Genetica®

U-Nutri

Nutrition and Metabolism

Explore Your Genes
Define Your Future

www.genetica.asia

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Dear Mr. NGUYEN VAN A,

On behalf of Genetica® team, I would like to send you our warmest greetings with deepest gratitude for your interest and trust in our Genetica® gene decoding technology consultation service.

With the recipe for success of prestigious and reputable scientists in the genetics field and artificial intelligence technology, Genetica® sincerely believes that we can bring about greater values and meanings into each of our customers' lives. This is the mission, the aim I and my colleagues are pushing our hardest efforts to reach. Everyday, we thrive to seek for more knowledge and to perfect our service, bringing gene decoding closer to public's heart. The precious gem of unlocking one's genomes is no longer limited to elitists of expertise knowledge, with Genetica®, it now extends its embrace to you, to your family and to everyone, the embrace of unearthing uncountable mysteries buried deep in our unique genomes using scientific technologies.

Our dear customer, the report on your hand now narrates a map for you to explore yourself thoroughly and to listen to your own body. From this map, you can direct your own ultimate working, fitness, rest, education, and diet plans towards your best life.

On choosing "Genetica®, Explore your genes - Define your future", you will always be accompanied with our most experienced experts for all consultations needed. Therefore, do not hesitate to contact us should you have any inquiries upon your results. You can also log into our Genetica® application to update helpful information curated specifically for your genomes.

We truly hope you have had a great experience using our service.

It was our greatest pleasure being your guide on this journey,

Cao Anh Tuan
Founder & Chief Technology Officer at Genetica®

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BACKGROUND

Human genomes contain 20,000 to 25,000 genes. Genes in our bodies are inherited from our parents. Some genes don't have any negative effects, but some definitely do. Our genes make us unique as the way we are.

Basic Terminologies in Genomics

Genome

A gene is the basic unit of heredity which is a phenomenon of parents passing on their characteristics to offspring. In most cases, the material constituting genes are DNA, and genes are passed on to the next generation by replicating DNA. DNA carries genetic code, defined by 4 different bases A, T, G, C.

DNA

DNA, or deoxyribonucleic acid, is the hereditary material in humans and almost all other organisms. Nearly every cell in a person's body has the same DNA. The information in DNA is stored as a code made up of four chemical bases: adenine (A), guanine (G), cytosine (C), and thymine (T).

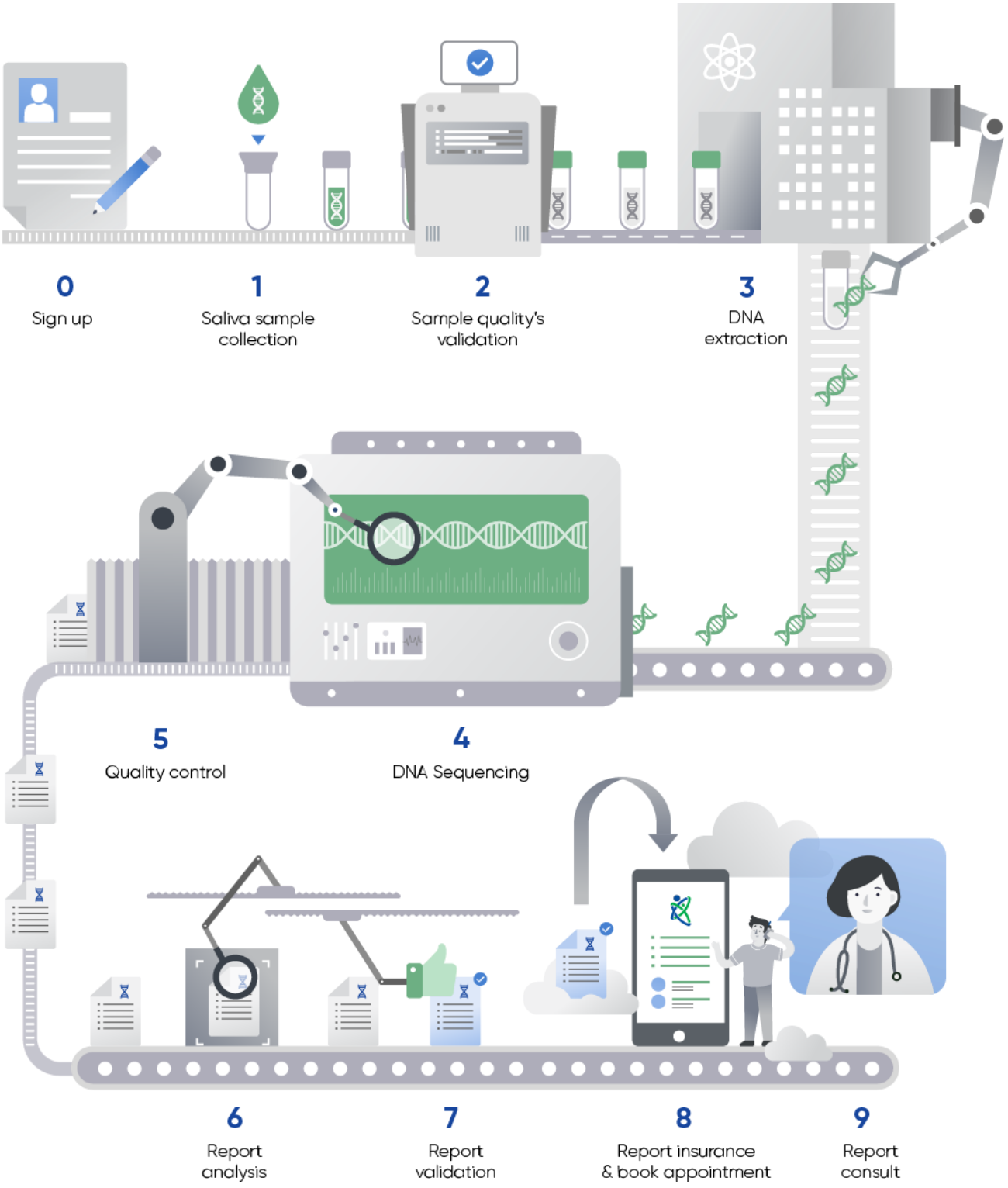
A **single-nucleotide polymorphism (SNP, pronounced snip)** is a DNA sequence variation occurring when a single nucleotide adenine (A), thymine (T), cytosine (C), or guanine (G) in the genome (or other shared sequence) differs between members of a species or paired chromosomes in an individual.

Mutation

Mutation is a change that occurs in our DNA sequence, either due to mistakes when the DNA is copied or as the result of environmental factors such as UV light and cigarette smoke.

Genes can be referred to as the "integrated body of information" which constitutes our bodies, and the purpose of genetic testing is to learn the genetic impacts of the occurrence of a specific disease in advance, and moreover, to control environmental factors as much as possible.

HOW THIS REPORT IS GENERATED?



GENETIC TESTING: AN OVERVIEW

Technological advances have dramatically impacted almost every aspect of daily life, especially in healthcare. Scientists study the complete DNA sequences and perform genetic mapping to help understand what causes disease, what makes a person to lose weight or gain weight faster than the others, and individual differences in behaviors, such as cognitive ability and personality.

With a few drops of saliva, a person can gain a wealth of personal insights. For example, a person with family history of breast cancer can find out if she carries a mutation in BRCA genes. Research shows that mutations in breast cancer (BRCA) genes significantly increase the chances of cancer. In particular, a BRCA1 mutation can increase the chances of breast cancer up to 81% and ovarian cancer up to 54%. Genetic tests will provide the information a user and their doctor need in order to take appropriate preventive actions.

On another spectrum, parents can **leverage genetic information** to create an optimal education plan to **unlock their child's potentials. Every child is unique**. A one-size-fits-all education will hinder children to unleash their innate talents. A child who has a tendency to be extrovert performs prolonged study everyday, which may lead to depression. For the past two decades, researchers have found dozens of genes that increase a child's susceptibility to anxiety, attention-deficit hyperactivity disorder, heightened risk-taking, and antisocial. However, unless the child suffers a traumatic or stressful childhood, the above traits are not revealed when they grow into adulthood. Genetic studies have shown that children with certain gene variants may need and benefit greatly from more maternal support.

According to Dr. Jennifer Stagg, the author of the (best seller) book **Unzip your genes, genomic testing provides information that was not clinically available just a few years ago**. She can now provide guidance to patient questions such as, "It seems like I get fat when I weight-train. Is that possible?" or "I've tried every low-carb diet and it doesn't work. How could that be?" It is really quite simple. A patient's saliva sample can provide answers. "Mrs. Smith, genetically you are predisposed to gain fat mass with an intensive strength training program" and "Mr. Morgan, with your genetic makeup, you will do better on a Mediterranean diet."

Genomics allows us to see how variations in our DNA can interact with one another and impact our growth, behavior and overall health. However, **our genes are not our destiny**. The way our genes get expressed is also affected by our lifestyle, environmental and psychosocial factors.

TABLE OF CONTENT

INTRODUCTION TO U-NUTRI

Nutrition and Metabolism

Your metabolism is the set of biochemical processes that occur inside your body in order to ensure that you stay alive.

As a case in point, numerous metabolic processes break down the nutrients found in your food—including proteins, carbs, and fats—in order to keep you energized and healthy. Among plenty of other things, these metabolic processes may affect your body mass, levels of cholesterol, and possibly even the risk of cancer.

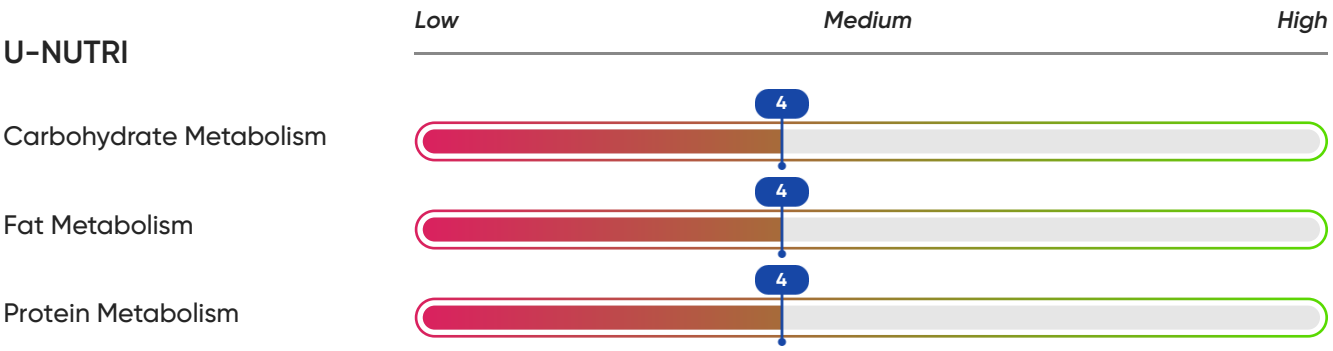
As you can probably guess by now, all of this is influenced by your genetics to some extent. There are even genetic disorders of nutrient metabolism, such as fructose intolerance, which you may have.

With the help of this report, you'll learn about the things that you can do in order to stay healthy despite carrying potentially harmful genetic tendencies.

Moreover, this report will also showcase the upside to your particular genetic variations. For instance, you might have genetic traits that protect the long term health of your kidneys when you eat a low-carb diet. Or you might experience significant weight loss if you focus on a high-protein diet instead.

So how well does your metabolism work? How does it relate to nutrition? What should you do to improve your health? Read this entire report to find out.

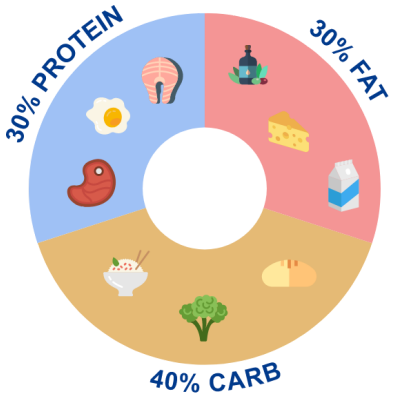
OVERVIEW



Suggested diet plan

You are most suitable with **Low-carb low-fat diet**.

A low-carb low-fat diet include lean protein, carbs with a low glycemic index and healthy fats.



Your optimal diet plan: low-carb low-fat diet

Low-carb low-fat diet food list:

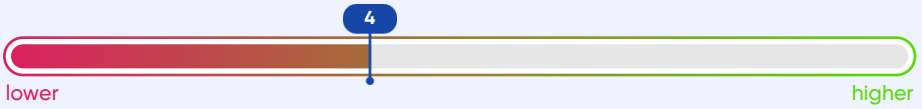
You should base your diet around these food:

- **Poultry**: Skinless chicken and turkey breast.
- **Fish and shellfish**: Cod, flounder, clams, shrimp, if not allergic to shellfish.
- **Vegetarian proteins**: tofu, other soy products.
- **Rice**: Brown rice is more preferable than white rice.
- **Non-starchy vegetables**: Greens, broccoli, tomatoes, asparagus, mushrooms and cauliflower.
- **Fruits**: Apples, oranges, pears, blueberries, strawberries.
- **Nuts and seeds**: Almonds, walnuts and sunflower seeds.
- **Healthy fats**: Olive oil, sunflower oil and sesame oil.
- **Beverages**: Water, unsweetened herbal tea, unsweetened coffee, etc..

Avoid these foods:

- **High-sugar fruits**: longan, lychee, jackfruit, raisins and dried fruits.
- **Refined and processed carbs**: Bread, bagels, pasta, noodles and other white-flour products.
- **Sugary foods and drinks**: Soft drinks, candy and other products that contain added sugar.
- **Unhealthy fats**: Trans fats, such as fried fast foods, and saturated fats, such as fatty beef and poultry with skin.
- **Processed foods**: Pizza, chips and bacon.

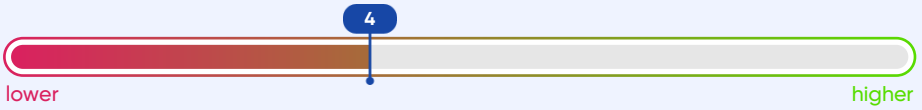
Carbohydrate Metabolism



17 genes analyzed	4 harmful variants	Bottom 34% of Asian population

Your carbohydrate metabolism is relatively lower than average. You carry unfavorable variants associated with a lower amylase level in blood, that may lead to reduced insulin activity. You also tend to have sweet food preference, that may put you in a higher risk of weight gain and other metabolic syndromes. A diet with low simple carbohydrates, rich in plant-protein and fish, along with vegetables will be beneficial for you.

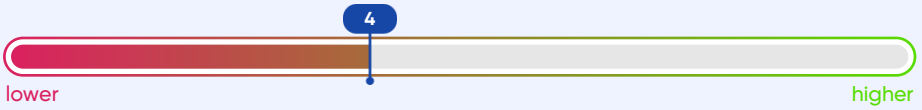
Fat Metabolism



19 genes analyzed	1 risk variant	Bottom 33% of Asian population

Your fat metabolism is relatively lower than average. For your genotype, a diet full of saturated and trans fats might increase your LDL (bad cholesterol) levels, fasting blood glucose, as well as insulin levels and resistance. You should use unsaturated fats rich in omega-3 to enhance your cardiac health.

Protein Metabolism



14 genes analyzed	2 harmful variants	Bottom 37% of Asian population

Your protein metabolism is relatively lower than average. You have a tendency to eat lots of protein. However, you should reconsider a long-term high-protein diet since such diet can harm your liver and kidneys. You should eat proteins with vegetables and fruits. Try to partially replace animal-based proteins with plant-based proteins such as mushrooms, soy beans, etc.

RECOMMENDATIONS

- If you are a low amylase producer, reducing the proportion of carbs in a meal would be advisable. Also, you may consider to use digestive enzyme supplements (with Amylase) available.
- Eat slowly and chew your food thoroughly. By eating slowly, you give whatever amylase you have more time to break down the carbohydrates you just eat.
- For your genotype, you need to make lifelong healthy lifestyle changes, such as heart-healthy eating and physical activity. You can significantly reduce obesity risk with calorie restriction diet.
- Reduce about 34% carbohydrates in your diet to lower your triglycerides and increase your HDL-cholesterols by more than 20%.
- You should avoid things that may cause strain on the lungs and heart. You must not smoke and do not use recreational drugs such as cannabis and amphetamines.
- Exercise often. Exercise is the best way to reduce the risk of hypercholesterolemia. In addition, eat a heart-healthy diet that emphasizes fruits, vegetables, whole grains, poultry, fish and nuts, while limiting sugary foods and beverages. Eating this way may also help to increase your fiber intake, which is beneficial. A diet high in fiber can help lower cholesterol levels by as much as 10 percent.
- You should consider to replace unhealthy fats by monounsaturated fats and polyunsaturated fats. Monounsaturated fats, like those in olive oil, canola oil and avocados, reduce the “bad” LDL, increase the “good” HDL and reduce the oxidation that contributes to clogged arteries. Polyunsaturated fats can be found in nuts, seeds, fish and oysters. Polyunsaturated fats also provide omega-3 and are shown to bring extra benefits for your heart health.
- If you want to lose weight, you should keep a record of calorie intake for a few days. This helps you understand your food habits. Then, you can try to gradually reduce the calorie intake.

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CARBOHYDRATE METABOLISM

17 genes analyzed

2 detailed results

2 personalized recommendations

WHAT IS **CARBOHYDRATE METABOLISM**?

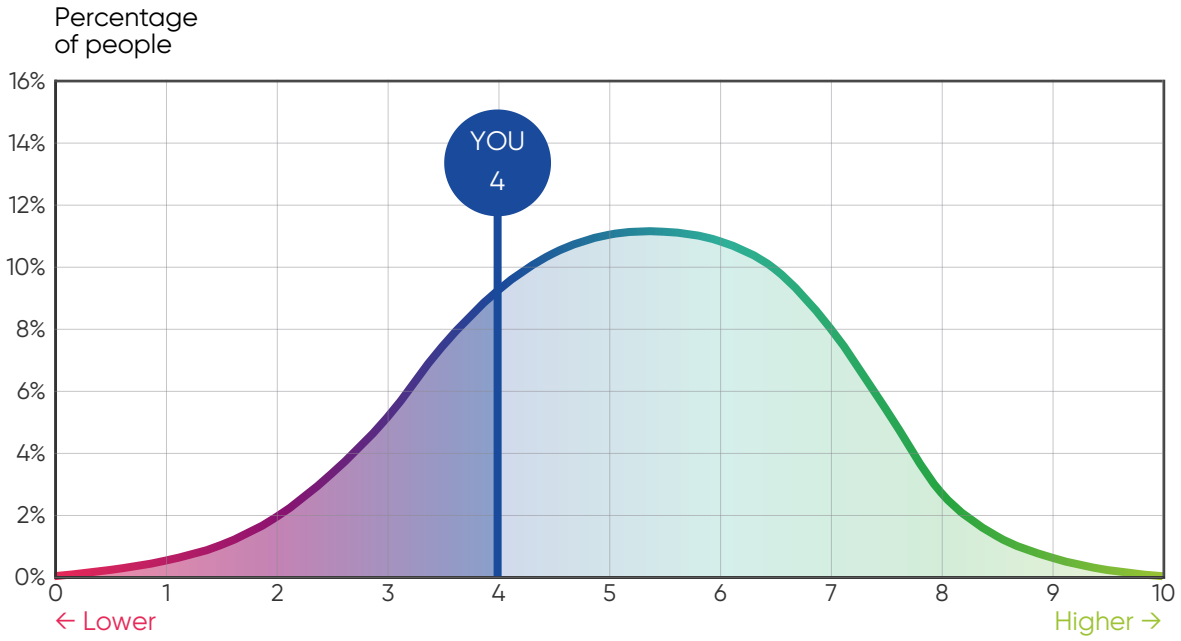
Metabolism describes the way your body burns energy and has a strong correlation to managing your weight. People with a "fast" metabolism can sometimes eat more food with little exercise and not gain weight. People with a "slow" metabolism tend to require adequate amounts of exercise to maintain weight. Carbohydrate metabolism denotes the various biochemical processes responsible for the formation, breakdown, and interconversion of carbohydrates in living organisms. You can get carbs from sweets, fruit, milk, yogurt, bread, cereal, rice, pasta, potatoes, and other vegetables.

There are two major types of carbohydrates (or carbs) in foods: simple and complex.

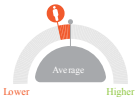
Simple carbohydrates: These are called simple sugars. They are rapidly absorbed resulting in a rise in blood glucose after consumption, which is believed to cause health problems like diabetes and heart disease. Simple carbohydrates are present in processed foods and refined products, and also found naturally in fruits, milk and milk products.

Complex carbohydrates: These are also called starches. They take longer to be absorbed and you will feel fuller for a longer period of time. Complex carbohydrates make blood sugar levels more stable and tend to be more nutrients and fiber dense than simple carbohydrates. Some examples of complex carbohydrates are unrefined grain products, legumes, wheat bread, starchy vegetables, and others. These types of carbohydrates usually contain more vitamins, minerals, and are rich in fiber, which helps your digestive system to work well.

SUMMARIZED ANALYSIS



How your Carbohydrate Metabolism compares to the Asian population.



15% lower than average.
Lower carbohydrate metabolism is harmful to cardiovascular health.

Bottom 34% of Asian population.
Your body does not efficiently break down and metabolize starch and sugary foods.

What does this tell you?

Poor insulin activity as a result of low amylase producer
Your genotype indicates that you might have low blood amylase levels which result in poor insulin activity.

Susceptible to high sugar consumption
You carry unfavorable variants that are associated with higher sugar consumption.

RESULTS & RECOMMENDATIONS

OVERALL

Your carbohydrate metabolism is relatively lower than average. You carry unfavorable variants associated with a lower amylase level in blood, that may lead to reduced insulin activity. You also tend to have sweet food preference, that may put you in a higher risk of weight gain and other metabolic syndromes. A diet with low simple carbohydrates, rich in plant-protein and fish, along with vegetables will be beneficial for you.

Poor insulin activity as a result of low amylase producer

- *People with the low amylase levels should consult the physician to find out the most optimal way for them to increase amylase levels. If you are a low amylase producer, reducing the proportion of carbs in a meal would be advisable, for example, you can have a low-carb diet which mainly includes non-starchy vegetables. Also, you may consider to use digestive enzyme supplements (with Amylase) available. You can increase amylase by moderately intense exercise, which is known to increase amylase levels. In case of overweight people, amylase can be increased with weight loss and also by avoiding eating late in the evening, since it is known to cause low amylase levels.*

Susceptible to high sugar consumption

- *You are better off with reduced calorie intake by cutting down sugar consumption. An excess of sweetened foods and beverages can lead to weight gain, blood sugar problems and an increased risk of heart disease, among other dangerous conditions. Eating healthy whole foods has so many benefits and their nutrients may help to keep the immune system strong and protect you from disease. Please note that eating too much of sweets is associated with joint pain because of the inflammation that proceeds in the body. Research studies have shown that sugar consumption can increase the risk of developing rheumatoid arthritis.*

THE SCIENCE BEHIND

We analyzed 17 genes to correctly determine the genetic condition of your Carbohydrate Metabolism. Notable among these are:

AMY1-AMY2

Result: GG (harmful)

Impact to your Carbohydrate Metabolism: MEDIUM

AMY1 makes a salivary protein called amylase, while AMY2 produces the pancreatic version of this protein. Amylase is an enzyme involved in digestion of carbohydrates in the form of starchy foods. When you consume starchy foods, amylase in your saliva will start the process of the disgestion of starches. To do so, amylase breaks down starches into smaller molecules and so they can be used as an energy source.

People with GG variant have poor insulin activity as a result of low amylase producer.

AMY1

Result: AC (harmful)

Impact to your Carbohydrate Metabolism: MEDIUM HIGH

The Alpha-amylase 1 (AMY1) gene produces the salivary amylase enzyme. Amylase enzyme plays an important role in digestion of carbohydrates in the form of starchy foods. When you consume starchy foods, amylase in your saliva will start the process of digestion. If the number of copies of the AMY1 gene are low, there will be a decreased ability for the amylase enzyme to help breaking down of starches, and it is linked to risks of obesity.

People with AC variant are susceptible to high sugar consumption.

Genetica®

FAT METABOLISM

19 genes analyzed

2 detailed results

2 personalized recommendations

WHAT IS **FAT METABOLISM**?

Fats play important functions in our bodies as both a source of energy and for energy storage.

Unsaturated fat is found in avocados, salmon, and other food sources. Unsaturated fats help to manage cholesterol levels and reduce the risk of cardiovascular disease.

Saturated fat is found in red meat, coconut oil, cheese, and other food sources. Saturated fat increases your risk of cardiovascular disease and diabetes.

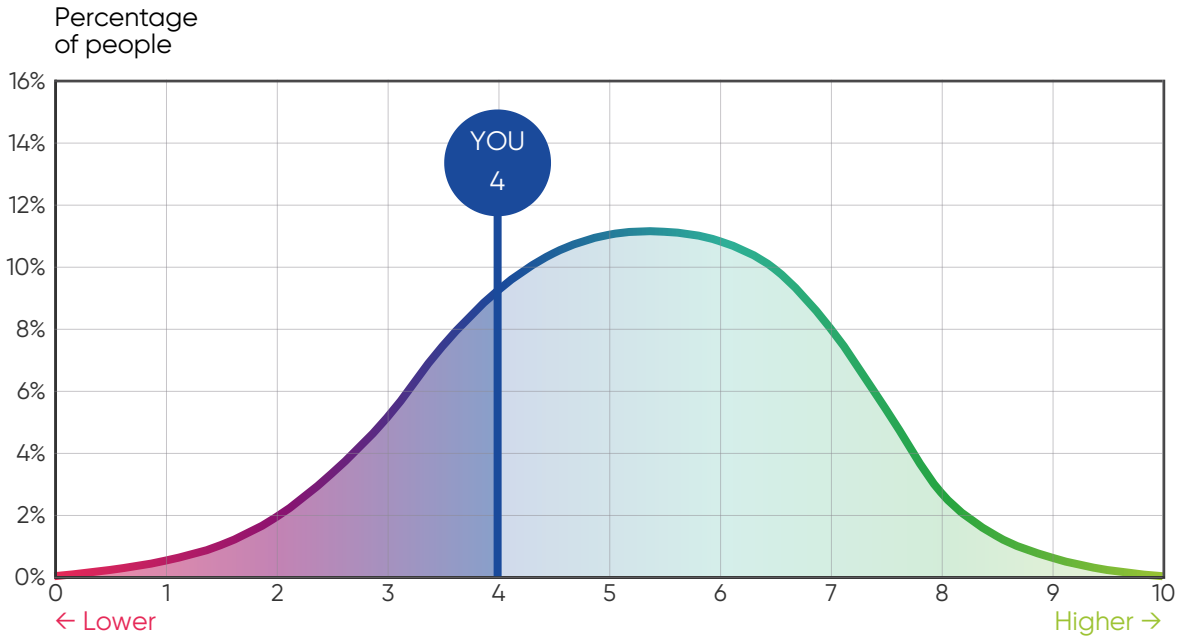
Trans fats are found in snack foods, cookies and cakes, and fried foods. Trans fats are often listed on the food label. Like saturated fats, trans fats can raise cholesterol and increase the chance of getting heart disease.

Fat metabolism is the process by which fats are broken down into smaller molecules so they can be used by our cells for energy. Our bodies can make saturated fats from building blocks such as fatty acids and glycerol. However, the other kind of fats, **the healthy ones such as unsaturated fats**, can only be obtained from our diet. This means that essential unsaturated fatty acids can be supplied only by diet, and as such you must make sure to include healthy fats in your diet.

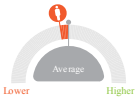
The Việt Nam National Institute of Nutrition, recommended the following Recommended Dietary Allowance (RDA) (g/day).

AGE	MALE	FEMALE
1-2	33-44	31-41
3-5	36-51	34-48
6-7	35-52	32-49
8-9	40-61	38-58
10-11	48-72	44-66
12-14	56-83	51-77
15-19	63-94	53-79
20-29	57-71	46-57
30-49	52-65	45-56
50-69	52-65	44-55
>70	49-61	40-51

SUMMARIZED ANALYSIS



How your Fat Metabolism compares to the Asian population.



11% lower than average.
Slightly lower fat metabolism is considered harmful to your health.

Bottom 33% of Asian population.
You are at the borderline of people who are predisposed to health risks when consuming unhealthly fats.

What does this tell you?

Significantly increase LDL(bad cholesterol) with saturated fat
Your genotype indicates that you have higher increase in LDL level with consumption of saturated fat. However, the beneficial effect is that you could decrease LDL level faster by switching to polyunsaturated fat.

Increased risk of metabolic syndromes due to dietary unhealthy fats
People with your genotype displayed elevated fasting glucose, increased insulin concentrations, and increased insulin resistance after eating dietary unhealthy fats.

RESULTS & RECOMMENDATIONS

OVERALL

Your fat metabolism is relatively lower than average. For your genotype, a diet full of saturated and trans fats might increase your LDL (bad cholesterol) levels, fasting blood glucose, as well as insulin levels and resistance. You should use unsaturated fats rich in omega-3 to enhance your cardiac health.

Significantly increase LDL(bad cholesterol) with saturated fat

- *You should consider to replace unhealthy fats by monounsaturated fats and polyunsaturated fats. Monounsaturated fats, like those in olive oil, canola oil and avocados, reduce the "bad" LDL, increase the "good" HDL and reduce the oxidation that contributes to clogged arteries. Polyunsaturated fats can be found in nuts, seeds, fish and oysters. Polyunsaturated fats also provide omega-3 and are shown to bring extra benefits for your heart health.*

Increased risk of metabolic syndromes due to dietary unhealthy fats

- *You will benefit from choosing a low fat diet. That's about 44 to 77 grams of fat a day if you eat 2,000 calories a day. Eat plenty of plant foods (such as whole-grains, fruits, and vegetables) and a moderate amount of lean and low-fat meats. Choose foods rich in omega-3 fatty acids such as salmon, flaxseed, and walnuts for heart health. Try plain, nonfat or low-fat yogurt and chives on baked potatoes rather than sour cream. Choose simply prepared foods such as broiled, roasted, or baked fish or chicken. Avoid fried or sautéed foods, casseroles, and foods with heavy sauces or gravies.*

THE SCIENCE BEHIND

We analyzed 19 genes to correctly determine the genetic condition of your Fat Metabolism. Notable among these are:

PPARG

Result: TC (harmful)

Impact to your Fat Metabolism: HIGH

PPARG gene is in charge of making a protein called Peroxisome proliferator activated receptor gamma. This protein takes circulating fatty acids and regulates their storage. PPARG is also involved in glucose metabolism, since glucose is the preferred over fats to be used as an energy fuel when available. As a result, this protein has been associated with obesity, type 2 diabetes mellitus, insulin resistance, inflammation, and metabolism syndrome. Research studies show that lack of this protein protects against obesity.

People with TC variant significantly increase LDL(bad cholesterol) with saturated fat.

ACSL1

Result: GG (harmful)

Impact to your Fat Metabolism: MEDIUM HIGH

The ACSL1 gene supports the creation of energy from fats. The ACSL1 plays an important role in fatty acid metabolism and triacylglycerol synthesis. Disturbance of these pathways may result in dyslipidemia and insulin resistance, hallmarks of the metabolic syndrome. Dietary fat is a key environmental factor that may interact with genetic determinants of lipid metabolism to affect metabolic syndrome risk. Research has shown that over expression of this protein leads to obesity.Variants of this gene are also associated with insulin sensitivity as well as metabolic syndrome.

People with GG variant have increased risk of metabolic syndromes due to dietary unhealthy fats.

PROTEIN METABOLISM

14 genes analyzed

2 detailed results

2 personalized recommendations

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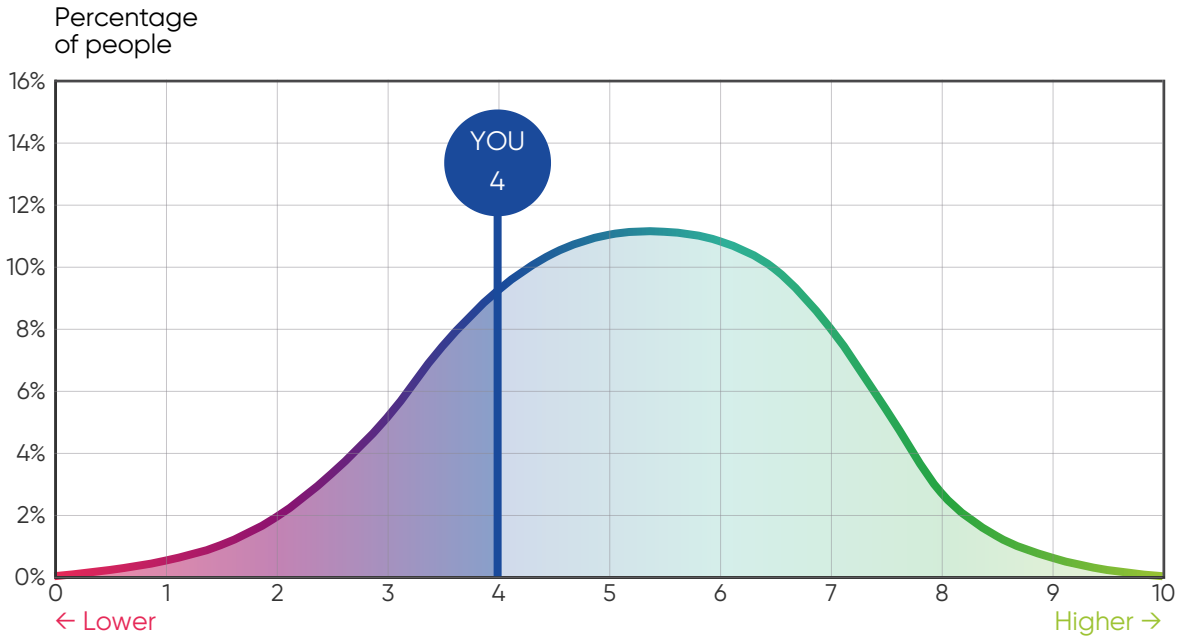
WHAT IS **PROTEIN METABOLISM**?

Proteins are important for the formation and function of the cells in the body. Proteins also function as enzymes, in membranes, as transport carriers, and as hormones; and their component amino acids serve as precursors for nucleic acids, hormones, vitamins, and other important molecules. Proteins make up our hair, skin, and nails. Proteins are also important to carry out biological functions in our cells, such as creating cell walls, transporting nutrients to where they are needed, and directly participating in biological reactions for our survival.

Proteins are made out of smaller building blocks called amino acids; this is the equivalent of individual Lego pieces that come together to form a bigger piece. Some of these amino acids, or Lego units, are made in our bodies while others are obtained from diet, which is why a balanced diet containing protein is important.

Proteins are a major energy source. Proteins have been shown to help in weight management, but not all protein types are the same. The rate at which you digest protein may affect the rate at which it is absorbed by your body to generate energy. Proteins are also important for building and maintaining healthy muscles and bones. Animal products, such as meat, fish, and eggs, are rich sources of protein. There are also vegetarian sources of protein, such as legumes, nuts, and others, but their protein content is lower.

SUMMARIZED ANALYSIS



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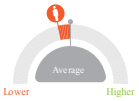


15% lower than average.
Lower protein metabolism is considered unfavorable to your digestive system.

Bottom 37% of Asian population.
Your stomach and small intestine are likely to work harder to break down and absorb proteins.

What does this tell you?

Low response in LDL cholesterol, glucose, insulin levels
Lack of decrease in LDL cholesterol, glucose, insulin levels and HOMA-R with high-protein weight loss diet.

Have tendency for higher protein intake
People having your genotype often have higher protein intake, regardless of their BMI.

RESULTS & RECOMMENDATIONS

OVERALL

Your protein metabolism is relatively lower than average. You have a tendency to eat lots of protein. However, you should reconsider a long-term high-protein diet since such diet can harm your liver and kidneys. You should eat proteins with vegetables and fruits. Try to partially replace animal-based proteins with plant-based proteins such as mushrooms, soy beans, etc.

Low response in LDL cholesterol, glucose, insulin levels

- *Aim to eat high-quality, nutritious whole foods, including different fruits and vegetables. You should try to be physically active, aiming for about two and a half hours of vigorous activity per week.*

Have tendency for higher protein intake

- *High protein intake may work well with some people as a weight loss intervention since eating protein is shown to be effective in short-term weight loss and muscle gain. However, eating high protein-diet for a prolonged period of time may affect your kidney function. Therefore, if you cave for protein, you should add plant-based protein into your diet. Many research studies have shown that eating a high-protein plant-based diet improves health outcomes compared to low-protein diets and high-protein animal-based diets.*

THE SCIENCE BEHIND

We analyzed 14 genes to correctly determine the genetic condition of your Protein Metabolism. Notable among these are:

MTHFR

Result: TT (harmful)

Impact to your Protein Metabolism: MEDIUM

Methylenetetrahydrofolate reductase, or MTHFR for short, is an enzyme involved in the metabolism of vitamin B9 (same as folate, folic acid). We obtain folic acid through our diet, but in order for our cells to utilize it, it needs to be converted into an active form, meaning another version of itself. MTHFR allows us to convert folic acid obtained through our diet into the biologically active form (called methylfolate) so cells can use it. One documented example of the importance of MTHFR is its role in preventing birth defects, which is why pregnant women are advised to take folate supplements.

Carriers of TT allele have a lower response to a lack of decrease of LDL than non-carrier subjects.

FTO

Result: TT (normal)

Impact to your Protein Metabolism: MEDIUM

The fat mass and obesity (FTO) protein is associated with regulating energy and obesity. The role of FTO in obesity has been widely studied. The association of FTO and obesity in humans is attributed to variations in the FTO gene. These genetic changes are affected by carbohydrates and dietary fibers that we consume in our diet; and sedentary lifestyles we have. The FTO gene is also associated with diabetes.

People with TT variant have tendency for higher protein intake.

Other services from Genetica®

65 genes

G-Care

Foundation To Your Quality Life

Over 18 years of age

NutriCare
- Carbohydrate metabolism
- Protein metabolism
- Fat metabolism

Facts-to-Know
- Béo bụng
- Chuyển hóa affeine
- Nguy cơ mất ngủ

HealthCare
- Breast Cancer or Prostate Cancer
- Stomach Cancer
- Asian Flush

Personality
- Belly fat
- Caffeine sensitivity
- Insomnia tendency

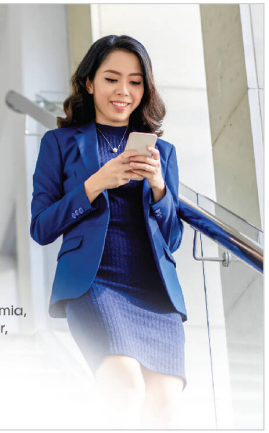
PhysiCare
- Endurance ability
- Power performance
- Cardiorespiratory fitness

300 genes

G-Pro

Unearth Your Potentials

Over 18 years of age



Mind & Spirit
- Personality
- Behavior tendency
- Cognitive ability
- IQ, EQ
- Educational attainment
- Language ability
- Math ability
- Music ability

Nutrition
- Protein, Fat, Carbohydrate metabolism
- Vitamin requirements
- Liver Detoxification
- Food and Drink sensitivities
- Eating behavior
- Cardiometabolic risk
- Diabetes risk scores
- Cardiometabolic health

Fitness
- Endurance ability
- Power performance
- Cardiorespiratory fitness
- Recover ability
- Tendency to get injuries
- Weight Management Difficulty
- Tendon/ Ligament strength
- Exercise benefit

Resting
- Insomnia tendency
- Belly fat
- Caffein metabolism

Health

Up to 20 common cancers for both genders
- Breast, Bladder, Brain, Cervical,
- Colorectal, Colon, Esophageal,
- Uterine, Kidney, Stomach, Leukemia,
- Liver, Lung, Pancreatic, Testicular,
- Prostate, Ovarian, Skin
- Pheochromocytoma and
- Paraganglioma

125 genes

G-Kid Care

Foundation For Child's Development

From 0 to 18 years of age

Behavioural tendencies
- Extraversion
- Conscientiousness
- Emotional instability

Macronutrient metabolism
- Carbohydrate metabolism
- Fat metabolism
- Protein metabolism

Health risk
- Obesity risk score

Intelligence
- IQ
- EQ
- Cognitive ability

300 genes

G-Kid Pro

Reaching An Optimal Future

From 0 to 18 years of age

Mind
- IQ
- EQ
- Educational attainment
- Cognitive ability
- Math ability
- Language ability
- Music ability
- Fitness potentials

Body
- Vitamin requirement
- Mineral requirement
- Macronutrients requirement
- Eating behavior
- Sweet and bitter taste
- Health risk: Obesity Cardiometabolic/ Diabetes risk.

Spirit
- Personality
- Behavior tendency

Other services from Genetica®

97 genes

G-Health

Access Risk Of Hereditary Diseases

Over 18 years of age

Up to 20 common cancers for both genders

- Breast
- Bladder
- Brain
- Cervical
- Colorectal
- Colon
- Esophageal
- Uterine
- Kidney
- Stomach
- Leukemia
- Liver
- Lung
- Pancreatic
- Testicular
- Prostate
- Ovarian
- Pheochromocytoma
- and Paraganglioma
- Skin

48 genes

G-Autism

Hereditary Autism Risk Screening

The G-Autism report will unveil the genetic risk of an individual via:
- Detect any known pathogenic or likely pathogenic mutations associated with ASD.
- Evaluate the Autism Risk Score: A polygenic score which indicates the user's increased risk of autism.

Everyone will benefit from this report. However, young children who display symptoms of autism are especially advised to take the genetic test.

This report will provide you:
- In-depth knowledge about gene-related causes of ASD.
- Information that enables best-suited personalized therapy and developmental care in regard to the user's risk of autism.

32 genes

G-Immunity

Hereditary Susceptibility To Respiratory Viral Infection Screening

Traits tested:
- SARS-CoV
- Influenza
- Acute Respiratory Distress Syndrome (ARDS)

Everyone will benefit from this report.

Benefits:
- Provide users the genetic information about their susceptibility to viral infection.
- Mainly focusing on respiratory viral infections at this time.
- Provide actionable guidelines and recommendations based on research studies from epidemics that have happened, such a SARS epidemic, ...

73 genes

G-Stroke

Hereditary Stroke Screening

The G-Stroke report will provide the following information:
- Pathogenic or likely pathogenic mutations that increase risk of strokes (ischemic stroke, hemorrhagic stroke).
- Stroke Risk Score: a polygenic score that indicates the patient's increased risk of stroke.

Everyone will benefit from this report.

Benefits:
- In-depth knowledge about gene-related causes of stroke.
- Information to make informed medical and lifestyle decisions in regard to the user's risk of stroke.
- Personalized recommendations for preventive and monitoring options.

28 genes

G-ADHD

Hereditary ADHD Risk Screening

The G-ADHD report will provide the following information:
- Pathogenic or likely pathogenic mutations that increase risk of ADHD.
- ADHD Risk Score: a polygenic score that indicates the user's increased risk of ADHD.

Young children and teenagers are especially advised to take the genetic test.

Benefits:
- In-depth knowledge about gene-related causes of ADHD.
- Information to help make informed medical and lifestyle decisions in regard to the user's risk of ADHD, as well as available treatment options.
- Helpful and personalized recommendations.

DISCLAIMERS

Gene Friend Way provides genetic assessment services for research or investigational use. Gene Friend Way does not provide any direct medical advice to individual patients. Genetic information must always be considered in conjunction with other information about your health such as lifestyle, family history, risk factors, biomedical data, diet, nutrition and physical activity among other factors.

Gene Friend Way's role is limited to providing results of genetic test and providing a broad set of general recommendations. More detailed recommendations that may be specific to you are to be made by qualified Professional Practitioners only. General guidelines provided in our report are for information purpose only and are meant to aid your Professional Practitioner to render the relevant professional or medical advice and treatment. While assessing your genetic parameters and providing the report and recommendations, we do not consider your past or existing health conditions and or any medication taken by you (either in the past or currently), even if you may have provided us with such information. Our report and the recommendations therein are to be acted upon in consultation with a medical or other health and wellness professional practitioner.

Your reliance upon the report is solely at your own discretion. As with all health and medical related matters, you should exercise adequate care in using the information provided in this report or on our website. Gene Friend Way disclaims any responsibility for any errors and/or omissions by you or other persons either during collection of DNA samples or delivery of the DNA sample to Gene Friend Way. We make no warranties of any kind, either express or implied, including, without limitation, the implied warranties of merchantability, fitness for a particular purpose, accuracy and non- infringement. The information in this report is for Research Use Only (RUO) or Investigational Use Only (IUO), meant to assist in further clinical diagnosis or treatment by Professional Practitioners.

If your sample is rejected or testing results are invalid, it means your sample was sub-optimal and could not be tested. You will be advised to re-collect and re-test. All samples not valid for testing are disposed of according to guidelines for biohazardous waste and are HIPAA compliant.

Laboratory Developed Test (LDT). This test was developed and its performance characteristics determined by Genetica in a manner consistent with CLIA requirements. It has not been cleared or approved by the U.S. Food and Drug Administration. This test is not intended to be used without first consulting your physician and subsequent clinical testing as deemed appropriate.

Thank you,

It is our honor to be able to contribute
to your healthy and happy life.

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in Vietnam and in the US.

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