies use B vitamins to convert the food we eat into the energy we need to function. It plays a crucial role in carbohydrate, lipid, and amino acid metabolism. Deficiency of vitamin B6 is associated with anemia, dermatitis, and weakened immune function of the body. When present in excess, it has been shown to cause neurological disorders. Vitamin B6 sources include chicken, eggs, chickpeas, bananas, sweet potatoes, pistachios, andspinach. Genetic variations canalter the absorption of vitamin B6, there by influencing the risk of vitamin B6 deficiency.

9.0

Vitamin B6 Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : Near NBPF3 | Your Genotype : CT

This variant is located near the NBPF3 gene. Variants of the NBPF3 gene were found to be associated with the plasma concentration of pyridoxal phosphate (PLP). PLP is an active form of vitamin B6, which is involved in several enzymatic reactions.

Gene Name : NBPF3 | Your Genotype : CT

The variant in this gene has been associated with decreased levels of Vitamin B6 (pyridoxine). Pyridoxine, one of the forms of Vitamin B6, strengthens the protein collagen’s regenerative ability which is much needed for rendering us flexibility and skin

Do's and Don'ts

Do's

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Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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Vitamin B9 Metabolism

What is Vitamin B9 Metabolism?

Vitamin B9, more commonly known as folate (naturally-occurring form of B9) or folic acid (a synthetic form), is a water- soluble vitamin that is a part of the B vitamin family. Vitamin B9, when converted to its active form, plays an important role in DNA synthesis and cell division, red blood cell production, and clearance of homo cysteine, all of which are affected in cases of impaired metabolism of vitamin B9. An excess accumulation of homo cysteine can induce inflammation, damage blood vessels, increase blood pressure, and cause a disturbance in heart health. However,excess vitamin B9 intake has been known to cause stomach problems, trouble sleeping, and adverse skin reactions. Sources rich in vitamin B9 include egg yolks, beef liver ,tuna, legumes, asparagus, and beetroots. Variations in certain genes can influence the metabolism of vitaminB9.

9.0

Vitamin B9 Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : MTHFR | Your Genotype : AA

The MTHFR gene encodes for an enzyme (methylenetetrahydrofolate reductase) which has a role in the processing of amino acids. This enzyme is involved in the chemical reaction involving the vitamin B9 (folate). It plays a role in the conversion of a form o

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
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- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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- Avoid improper chewing of food and finishing meals very quickly.

Vitamin D Metabolism

What is Vitamin D Metabolism?

Vitamin D is a fat-soluble vitamin which is synthesized upon exposure of skin to sunlight. Vitamin D plays an important role in regulating calcium levels in the blood, thereby playing an important role in maintenance of bone health. Vitamin D deficiency has been associated with rickets (bone and muscle weakness). It also results in cognitive impairment in older people. Excess vitamin D in the body is associated with elevated calcium levels in the blood, which in the short term could lead to nausea, vomiting, and poor appetite. Food sources for vitamin D include tuna, salmon, egg yolks, cheese, and spinach. However,food sources contain only a very small percentage of daily vitamin D requirement, thereby making sunlight the primary source for vitamin D. Genetic variations can influence the metabolism of vitamin D ,thereby influencing the risk of developing vitamin D deficiency.

9.0

Vitamin D Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : CYP2R1 | Your Genotype : AA

'The CYP2R1 gene provides instructions for making an enzyme called 25-hydroxylase. This enzyme carries out the first of two reactions to convert vitamin D to its active form, 1,25-dihydroxyvitamin D3, also known as calcitriol. Vitamin D can be acquired fr

Gene Name : GC | Your Genotype : AC, GT

The GC gene encodes the vitamin D binding protein (DBP) that belongs to the albumin gene family. The encoded protein has multiple functions and is found in the plasma, ascitic fluid, cerebrospinal fluid, and on the surface of many cell types. The protein

Gene Name : VDR | Your Genotype : TT, CA

Vitamin D can either be acquired through dietary intake or made in the body with help from sunlight exposure. The VDR gene encodes the vitamin D receptor (VDR) protein which plays a role in the body's response to vitamin D. It binds to calcitriol, the a

Do's and Don'ts

Do's

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Don'ts

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Vitamin E Metabolism

What is Vitamin E Metabolism?

Vitamin E, also known as tocopherols are a class of fat-soluble vitamins. Primary role of vitamin E in the body is as an antioxidant, to neutralize the free radicals produced in the body,thereby preventing cellular damage. It is also an important component of the immune system. Vitamin E deficiency has been known to cause cognitive decline and neuro muscular problems. Vitamin E is possibly unsafe in excess and may lead to nausea, diarrhea, stomach cramps, headache, and bleeding-related problems. Sources of vitamin E include vegetable oils, nuts, salmon, crayfish, soybean, spinach, broccoli, and almonds. Genetic variations can influence the absorption of vitamin E in the body.

9.0

Vitamin E Metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : APOA4 | Your Genotype : TT

APOA4 encodes an apoprotein secreted by the intestine and associated with chylomicrons. APOA4 gene has a role in chylomicrons and VLDL secretion and catabolism. Required for efficient activation of lipoprotein lipase by ApoC-II.

Gene Name : CD36 | Your Genotype : AG, GG, TT

Vitamin E is a fat-soluble vitamin and an antioxidant. The protein encoded by the CD36 gene is involved in the uptake of long-chain fatty acids and therefore may also influence the plasma concentrations of vitamin E.

Do's and Don'ts

Do's

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- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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- Avoid improper chewing of food and finishing meals very quickly.

Vitamin K metabolism

What is Vitamin K metabolism?

9.0

Vitamin K metabolism

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : CYP4F2 | Your Genotype : CT

The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. CYP4F2 regulates the bioavailability of vitamin E and vitamin K, a cofactor that is critical

Gene Name : VKORC1 | Your Genotype : CC

The VKORC1 gene provides instructions for making a vitamin K epoxide reductase enzyme. The VKORC1 enzyme is made primarily in the liver. It spans the membrane of a cellular structure called the endoplasmic reticulum, which is involved with protein process

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
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- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
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- Avoid improper chewing of food and finishing meals very quickly.

Category Summary

Regulation of eating

9.0	7.0	5.9
		
Emotional eating dependence	Satiety response	Snacking pattern

Emotional eating dependence

What is Emotional eating dependence?

Emotional eating is a form of disordered eating, and it is defined as an increase in food intake in response to emotions. Some people have a strong emotional connection with food. Such people can turn to food for comfort consciously or subconsciously, when facing a difficult problem, feeling stressed, or even while feeling bored. Emotional eating can lead to excessive calorie intake, thereby damaging any weight loss efforts. Such a response to food can be triggered due to variations in certain genes.

9.0

Emotional eating dependence

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : MC4R | Your Genotype : TC

The protein encoded by this gene is a membrane-bound receptor and member of the melanocortin receptor family. The encoded protein interacts with adrenocorticotropic and MSH hormones and is mediated by G proteins. This is an intronless gene. Defects in thi

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
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- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
- Avoid binging on empty calories, snacks with a high salt content, and high calorie meals.
- Avoid improper chewing of food and finishing meals very quickly.

Satiety response

What is Satiety response?

Satiety means feeling of fullness or suppression of hunger for a period of time after a meal. Certain genetic variations can influence the ability to feel satiated after consumption of a meal, which can lead to overeating for individuals with a poor satiety response. Over eating can lead to an excessive calorie intake, thereby increasing the risk of weight gain.

9.0

Satiety response

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : FTO | Your Genotype : TT

The FTO gene is one of the genes that has been associated with obesity risk. It is believed to influence satiety and hunger and regulate energy homeostasis. Studies suggest that the FTO gene may play an important role in regulating food intake; variations

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
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- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
- Avoid binging on empty calories, snacks with a high salt content, and high calorie meals.
- Avoid improper chewing of food and finishing meals very quickly.

Snacking pattern

What is Snacking pattern?

Eating behavior is a complex interplay of physiological, psychological, social, and genetic factors that influence meal timing, quantity of food intake, food preference, and food selection. Even after a meal, some individuals tend to look for snacks or more meals. Such people have an increased urge to snack on foods throughout the day even though they feel full. Variations in certain genes are involved in poor snacking pattern, resulting in overeating.

9.0

Snacking pattern

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : near LEP | Your Genotype : GG

This gene encodes a protein that is secreted by white adipocytes into the circulation and plays a major role in the regulation of energy homeostasis. Circulating leptin binds to the leptin receptor in the brain, which activates downstream signaling pathwa

Gene Name : MC4R | Your Genotype : TC

The protein encoded by this gene is a membrane-bound receptor and member of the melanocortin receptor family. The encoded protein interacts with adrenocorticotropic and MSH hormones and is mediated by G proteins. This is an intronless gene. Defects in thi

Do's and Don'ts

Do's

- Maintain intervals of 2.5-3 hours between each meal.
- Increase the protein and fiber content in your meals so that excessive intake of simple carbohydrates and fats is avoided.
- Maintain a good lifestyle, exercise regularly, and follow a healthy eating pattern.

Don'ts

- Avoid intake of excessive amounts of simple carbohydrates, deep fried foods, and junk foods.
- Avoid binging on empty calories, snacks with a high salt content, and high calorie meals.
- Avoid improper chewing of food and finishing meals very quickly.

Category Summary

Taste Perception

9.0	7.0	5.9
		
Bitter taste perception	**Fatty food preference**	**Sweet taste perception**

Bitter taste perception

What is Bitter taste perception?

Bitter taste perception is the ability of our taste buds to sense bitter foods. Taste perception explains the individual food preferences and the impact of eating behavior and nutritional intake. Generally, the less sensitive ones are more likely to consume that food and tend to overeat. Lower perception of bitter taste is generally associated with increased consumption of bitter foods, which could possibly lead to toxicity in the body under adverse conditions. Genetic variations in the genes encoding taste receptors are responsible for differences in bitter taste perception.

9.0

Bitter taste perception

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : TAS2R38 | Your Genotype : TT, CC

The TAS2R38 gene encodes a G protein-coupled receptor, which acts as a taste receptor, and is mediated by certain chemicals like PROP and phenylthiocarbamide; these chemicals bind to the receptor and signal taste perception. Vegetables like broccoli, cabb

Do's and Don'ts

Do's

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Don'ts

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Fatty food preference

What is Fatty food preference?

Fatty food preference tells us about our taste-based preference for foods rich in fats, such as deep fried foods, nuts, cheese, and red meats. How an individual perceives the taste of foods dictates the individual food preferences, eating behavior, and nutritional intake. Preference for fatty foods is governed by certain genetic variations which can largely influence our fatty food intake.

9.0

Fatty food preference

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : RGS6 | Your Genotype : GA, CT, GA, TC

The RGS6 gene is a member of the G7 superfamily; it plays a role in the regulation of G-protein signaling and is believed to have an interplay with opioid receptors (G-protein coupled receptors). While under stress, there is an increase in the cortisol le

Gene Name : CD36 | Your Genotype : GG, CT

'The CD36 gene encodes for a membrane-bound protein; CD36 is expressed in several cell types, including fat cells, muscle cells, and on certain taste bud cells where it is believed to mediate the perception of fatty acid. CD36 plays a major role in the or

Do's and Don'ts

Do's

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Don'ts

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Sweet taste perception

What is Sweet taste perception?

Sweet taste perception is the ability of our taste buds to sense sweet foods. Taste perception explains the individual food preferences and the impact of eating behavior and nutritional intake. Generally, the less sensitive ones are likely to consume more of that food and tend to overeat. Taste buds for sweet taste perception are usually found at the back of the tongue and the roof of the mouth. Genetic variations in the genes encoding taste receptors influence the inter- individual differences observed in sweet taste perception. People with certain variants are poor sweet taste perceivers, and therefore tend to consume sugars in higher amounts.

9.0

Sweet taste perception

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : TAS1R3 | Your Genotype : CC, CC

There are differences in the sensitivity, perception, and preference for tastes. Taste sensitivity can be attributed to the threshold of activated taste cells. The sweet taste perception is primarily mediated by the TAS1R2 (taste receptor type 1 member 2)

Gene Name : TAS1R2 | Your Genotype : CC, GT

There are differences in the sensitivity, perception, and preference for tastes. Taste sensitivity can be attributed to the threshold of activated taste cells. The sweet taste perception is primarily mediated by the TAS1R2 (taste receptor type 1 member 2)

Do's and Don'ts

Do's

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Category Summary

Weight Management and Maintenance

9.0

Ability to maintain the weight loss

Ability to maintain the weight loss

What is Ability to maintain the weight loss?

While losing weight is difficult for many people, it is equally challenging to keep the weight off. A significant number of people who lose a large amount of weight tend to regain it 1 to 3 years later. Certain genetic variations can influence the ability to maintain body weight post weight loss. This increases the importance of following a healthy nutrition plan and exercise regimen to maintain the weight loss for those people who are at a higher genetic risk for regaining lost weight.

9.0

Ability to maintain the weight loss

Interpretation

As per your genetics, your Satiety Response is very poor. People with such a genotype tend to not reach the satiety point or a feeling of fullness after a meal, which can lead to excessive calorie intake.

Gene Table

Gene Name : NEGR1 | Your Genotype : AA

'NEGR1 (Neuronal Growth Regulator 1) is a Protein Coding gene. It''s a key obesity gene and has effects on brain structure as well. Polymorphisms in this gene are found to be associated with propensity of weight regain. '

Gene Name : ADIPOQ | Your Genotype : GG

The ADIPOQ gene encodes for a protein, adiponectin, which is produced in the adipose tissue (fat tissue). Variations in the ADIPOQ gene can influence the production of adiponectin, thereby affecting energy intake and body weight.

Gene Name : PPARG | Your Genotype : CC

PPAR (peroxisome proliferator-activated receptor) is involved in regulating the carbohydrate and lipid homeostasis, adipogenesis, fatty acid storage, and maintaining energy balance. The PPARG gene encodes a protein (PPAR-gamma) which plays a role in the r

Gene Name : FTO | Your Genotype : GG

The FTO gene has strong associations with conditions such as obesity and type II diabetes. Variations in the FTO gene may influence weight regain

Do's and Don'ts

Do's

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