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Nebula Library

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CATEGORY CLEAR

Favorites ⭐

SEARCH

e.g. Trait, SNP, Gene

TAGS

Addiction Aging Alcoholism Allergy Appearance Autoimmunity Behavior

+ VIEW MORE

Found Sort by: Personal Score

2/2020

Vitamin D level (Manousaki, 2020)

Skin Bones

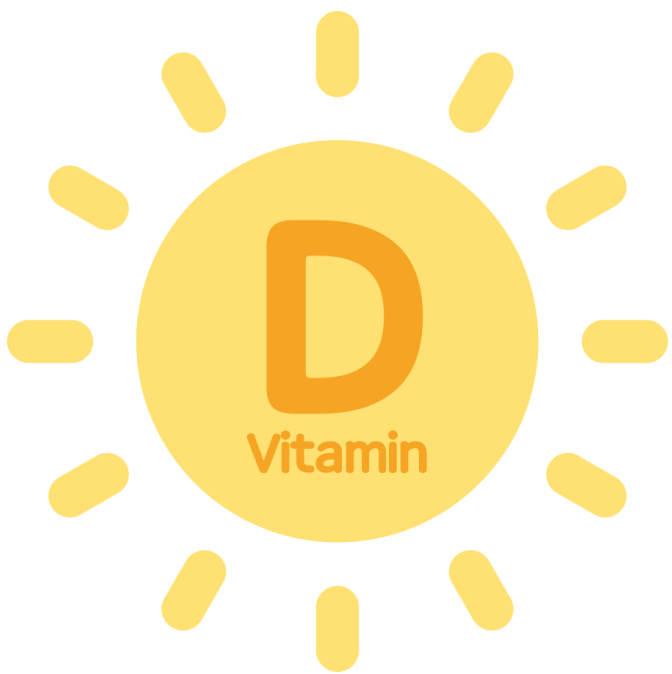
Study Summary

Identification of 69 genetic regions associated with vitamin D level.

Your Result

Study Description

Vitamin D is known as the “sunshine vitamin” because it’s produced by the skin when it’s exposed to sunlight. Vitamin D helps ensure that the body absorbs and retains the minerals calcium and phosphorus, which are important for building strong bones. In this study, researchers aimed to understand the genetic determinants of vitamin D level by conducting a genome-wide association study of ~400,000 individuals of European ancestry.



The body produces vitamin D when the skin is exposed to the sun.

View Full Report

12/2016

Insomnia (Lane, 2016)

Sleep Mind

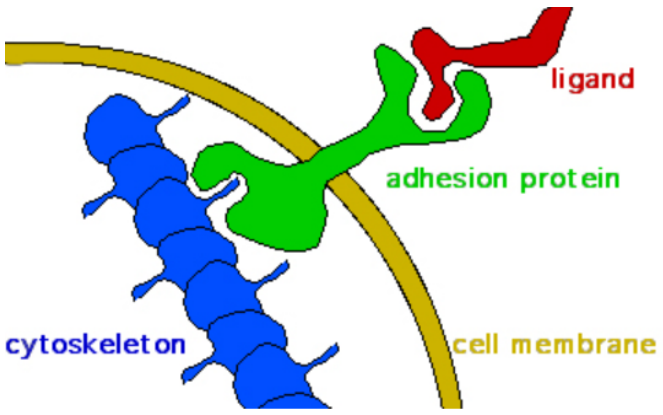
Study Summary

This study identified several genetic variants that were associated with insomnia, including 2 that were gender-specific.

Your Result

Study Description

Insomnia is a sleep disorder that makes it difficult to fall or stay asleep. This study examined genetic variants associated with chronic sleep disturbances, which affect 25-30% of adults worldwide.



Cell Adhesion

View Full Report

3/2020

☆ Apolipoprotein B level (Richardson, 2020)

Heart Blood

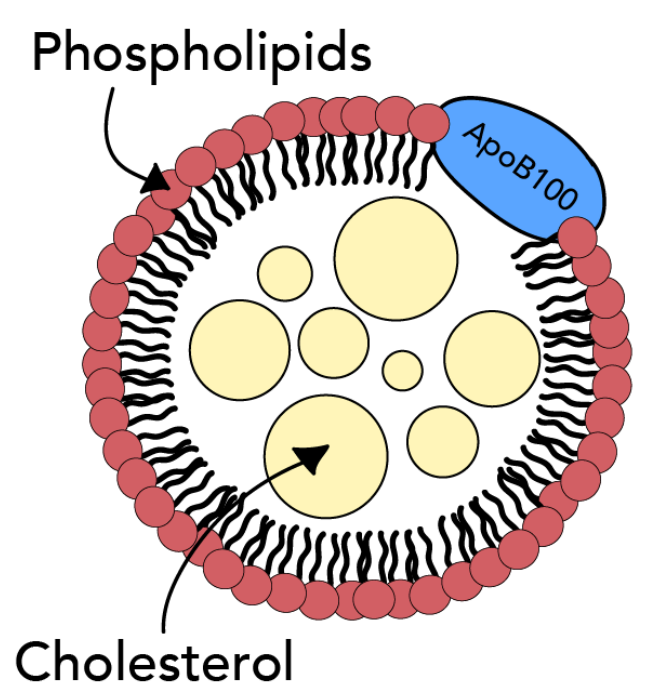
Study Summary

Identification of 255 genetic variants associated with the apolipoprotein B level in the blood and analysis of its contribution to the risk of coronary heart disease.

Your Result

Study Description

Coronary heart disease (CHD) is a condition that develops when the heart's arteries cannot supply enough oxygen to the heart muscle. Coronary heart disease is the leading cause of death in the United States. It occurs when *plaque* builds up in the heart's arteries and blocks the blood flow to the heart. Arterial *plaque* consists of multiple substances that circulate in the blood, in particular fats and *cholesterol*. Fats and *cholesterol* cannot travel around the bloodstream on their own and instead must be transported by proteins called "apolipoproteins". In particular, LDL *cholesterol*, the "bad" *cholesterol*, relies on transport by apolipoprotein B (apoB).



Apolipoprotein B helps form particles that carry LDL cholesterol in the blood.

View Full Report

9/2019

⭐ Systemizing (Warrier, 2019)

Behavior Mind

Study Summary

Discovery of 3 genetic variants associated with systemizing, a trait related to autism spectrum disorder.

Your Result

Study Description

Autism is a developmental disorder that is typically characterized by social, communication, and behavioral challenges. It is known as a "spectrum disorder" because there is much variation in how it manifests in affected individuals. One trait associated with autism is "systemizing", which describes the tendency of an individual to search for or create structures in the physical environment or mentally.

A typical example of systemizing observed in a young child.

View Full Report

01/2019

☆ Bilirubin concentrations (Coltell, 2019)

Liver

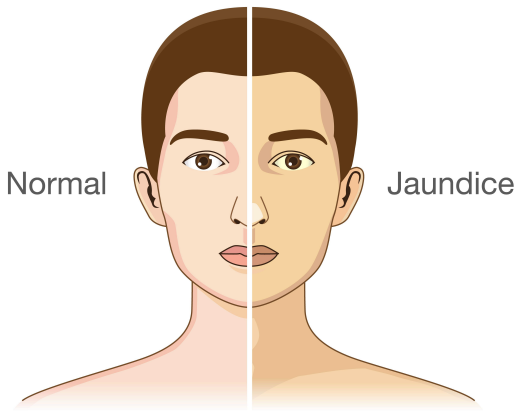
Study Summary

This report is based on a study that identified 59 variants associated with bilirubin concentrations.

Your Result

Study Description

Bilirubin is a substance that is created when the body breaks down red blood cells. This process involves converting heme (a component of hemoglobin) into biliverdin, which then turns into bilirubin. The liver further processes bilirubin, making it water-soluble so it can be excreted. Although high bilirubin levels can indicate serious conditions like liver disease or newborn jaundice, recent research has shown that bilirubin also has beneficial properties. It acts as a strong antioxidant and anti-inflammatory agent, offering protection against diseases related to oxidative stress, such as diabetic retinopathy, kidney disease, cardiovascular diseases, diabetes, and more. A bilirubin test measures the levels of bilirubin in your blood. This test can help identify blockages in your bile ducts, whether in the liver or gallbladder, detect liver diseases like hepatitis, monitor the progress of liver conditions, and evaluate anemia caused by the breakdown of red blood cells, among other uses.



Jaundice is a yellowing of the skin and eyes caused by high levels of bilirubin.

View Full Report

7/2020

☆ Corneal resistance factor (Simcoe, 2020)

Eyes

Study Summary

Identification of 258 genetic variants associated with the corneal resistance factor.

Your Result

Study Description

The cornea is a dome-shaped “window” covering the front part of the eye. It serves to both protect the eye and focus light to help us see. Damage to the cornea can be detrimental to eyesight, so doctors commonly use a number of metrics to measure the cornea’s health. One metric is the corneal resistance factor, which measures the total resistance ability of the cornea. A low corneal resistance factor has previously been connected to glaucoma and other disorders of the eye.

View Full Report

2/2020

☆ Testosterone level (Ruth, 2020)

Hormones Sex

Study Summary

Identification of over 200 genetic variants associated with testosterone level.

Your Result

Study Description

Testosterone is the main male sex hormone. However, it regulates bodily functions, like muscle development and fertility, in both sexes. This study examined over 425,000 individuals of European ancestry from the UK Biobank database to identify genetic factors associated with testosterone level.

View Full Report

8/2019

☆ Cerebral small vessel disease (Chung, 2019)

Vasculature Brain

Study Summary

Identification of novel genetic variants linked to cerebral small vessel disease, which can cause a variety of cognitive symptoms.

Your Result

Study Description

Cerebral small vessel disease (CSVD) describes a variety of conditions related to abnormalities or damage to small blood vessels within the brain. Some of the most common conditions are small vessel ischaemic strokes, a result of hardened blood vessels, and intracerebral hemorrhage, which occurs when blood vessels in the brain

burst. CSVD generally results in cognitive decline, movement disorders, and can lead to depression. Few genetic variants that correlate with the development of CSVD have been found.

View Full Report

11/2015

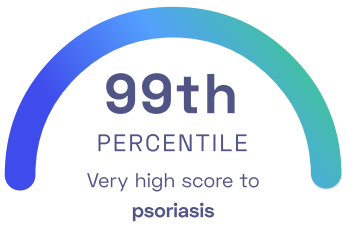
Psoriasis (Tsoi, 2015)

Skin Autoimmunity

Study Summary

Genetic variants linked to the immune system are associated with psoriasis.

Your Result



Study Description

Psoriasis is a condition where extra skin cells build-up on the surface of the skin, causing scales and itchy red patches to form. In an effort to better understand genetic variants that lead to an increased risk of developing psoriasis, this study examined 10,740 individuals of European ancestry.

View Full Report

11/2020

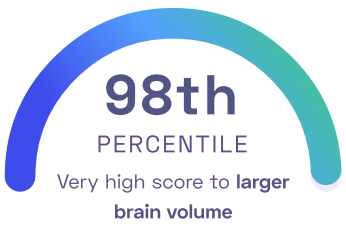
Brain volume (Jansen, 2020)

Brain

Study Summary

Identification of 14 new genetic variants associated with brain volume.

Your Result



Study Description

Differences in brain volume among individuals appear to be connected with differences in numerous cognitive and behavioral traits, including intelligence and emotional processing. Furthermore, genes involved in determining brain volume have been linked to diseases such as schizophrenia and bipolar disorder.

View Full Report

5/2020

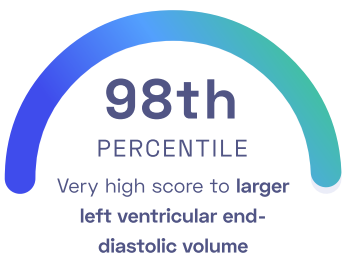
Left ventricular end-diastolic volume (Pirruccello, 2020)

Heart

Study Summary

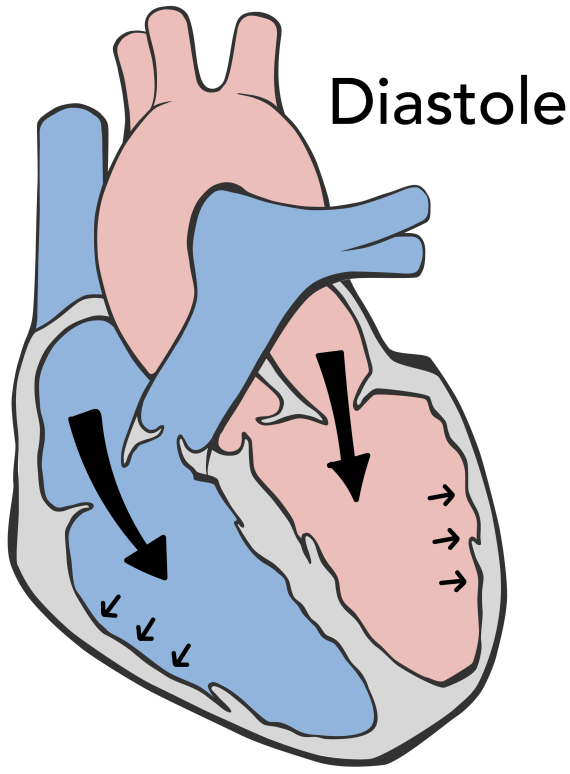
Identification of 14 genetic variants associated with the left ventricular end-*diastolic* volume (LVEDV).

Your Result



Study Description

The human heart is a muscle that pumps blood throughout the body. It consists of 4 chambers: 2 atria (left and right) and 2 ventricles (left and right). Blood that has been enriched with oxygen in the lungs enters the left atrium and then flows into the left ventricle from where it's pumped to all other parts of the body. Left ventricular end-*diastolic* volume (LVEDV) is the volume of blood in a relaxed left ventricle right before it contracts and pumps blood into the body.



During the diastole phase the heart muscle relaxes, the heart chambers expand and blood flows into the heart.

View Full Report

2/2021

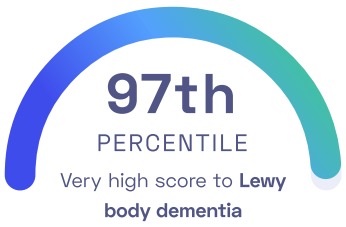
Lewy body dementia (Chia, 2021)

Dementia Brain

Study Summary

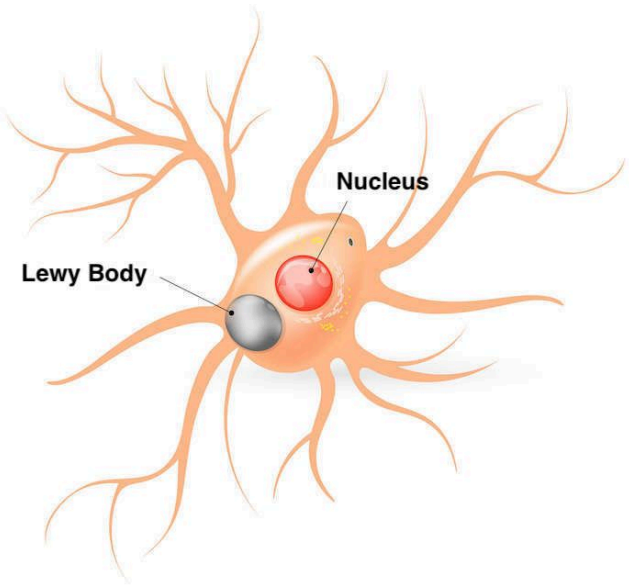
This report is based on a study that discovered 5 genetic variants associated with Lewy body dementia.

Your Result



Study Description

Dementia is a term used to describe a collection of symptoms related to cognitive decline. These symptoms typically impair thinking, memory, and communication. Lewy body dementia (LBD) is the third most common cause of dementia, following Alzheimer's disease and vascular dementia. LBD is characterized by the formation of clumps of proteins known as Lewy bodies in the brain. While scientists aren't sure what leads to the formation of Lewy bodies, genetics may confer an increased risk.



Lewy bodies are clumps of proteins that form inside nerve cells and damage them.

View Full Report

9/2020

Ebbinghaus illusion overestimation (Zhu, 2020)

Brain Mind

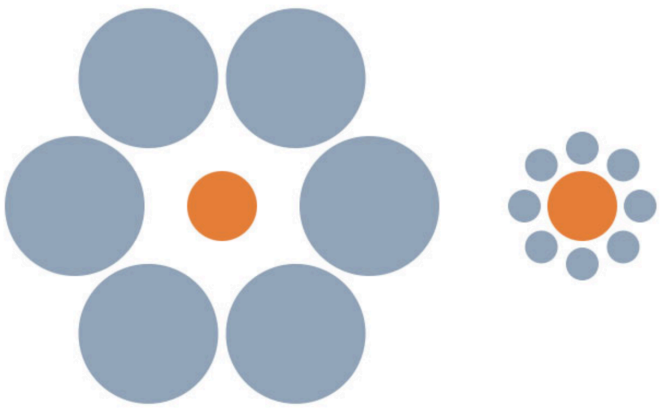
Study Summary

Identification of 70 genetics variants associated with Ebbinghaus illusion overestimation.

Your Result

Study Description

Our brain and eyes work together to process visual information about our surroundings. Information, such as the size of faraway objects, is interpreted by the brain by analyzing other visual cues such as the sizes of known objects next to it. However, sometimes the brain's interpretation may be incorrect which can result in optical illusions. One such optical illusion is known as the Ebbinghaus illusion. When a circle is surrounded by other circles, it may appear larger or smaller than its real size depending on the sizes of the surrounding circles.



Most people perceive the orange circle on the right as bigger than the orange circle on the left. They are actually the same size.

View Full Report

9/2020

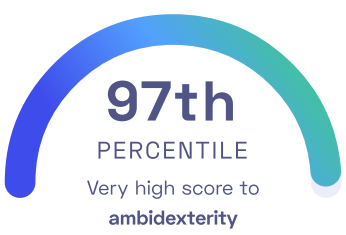
Ambidexterity (Cuellar-Partida, 2020)

Brain

Study Summary

Discovery of 7 locations in the genome that are associated with ambidexterity, the ability to use both hands equally well.

Your Result



Study Description

The majority of people have one dominant hand for performing activities such as writing. Normally, the non-dominant hand cannot be used effectively for performing these tasks without significant training. However, roughly 1% of individuals are ambidextrous, meaning they can make use of both hands effectively. This genome-wide association study aimed to identify genetic variants associated with ambidexterity.

Ambidextrous people can use both hands equally well for tasks such as writing.

View Full Report

10/2023

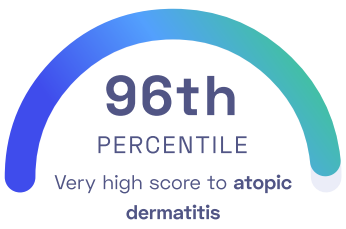
Atopic dermatitis (Budu-Aggrey, 2023)

Skin Inflammation

Study Summary

This report is based on a study that discovered 81 genetic variants associated with atopic dermatitis, also known as eczema.

Your Result



Study Description

The skin serves as the body's protective barrier, shielding it from harmful elements in the environment and retaining essential moisture. Atopic dermatitis, commonly known as eczema, is a skin condition where this barrier becomes compromised. As a result, an affected individual can develop dry, itchy, and inflamed patches of skin. This inflammation can cause discomfort and, in severe cases, can lead to infections if the skin is broken from scratching excessively. While the exact cause of eczema is not fully understood, it is believed to be a combination of genetic and environmental factors, such as allergens or irritants, that trigger the condition.

Atopic dermatitis can be extremely itchy.

View Full Report

3/2020

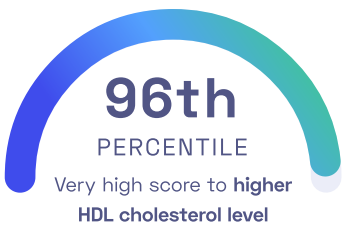
HDL cholesterol level (Richardson, 2020)

Heart Blood

Study Summary

Identification of 534 genetic variants associated with the HDL *cholesterol* level in the blood and analysis of its contribution to the risk of coronary heart disease.

Your Result



Study Description

Coronary heart disease (CHD) is a condition that develops when the heart's arteries cannot supply enough oxygen to the heart muscle. Coronary heart disease is the leading cause of death in the United States. It occurs when *plaque* builds up in the heart's arteries and blocks the blood flow to the heart. Arterial *plaque* consists of multiple substances that circulate in the blood. One of the substances that the study examined is HDL (high-density lipoprotein) *cholesterol*, also known as the "good" *cholesterol*.

View Full Report

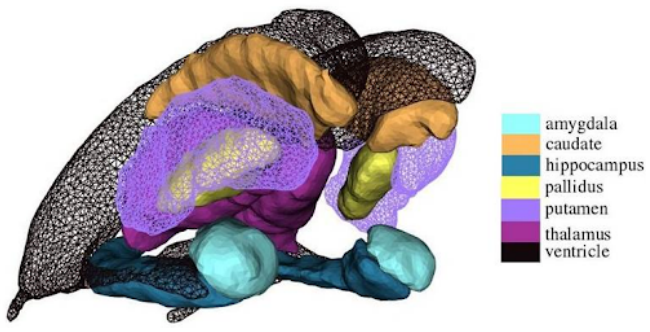
01/2015

Brain volume (Hilbar, 2015)

Brain

Study Summary

This study identified novel genetic variants that may influence the subcortical brain structures which are involved in complex activities including movement, emotions, and learning.



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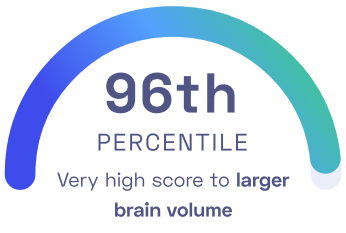


Study Description

The subcortical region consists of structures located below the outer layer of the brain. These structures have functions related to regulation of movement, learning, memory, and motivation. In this study, the volume of subcortical brain structures of 30,717 individuals was measured using Magnetic Resonance Imaging (MRI).

View Full Report

11/2020

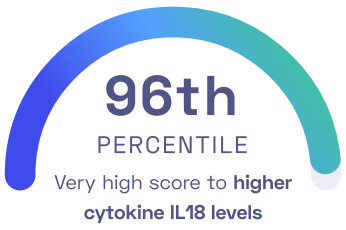
Cytokine IL18 levels (Wang, 2020)

Inflammation Blood

Study Summary

Discovery of 4 genetic variants associated with the levels of IL18 cytokine in the blood, a marker of inflammation.

Your Result



Study Description

Inflammation is a defense response formed by the body's immune system in response to injury or illness, but can also be initiated due to stress and environmental factors. While acute inflammation generally helps repair damage in the body, chronic inflammation can cause a host of issues such as arthritis, heart disease, and dementia. One group of proteins particularly important for the inflammatory process are known as cytokines. Cytokines circulate in the blood and help coordinate the immune system response.

View Full Report

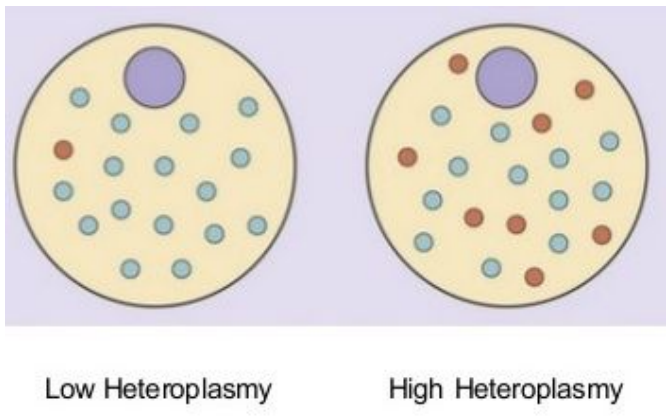
3/2021

Mitochondrial heteroplasmy (Nandakumar, 2021)

Metabolism Mitochondria

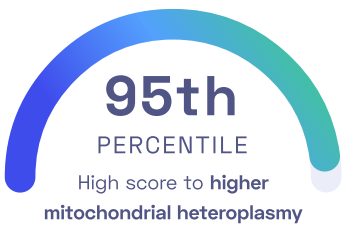
Study Summary

This report is based on a study that discovered 20 genetic variants associated with mitochondrial heteroplasmy.



A single cell contains many mitochondria with many mitochondrial genomes. Heteroplasmy describes a state where the genomes of the mitochondria differ.

Your Result



Study Description

Mitochondria are commonly known as "the powerhouse of the cell". They also have their own small genomes that are distinct from the nuclear genome of the cell. Mutations in the genomes of mitochondria can lead to a state called "heteroplasmy", which means that multiple versions of mitochondrial DNA exist within the same cell or person. Heteroplasmy is caused by mutations of mitochondrial DNA and can result in disease if the mutations disrupt the function of mitochondria.

View Full Report

07/2019

Post-traumatic stress disorder (Gelernter, 2019)

Mind

Study Summary

This study identified eight new loci associated with re-experiencing post-traumatic stress disorder (PTSD) trauma.

Your Result

Study Description

Post-traumatic stress disorder (PTSD) is a psychiatric disorder that can occur when individuals experience or witness a traumatic event such as a natural disaster, a serious accident, or violence. Re-experiencing the trauma is the most characteristic symptom of PTSD. While many factors influence the development of PTSD, genetic variants may lead to an increased predisposition of developing the disorder.

View Full Report

07/2021

Testicular germ cell tumors (Pluta, 2021)

Cancer

Study Summary

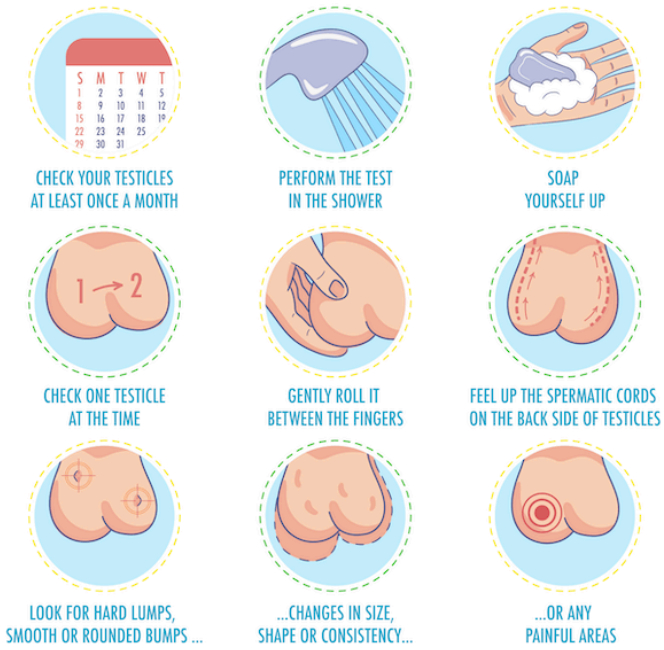
This report is based on a study that discovered 78 genetic variants associated with testicular germ cell tumors.

Study Description

The testicles are two small, egg-shaped glands located close to the penis. Testicles contain many specialized types of cells, such as germ cells, that contribute to the production of sperm. While testicular cancer is relatively uncommon, affecting up to 90,000 men per year in the

Your Result

US, it is the most common cancer in men younger than 35. Overall, about 95 percent of testicular cancers begin in the sperm-producing germ cells. To better understand genetic factors that contribute to an individual's risk of testicular germ cell tumors (TGCT), this study examined nearly 190,000 men of European ancestry.



Doctors recommend that young men regularly examine their testicles for lumps.

View Full Report

11/2019

⭐ Schizophrenia (Lam, 2019)

Brain Behavior Mind

Study Summary

Discovery of 53 novel schizophrenia-associated genetic loci in East Asian and European populations.

Your Result

Study Description

Schizophrenia is a mental disorder that affects how an individual perceives and interacts with reality. It is characterized by hallucinations, delusions, as well as abnormal thinking and behavior that impairs daily function.

View Full Report

02/2019

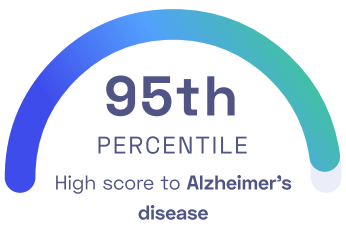
☆ Alzheimer's disease (Kunkle, 2019)

Brain Dementia

Study Summary

Identification of 5 novel genetic loci correlated to a person's risk of developing late-onset Alzheimer's disease.

Your Result



Study Description

Alzheimer's disease is a common cause of dementia, characterized by the degeneration of brain cells. Late-onset Alzheimer's is the most typical form of Alzheimer's disease and typically results in the progressive impairment of cognitive abilities. Heredity is known to have a component in determining a person's risk of developing Alzheimer's disease.

View Full Report

04/2018

☆ Depression (Wray, 2018)

Mind

Study Summary

Genetic variants in genes expressed in the brain are associated with major depressive disorder.

Study Description

Major depressive disorder (MDD), or depression, is a common mental disorder characterized by intense feelings of sadness for extended periods of time that impacts the mood, behavior, sleep, and appetite of an individual. It may also be accompanied by an increased risk of suicide or suicidal thoughts and a general disinterest for activities that used to cause excitement. Genetics are a known factor in a person's risk of developing depression.

Your Result

View Full Report

5/2019

Anxiety (Meier, 2019)

Mind Behavior

Study Summary

Identification of genetic variants near the PDE4B gene that are associated with anxiety and stress disorders.

Your Result

Study Description

Anxiety disorders, where a person experiences excessive and inappropriate fear and anxiety, affect more than 20% of people at some point in their lives. Although stress-related disorders are a separate diagnosis, people often have both stress and anxiety disorders and the symptoms overlap. This study examined genetic data of over 12,000 Danish individuals diagnosed with various anxiety or stress-related disorders and over 19,000 controls.

View Full Report

8/2020

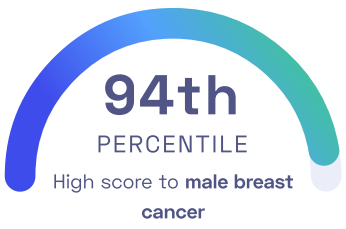
Male breast cancer (Maguire, 2020)

Breasts Cancer

Study Summary

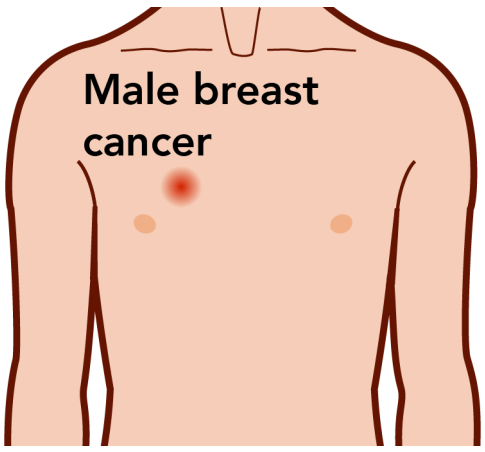
Discovery of 3 novel regions of the genome associated with male breast cancer.

Your Result



Study Description

Breast cancer is a disease where cells in the breast grow out of control. Though breast cancer is commonly considered a disease that only affects females, males can also be diagnosed with breast cancer. In all, roughly 1 in 800 males will be diagnosed with breast cancer during their life. While many aspects of female and male breast cancer are similar, it is not well understood whether both types of breast cancer share the same genetic risk factors.



Althought breast cancer is much more common in women, men can develop it as well.

View Full Report

1/2008

Low-density lipoprotein cholesterol level (Kathiresan, 2008)

Blood

Study Summary

Identification of six new genetic variants associated with LDL and HDL cholesterol as well as triglyceride levels in the blood.

Your Result

Study Description

Lipoproteins help transport cholesterol, an essential building block of cells, in the blood. Low-density lipoprotein, LDL, is associated with accumulation of cholesterol in the blood and an increased risk of heart diseases and stroke. However, high-density lipoprotein, HDL, is linked to lower cholesterol levels as it helps remove cholesterol from your bloodstream.

View Full Report

09/2023

Sleep duration (Austin-Zimmerman, 2023)

Sleep

Study Summary

This report is based on a study that discovered 84 genetic variants associated with sleep duration.

Your Result

Study Description

Sleep is an essential component of our daily lives, and plays a crucial role in physical health, emotional stability, cognitive function, and long-term health. The consequences of not getting enough sleep are far-reaching. Sleep deprivation can lead to impaired cognitive function, such as decreased concentration, poor memory, and reduced decision-making ability. It also affects emotional health, leading to irritability, mood swings, and increased risk of depression. Physically, lack of sleep is linked to a higher risk of chronic conditions like obesity, diabetes, cardiovascular diseases, and weakened immune function. On average, adults require about 7-9 hours of sleep per night, while teenagers need about 8-10 hours, and children even more, depending on their age. However, the actual amount of sleep a person needs can vary due to several factors, including environmental factors and stress levels. Additionally, some people may be genetically predisposed to needing more or less sleep.

Adults need 7-9 hours of sleep per night, on average.

View Full Report

5/2020

☆ Thinness (Orthofer, 2020)

Obesity Metabolism

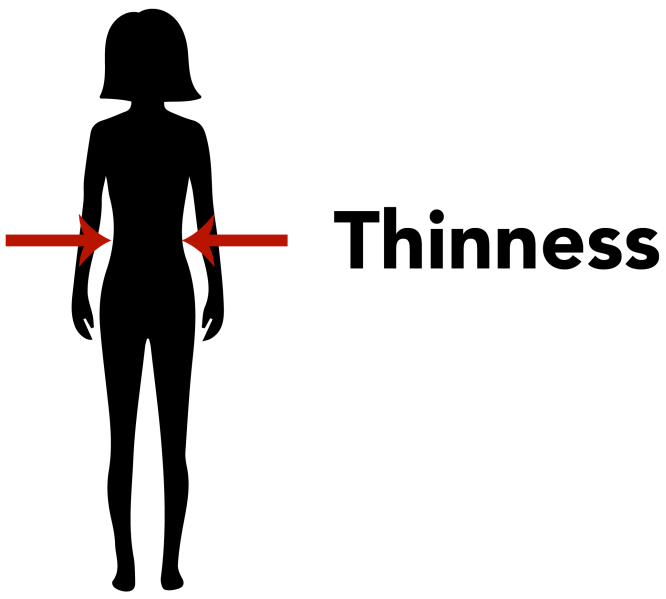
Study Summary

Discovery of 5 genetic variants associated with thinness.

Your Result

Study Description

Although diet and exercise are important for maintaining healthy body weight, individuals who eat similar foods and exercise similar amounts can differ in their weight. Most studies that look for genetic variants associated with the *body mass index* (BMI) compare obese individuals to healthy controls. This study instead looked for associations with thinness.



This study examined genetic predisposition to thinness rather than obesity.

View Full Report

3/2020

☆ Male puberty timing (Hollis, 2020)

Aging Hormones Sex

Study Summary

Identification of 29 novel genomic regions associated with male puberty timing.

Your Result

Study Description

The timing of puberty, which is the period of sexual maturation for teenage boys and girls, varies widely across individuals. It is a trait that is determined by a combination of environmental and genetic factors. This study aimed to understand the genetic basis of male puberty timing specifically, using voice breaking as a proxy for puberty. To this end, the researchers examined the genomes of over 200,000 males of European descent.

View Full Report

07/2019

☆ Peripheral artery disease (Klarin, 2019)

Vasculature

Study Summary

The risk of peripheral *artery* disease is increased by genetic variants associated with LDL cholesterol levels.

Your Result

Study Description

Peripheral *artery* disease (PAD) is the narrowing of the arteries in the legs, stomach, arms, or head. It is generally caused by the buildup of *plaque* (from fats, cholesterol, or other substances) in the arteries and can lead to a heart attack or stroke. A predisposition to peripheral *artery* disease is known to be influenced by genetics, but few variants have been identified.

View Full Report

09/2023

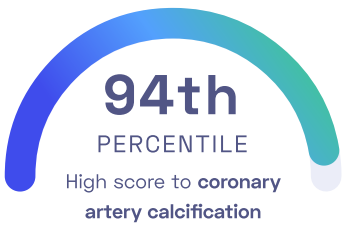
Coronary artery calcification (Kavousi, 2023)

Vasculature

Study Summary

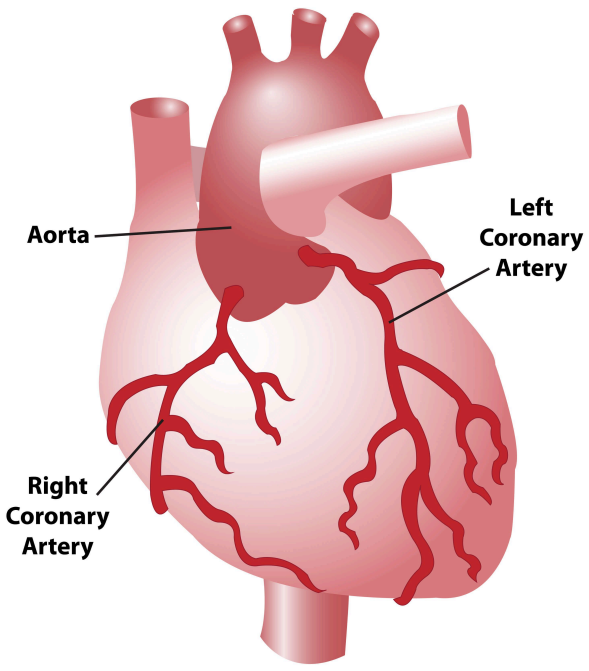
This report is based on a study that discovered 11 genetic variants associated with coronary artery calcification.

Your Result



Study Description

The coronary arteries are vital blood vessels responsible for delivering oxygen-rich blood to the heart. Over time, these arteries can undergo a process called coronary artery calcification, where calcium deposits form, leading to the hardening of the arteries. Various factors, such as aging, high cholesterol levels, smoking, and high blood pressure can trigger this. Hardening of these arteries can lead to coronary artery disease. This can result in symptoms including chest pain and shortness of breath, and can even lead to heart attacks eventually. Certain individuals are more prone to this calcification because of their genetic makeup, unhealthy lifestyle habits, or having specific medical conditions like diabetes.



The coronary arteries are important for the heart's functioning.

View Full Report

11/2019

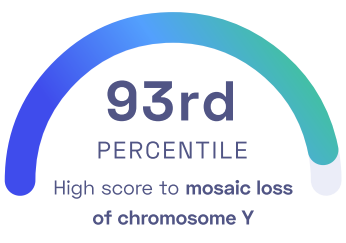
Mosaic loss of chromosome Y (Thompson, 2019)

Blood

Study Summary

Discovery of 156 genetic variants associated with a mosaic loss of *chromosome* Y.

Your Result



Study Description

Our DNA is packed into 23 pairs of *chromosome*s including two 'sex *chromosome*s'. Females have two X *chromosome*s, while males have one Y and one X *chromosome*. In males, loss of the *Y chromosome* in some cells of the body, particularly white blood cells, has been previously associated with multiple medical conditions including various cancers, autoimmune disease, diabetes, and cardiovascular disease.

View Full Report

06/2020

Chronic muskuloskeletal pain (Yakov A. Tsepilov, 2020)

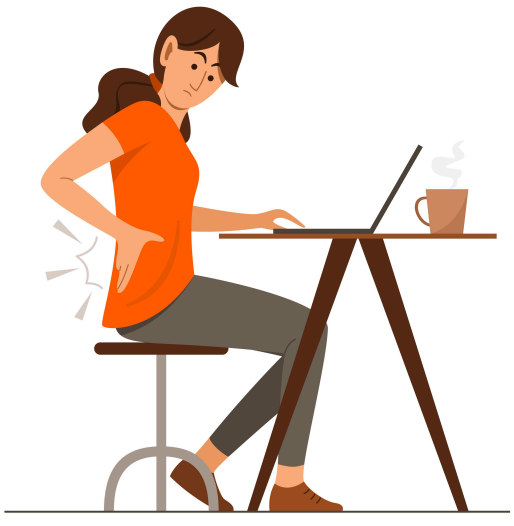
Muscles

Study Summary

This report is based on a study that discovered 9 variants associated with chronic muskuloskeletal pain.

Study Description

Chronic pain stands as a significant health issue for humanity, impacting approximately 20-30% of adults on average. It poses formidable challenges in clinical treatment, often lacking a clear pathophysiological origin like tissue damage or identifiable disorder. The most prevalent self-reported chronic musculoskeletal pain conditions are low back, neck, and shoulder pain. This study explores the genetic basis of chronic musculoskeletal pain across four anatomical sites: the back, neck/shoulder, hip, and knee, using principal



Your Result

component analysis to identify genetically independent phenotypes. These anatomical sites are commonly affected by osteoarthritis. Pain is the predominant symptom of osteoarthritis and current evidence suggests that the pain experienced by individuals with osteoarthritis can be influenced by various factors, including changes in the nervous system's processing of pain signals. The leading phenotype explains a significant portion of the genetic variance underlying these conditions, highlighting its importance in understanding chronic pain mechanisms. Previous genetic studies have been complicated by the complexity and heterogeneity of pain phenotypes, hence a more comprehensive approach like genome-wide association studies (GWAS) was called for.

If you tend to slouch forward or lean back at your desk, you're likely putting your spine out of alignment. Place your monitor at eye level to improve your posture.

View Full Report

8/2021

☆ Frailty (Atkins, 2021)

Aging

Study Summary

This report is based on a study that discovered 14 genetic variants associated with an individual's predisposition to frailty.

Your Result

Study Description

Frailty is a medical condition characterized by reduced ability to function and diminished health. Individuals experiencing frailty often experience weight loss, reduced strength, and low activity levels. As a result, these individuals are more susceptible to having major health declines from issues such as infections or falls. Age increases an individual's odds of becoming frail.

Frailty is used to describe weakness and bad health that are typical for old age.

View Full Report

1/2021

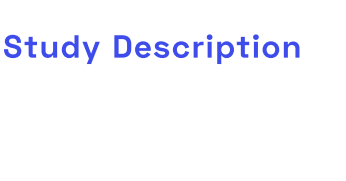
☆ Hyperarousal in PTSD (Stein, 2021)

Mind Behavior

Study Summary

Identification of 15 genetic variants associated with hyperarousal, a symptom of post-traumatic stress disorder.

Your Result



Study Description

Post-traumatic stress disorder (PTSD) is a mental health condition caused by experiencing a traumatic event. Though many people associate PTSD with war veterans, anyone can experience the disorder. Common symptoms of PTSD include flashbacks and nightmares related to the traumatic event, avoidance of particular situations, and being easily startled. Being easily startled, and feeling tense in general, are collectively known as "hyperarousal".

Individuals suffering from PTSD are often easily startled.

View Full Report

7/2012

☆ Gambling disorders (Lind, 2012)

Behavior

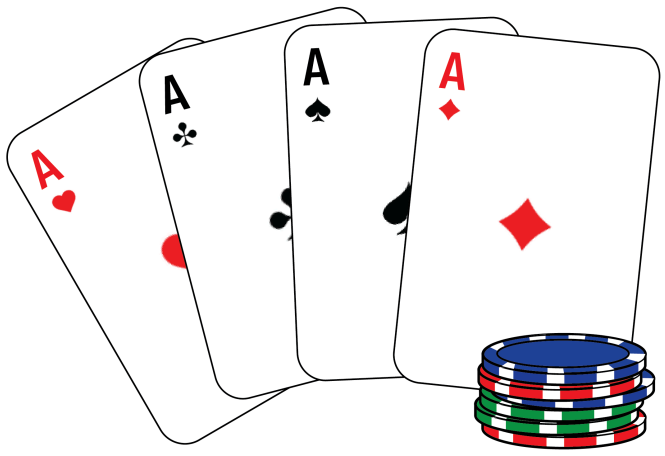
Study Summary

Discovery of 6 genetic variants associated with the development of gambling disorders.

Study Description

Your Result

When most people think of gambling, they typically think of casinos or lottery tickets. But, gambling comes in many more forms. Even activities such as playing bingo can be considered forms of gambling. While gambling is common, gambling disorders can affect an individual's life and well-being. Signs of gambling disorders include needing to bet increasing amounts of money to feel excited, being unable to quit, and jeopardizing work or relationships because of gambling.



Gambling disorders come in many forms and are not limited to classical gambling games.

View Full Report

1/2020

Heart failure (Shah, 2020)

Heart

Study Summary

Identification of 12 genetic variants associated with the risk of heart failure.

Your Result

Study Description

Heart failure is a common condition affecting over 30 million people worldwide. It occurs when the heart is not strong enough to pump blood throughout the body. This typically results in fluid buildup in the body, which "congests" areas like the lungs and ankles. It is estimated that the heritability of heart failure is approximately 26%.

View Full Report

01/2019

Risk tolerance (Linnér, 2019)

Behavior

Study Summary

This study identified hundreds of new genetic variants associated with risky behavior in genes, most of which are highly expressed in the brain.

Your Result

Study Description

Risk tolerance varies widely within the human population. Although it is known to be a moderately heritable trait, few genetic variants that correlate with this tolerance have been identified.

View Full Report

09/2017

Dupuytren's disease (Ng, 2017)

Hands

Study Summary

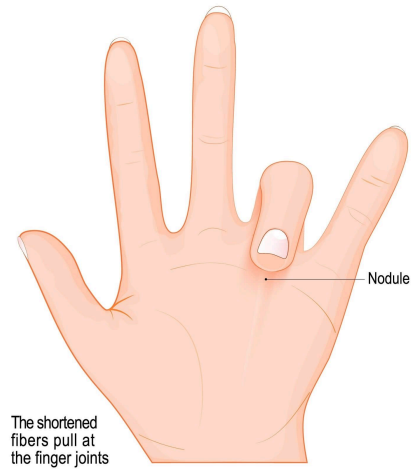
This report is based on a study that discovered 26 genetic variants associated with Dupuytren's disease.

Study Description

Dupuytren's disease is a condition that affects the hand and fingers and is caused by the progressive thickening and tightening of the connective tissue beneath the skin of the palm and fingers. The primary symptom of Dupuytren's disease is the development of lumps in the palm of the hand. Over time, these lumps can develop into thick cords that extend from the palm into the fingers. As the cords contract, they can cause the affected fingers to bend inward towards the palm, resulting in a condition known as contracture. The progression of the disease varies from person to person, with some individuals only having small lumps that do not progress further, while others may develop significant contractures that interfere with hand function. The disease typically progresses slowly over a period of months or years. The exact cause of Dupuytren's disease is unknown, but it is believed to involve a combination of genetic and environmental factors.

Your Result

92nd
PERCENTILE
High score to **Dupuytren's disease**



Contracture can impair hand movements.

View Full Report

10/2022

Idiopathic pulmonary fibrosis (Partanen, 2022)

Lungs

Study Summary

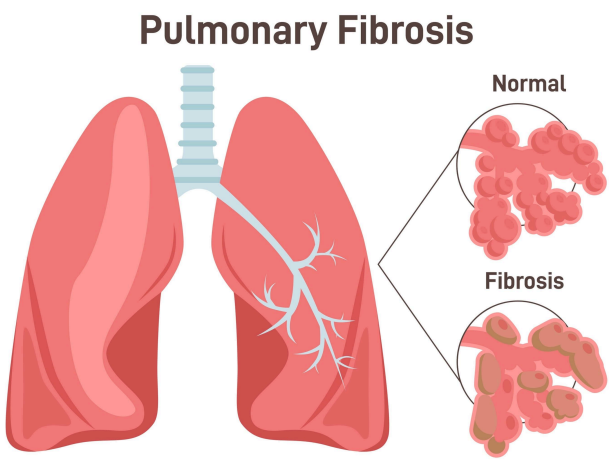
This report is based on a study that discovered 25 genetic variants associated with idiopathic pulmonary fibrosis.

Your Result

91st
PERCENTILE
High score to **IPF**

Study Description

The lungs are responsible for the exchange of oxygen and carbon dioxide between the air and the bloodstream. When you breathe, oxygen is taken in through inhalation and transported to the rest of the body via the blood, while carbon dioxide produced by the body is removed through exhalation. Idiopathic pulmonary fibrosis (IPF) is a type of lung disease that causes thickening and scarring of the lungs' delicate tissue, which makes it harder for the lungs to expand and contract during breathing. This can cause shortness of breath, coughing, and fatigue. Over time, the scarring can progress to the point where the lungs can no longer function properly, potentially leading to respiratory failure. The cause of IPF is unknown, hence the term 'idiopathic.'



Pulmonary fibrosis causes scarring in the lungs

View Full Report

10/2020

Coronary artery disease (Koyama, 2020)

Heart Vasculature

Study Summary

Identification of 175 genomic regions associated with the risk of coronary artery disease.

Your Result

91st
PERCENTILE
High score to **coronary artery disease**

Study Description

Like all other organs and tissues in the body, the heart requires a supply of blood to function. For the heart, the system that supplies its blood is known as the coronary circulation. Coronary artery disease occurs when the coronary arteries become damaged or diseased. As a consequence of decreased blood flow, less oxygen can reach the heart. Over time, this may result in heart attacks, making coronary artery disease the leading cause of death for both men and women.

View Full Report

5/2020

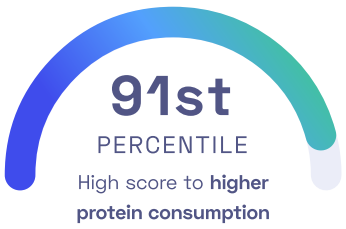
Protein consumption (Meddens, 2020)

Diet

Study Summary

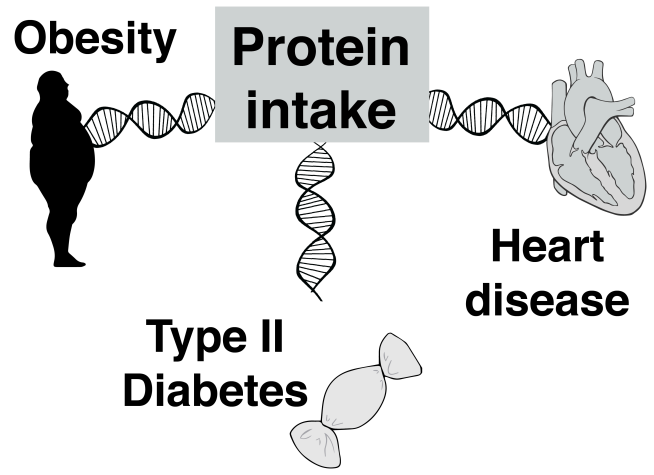
Identification of 7 genetic variants associated with protein consumption.

Your Result



Study Description

Proteins are essential *macronutrients* and building blocks of the body. More specifically, proteins are molecular machines that fulfill many functions inside and outside of cells. Proteins are made from 20 building blocks known as amino acids. While our bodies can make 11 of 20 amino acids, the remaining 9 must be consumed through the food we eat. On average, individuals consume approximately 7 grams of protein per 20 pounds of body weight per day. While protein is essential, excess protein consumption can result in metabolic disorders, such as obesity and diabetes.



This study found a genetic correlation between higher protein intake and various diseases.

View Full Report

6/2016

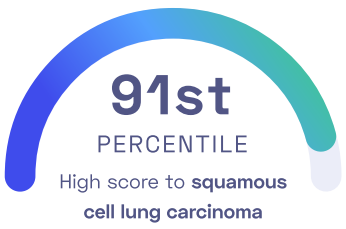
☆ Squamous cell lung carcinoma (McKay, 2017)

Lung Cancer

Study Summary

Identification of 3 genomic regions associated with squamous cell lung carcinoma.

Your Result



Study Description

Lung cancer is a condition in which cells in the lungs divide uncontrollably. Squamous cells are flat-shaped cells that line many organs in the body. Squamous cell lung carcinoma is a type of lung cancer that is caused by mutations in squamous cells that line the airways of the lungs. This lung cancer subtype accounts for 30% of all lung cancer cases and is often linked to a history of smoking.

View Full Report

10/2019

☆ Gout (Tin, 2019)

Joints Kidneys

Study Summary

Identification of 147 novel genetic variants associated with gout development.

Your Result

Study Description

Uric acid is a waste product that is produced as the body digests some foods. Normally, uric acid travels through the blood until it gets filtered out by the kidneys, ultimately getting excreted in urine. When the body does not efficiently process uric acid, it can accumulate in joints and kidneys causing gout and kidney stones. A person's risk of uric acid accumulation is known to be heritable, yet few genetic loci have been found.

View Full Report

07/2023

☆ Depression pathophysiology (Thomas D. Als, 2023)

Brain

Study Summary

This report is based on a study that discovered 64 variants associated with depression.

Your Result

Study Description

Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest. Also called major depressive disorder or clinical depression, it affects how you feel, think and behave and can lead to a variety of emotional and physical problems. You may have trouble doing normal day-to-day activities, and sometimes you may feel as if life isn't worth living.Depression is common, affecting 15% to 20% of people during their lives. Those diagnosed with depression face elevated risks of developing nearly all types of mental disorders, in particular anxiety, bipolar disorder, schizophrenia, and substance use disorder. If you feel depressed, make an appointment to see your doctor or mental health professional as soon as you can. If you're reluctant to seek treatment, talk to a friend or loved one, any health care professional, a faith leader, or someone else you trust. More than just a bout of the blues, depression isn't a weakness. Depression may require long-term treatment. But don't get discouraged. Most people with depression feel better with medication, psychotherapy or both.

Research suggests that, for some people, exercise can be as effective as medication at relieving depression symptoms. It may also help prevent future depressive episodes.

View Full Report

02/2023

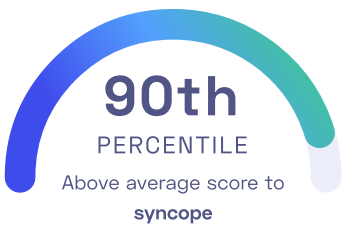
☆ Syncope (Aegisdottir, 2023)

Heart Vasculature

Study Summary

This report is based on a study that discovered 18 genetic variants associated with syncope.

Your Result



Study Description

Syncope, also known as fainting, is a temporary loss of consciousness and posture caused by a decrease in blood flow and oxygen to the brain. It is often triggered by factors such as overheating, dehydration, or a change in body position, though it can also be a sign of various heart diseases. The onset of syncope is sudden and the recovery is near as spontaneous. It is a common medical problem, affecting up to 35% of people at some point in their lives. Previous studies in families have shown that the risk for syncope has a heritable component, but the genes associated with this propensity have not been identified.

Syncope can be triggered by many factors.

View Full Report

11/2019

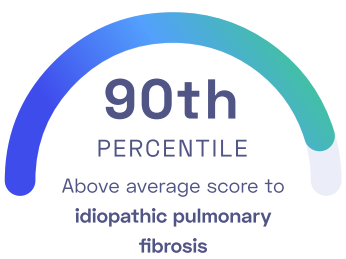
☆ Idiopathic pulmonary fibrosis (Allen, 2019)

Lungs

Study Summary

Identification of 5 novel variants associated with *idiopathic pulmonary fibrosis*.

Your Result



Study Description

Idiopathic pulmonary fibrosis (IPF) is a *progressive* lung disease that is characterized by scarring of lungs which makes it hard to breathe. Over 15,000 new cases of IPF are reported yearly in the United States, however, the cause of IPF is not known and there is also no cure. This study sought to identify genetic factors that contribute to the risk of developing IPF.

View Full Report

11/2019

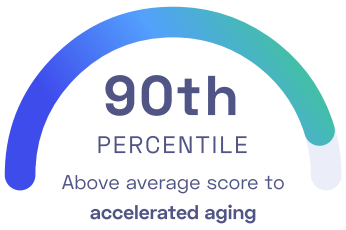
☆ Aging (Gibson, 2019)

Aging

Study Summary

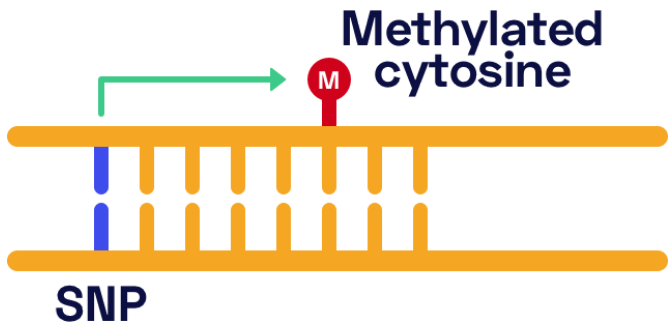
Discovery of 10 genetic variants associated with accelerated aging.

Your Result



Study Description

“Biological age” is a measure of how well a human body is functioning relative to its actual calendar age. Studies have shown that the biological age can be estimated by measuring DNA modifications, known as methylations, across the genome. The presence of these aging-associated modifications is influenced by environmental (e.g. lifestyle) as well as genetic factors.



Some genetic variants are linked to aging-associated methylation patterns.

View Full Report

4/2021

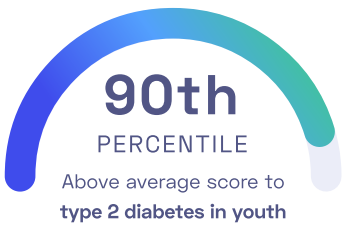
Type 2 diabetes in youth (Srinivasan, 2021)

Metabolism

Study Summary

This report is based on a study that discovered 7 genetic variants associated with type 2 diabetes in children.

Your Result



Study Description

Type 2 diabetes is an impairment in the way the body regulates and uses sugar (glucose) as a fuel. Over time, this causes a build-up of sugar in the blood. Having high blood sugar can cause numerous health complications, including kidney disease, blindness, and nerve damage. Type 2 diabetes is a significant public health crisis, but until recently it was considered an “adult-onset” disease. However, the incidence of type 2 diabetes in children has been growing in the past years.

The risk of type 2 diabetes can be greatly reduced by healthy behaviors.

View Full Report

06/2022

Beat synchronization (Niarchou, 2022)

Brain

Study Summary

This report is based on a study that discovered 69 genetic variants associated with musical beat synchronization.

Your Result

Study Description

Music is an integral part of many cultures across the world. One feature of music that is present across cultures is the “beat”, which is the rhythmic measure that helps to structure music. When listening to music, many people clap or tap along to the beat, but the ability to keep up with the beat varies widely. This genome-wide association study sought to identify genetic variants that affect an individual’s ability to keep a beat by examining more than 600,000 individuals of European ancestry.

Music is an important part of many cultures.

View Full Report

3/2020

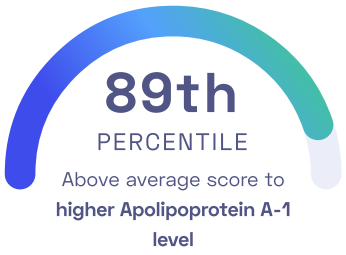
Apolipoprotein A-1 level (Richardson, 2020)

Blood Heart

Study Summary

Identification of 440 genetic variants associated with the apolipoprotein A-1 level in the blood and analysis of its contribution to the risk of coronary heart disease.

Your Result



Study Description

Coronary heart disease (CHD) is a condition that develops when the heart's arteries cannot supply enough oxygen to the heart muscle. Coronary heart disease is the leading cause of death in the United States. It occurs when *plaque* builds up in the heart's arteries and blocks the blood flow to the heart. Arterial *plaque* consists of multiple substances that circulate in the blood, in particular fats and *cholesterol*. Fats and *cholesterol* cannot travel around the bloodstream on their own and instead must be transported by proteins called "apolipoproteins". The apolipoprotein responsible for transporting HDL *cholesterol*, or the "good" *cholesterol*, in the blood is known as apolipoprotein A-1 (apoA1).

View Full Report

5/2020

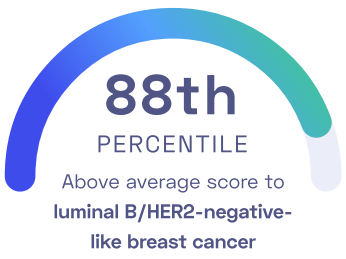
Luminal B/HER2-negative-like breast cancer (Zhang, 2020)

Cancer Breasts

Study Summary

Discovery of novel genetic variants associated with luminal B/HER2-negative-like breast cancer.

Your Result



Study Description

Among women, breast cancer is the second most common type of cancer. In fact, about 13% of women in the United States develop breast cancer during their lifetime. Breast cancer types can be classified by tumor markers, such as the *receptors* found on the surface of cancer cells. Luminal B/HER2-negative-like breast cancer is a type of breast cancer characterized by cancerous cells originating in the inner, or luminal, cells that line the *mammary ducts*.

View Full Report

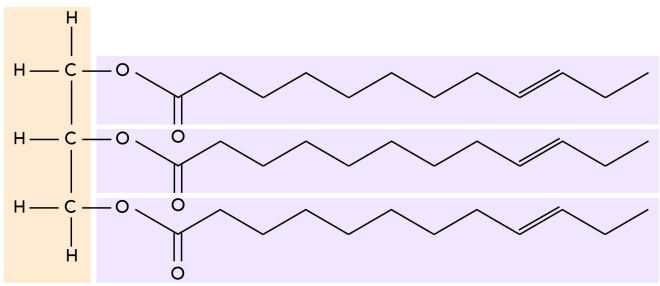
3/2020

Triglyceride level (Richardson, 2020)

Blood Heart

Study Summary

Identification of 440 genetic variants associated with the *triglyceride* level in the blood and analysis of its contribution to the risk of coronary heart disease.



The 'tri' in triglycerides refers to the three fatty acid chains.

Your Result

Study Description

Coronary heart disease (CHD) is a condition that develops when the heart's arteries cannot supply enough oxygen to the heart muscle. Coronary heart disease is the leading cause of death in the United States. It occurs when *plaque* builds up in the heart's arteries and blocks the blood flow to the heart. Arterial *plaque* consists of multiple substances that circulate in the blood. One of the substances that the study examined is *triglyceride*.

View Full Report

5/2020

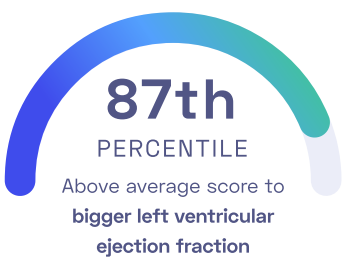
Left ventricular ejection fraction (Pirruccello, 2020)

Heart

Study Summary

Identification of 22 genetic variants associated with the heart's left ventricular ejection fraction (LVEF).

Your Result



Study Description

The human heart is a muscle that pumps blood throughout the body. It consists of 4 chambers: 2 atria (left and right) and 2 ventricles (left and right). Blood that has been enriched with oxygen in the lungs enters the left atrium and then flows into the left ventricle from where it's pumped to all other parts of the body. When the left ventricle contracts, not all blood is ejected and some remains inside of the ventricle. Left ventricular ejection fraction (LVEF) is calculated by dividing the blood volume that leaves the left ventricle when the heart muscles contract by the blood volume that remains inside the left ventricle.

View Full Report

2/2020

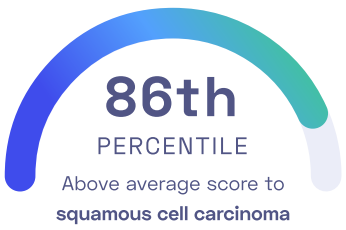
Squamous cell carcinoma (Sarin, 2020)

Skin Cancer

Study Summary

Identification of 8 novel genomic variants associated with cutaneous *squamous cell* carcinoma (SCC).

Your Result



Study Description

Cutaneous *squamous cell* carcinoma (SCC) is the second most common form of skin cancer. Most SCCs can be easily removed, but if left untreated, they can grow deeper into the skin and the cancer cells can spread to other parts of the body.

View Full Report

8/2020

Alcohol-related liver cirrhosis (Schwantes-An, 2020)

Liver

Study Summary

Discovery of a novel region of the genome associated with alcohol-related liver cirrhosis.

Your Result

Study Description

The liver is a large organ that sits on the right side of the abdomen. It filters blood to detoxify chemicals, including drugs and alcohol. After long periods of heavy alcohol use, healthy liver tissue is replaced by scar tissue. Over time, the build-up of scar tissue can impair the functioning of the liver, leading to a condition called cirrhosis. It is estimated that 10-20% of heavy drinkers will develop cirrhosis, which can eventually lead to liver failure.

View Full Report

03/2014

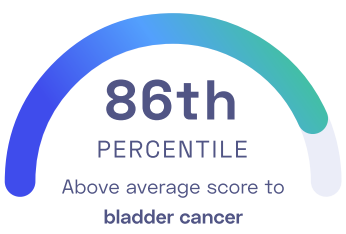
Bladder cancer (Figueroa, 2014)

Cancer Bladder

Study Summary

Bladder cancer may be associated with genes linked to *telomere* length and inflammation.

Your Result



Study Description

Bladder cancer is one of the most common cancers worldwide. Men are three to four times more likely to develop bladder cancer than women. Prior to this study, 11 genetic variants were known to be associated with bladder cancer.

View Full Report

05/2010

Alzheimer's disease (Seshadri, 2010)

Dementia Brain

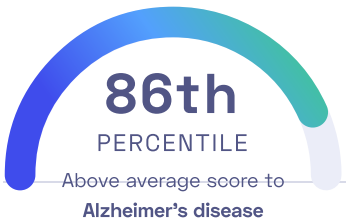
Study Summary

Identification of novel variants (one of which was in the BIN1 gene) associated with Alzheimer's disease.

Your Result

Study Description

Alzheimer's disease is a progressive brain disorder that slowly decreases memory and cognitive skills. It is the most common form of dementia in older adults and is known to be a highly heritable disease.



View Full Report

10/2011

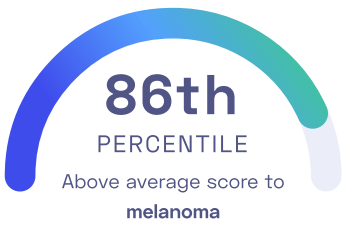
Melanoma (Barrett, 2011)

Skin Cancer

Study Summary

Susceptibility to melanoma is associated with variants in the ATM and CASP8 genes.

Your Result



Study Description

Melanoma is a skin cancer that occurs when pigment-producing skin cells mutate and become cancerous. To identify genetic variants associated with the development of melanoma, this study examined 11,389 individuals of European ancestry.

View Full Report

03/2014

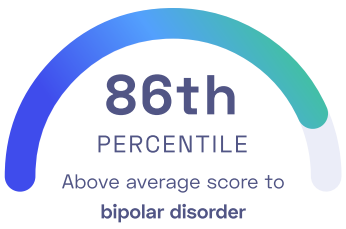
Bipolar disorder (Mühleisen, 2014)

Behavior Mind

Study Summary

Bipolar disorder is linked to several genetic variants, some of which are in the ADCY2 gene.

Your Result



Study Description

Bipolar disorder (aka manic-depressive illness) can cause abnormal shifts in mood, energy, and activity levels. Moods can range from periods of extremely "up" or energized behavior (called manic episodes) to extremely "down" or hopeless periods (called depressive episodes). Bipolar disorder is likely a polygenic disease, meaning that it is probably caused by variants in many genes.

View Full Report

11/2022

Heart failure (Levin, 2022)

Heart

Study Summary

This report is based on a study that discovered 47 genetic variants associated with heart failure.

Your Result

Study Description

The heart is a muscular organ that pumps oxygen- and nutrient-rich blood to all parts of the body. Heart failure is a medical condition in which the heart cannot effectively pump blood to meet the body's needs. Heart failure can be acute or chronic. Affected individuals commonly experience shortness of breath, fatigue, rapid heartbeats, and difficulty concentrating. The condition can arise from several causes, such as damaged heart muscle, high blood pressure, and heart defects from birth.

Heart failure can be acute or chronic

View Full Report

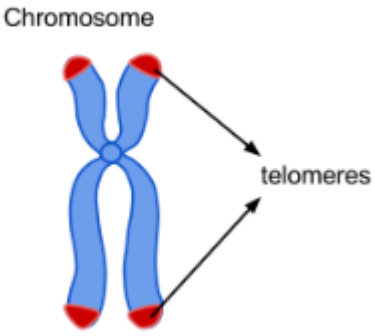
02/2017

Thyroid cancer (Gudmundsson, 2017)

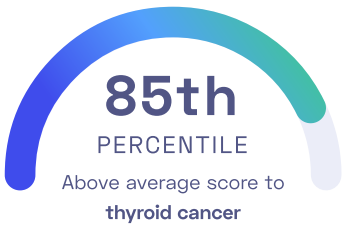
Cancer Thyroid

Study Summary

Thyroid cancer is associated with genetic variants linked to the regulation of telomere length.



Your Result



Study Description

The thyroid is a gland at the bottom of the neck that produces hormones that regulate blood pressure, weight, and heart rate. Thyroid cancer is known to have one of the strongest genetic components of any cancer.

View Full Report

5/2020

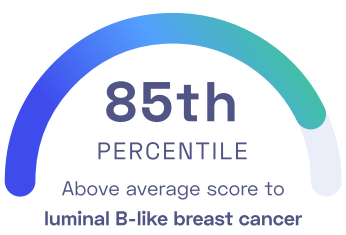
Luminal B-like breast cancer (Zhang, 2020)

Cancer Breasts

Study Summary

Discovery of novel genetic variants associated with luminal B-like breast cancer.

Your Result



Study Description

Breasts are complex structures with multiple cell types which can give rise to multiple types of cancer. Breast cancers are classified by what *receptors* cancer cells have on the outside. This classification is helpful for predicting outcomes and effective treatments. Luminal B-like cancers have hormone *receptors* (progesterone, estrogen, or both) as well as human epidermal growth factor 2 (HER2) *receptors*. These *receptors* enable cancer cells to grow in response to growth signals.

View Full Report

10/2019

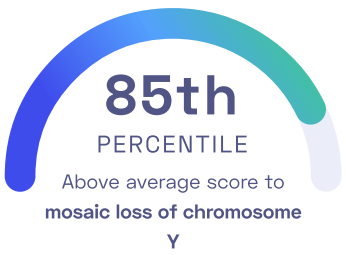
Mosaic loss of chromosome Y (Terao, 2019)

Blood Sex

Study Summary

Identification of 46 genetic variants associated with mosaic loss of chromosome Y.

Your Result



Study Description

Cells in the human body store genetic information in 23 pairs of chromosomes. Mosaic loss of chromosome Y (mLOY) is a male-specific condition characterized by the loss of chromosome Y by some cells. mLOY has been linked to various medical conditions, including cancer, and is most commonly observed in the white blood cells of ageing men.

View Full Report

03/2019

Amyotrophic lateral sclerosis (Nicolas, 2019)

Muscles Spine Brain

Study Summary

Discovery of genetic variants in the KIF5A gene that are associated with amyotrophic lateral sclerosis (ALS).

Study Description

Amyotrophic lateral sclerosis, or ALS, is a progressive degeneration of nerve cells that control muscle movements which results in worsening weakness. ALS patients lose the ability to walk, use their hands, speak, swallow, and eventually breathe.

Your Result

Above average score to **amyotrophic lateral sclerosis**

The Ice Bucket Challenge that promotes awareness of ALS went viral in the summer of 2014.

View Full Report

05/2023

Narcolepsy (Ollila, 2023)

Sleep

Study Summary

This report is based on a study that discovered 13 genetic variants associated with narcolepsy.

Your Result

Above average score to **narcolepsy**

Study Description

Narcolepsy is a sleep disorder that affects a person's ability to control their sleep-wake cycle. It causes excessive sleepiness during the day and can lead to sudden and uncontrollable episodes of falling asleep, even during important activities. There are different types of narcolepsy, one of which is called type 1 narcolepsy (NT1). In NT1 narcolepsy, a person experiences excessive daytime sleepiness, similar to other forms of narcolepsy, but also experiences cataplexy, a sudden loss of muscle control. It can make a person feel weak or unable to move for a short time. Narcolepsy's exact cause is not fully understood, but a combination of genetic and environmental factors is believed to play a role.

Narcolepsy can interfere will an individual's ability to stay productive

View Full Report

5/2020

Triple-negative breast cancer (Zhang, 2020)

Cancer Breasts

Study Summary

Discovery of novel genetic variants associated with triple-negative breast cancer.

Your Result

Above average score to **triple-negative breast cancer**

Study Description

Breasts are complex structures with multiple cell types which can give rise to multiple types of cancer. Breast cancers are classified by what *receptors* cancer cells have on the outside. This classification is helpful for predicting outcomes and effective treatments. Triple-negative breast cancer is any type of breast cancer that has neither the estrogen receptor, progesterone receptor, nor human epidermal growth factor 2 (HER2) receptor. Triple-negative breast cancers are still fairly heterogeneous, with some subtypes being more aggressive than others. 15-20% of all breast cancer cases are triple-negative breast cancers.

View Full Report

3/2020

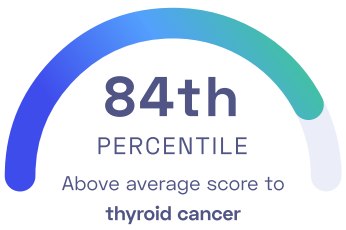
Thyroid cancer (Liyanarachchi, 2020)

Metabolism Thyroid Cancer

Study Summary

Development of a polygenic risk score for thyroid cancer based on 10 previously identified genetic variants.

Your Result



Study Description

The thyroid is a butterfly-shaped gland in the front of the neck that produces *hormones* which control important bodily functions like blood pressure, temperature, and heart rate. Thyroid cancer is more heritable than most other cancer types, and it affects over 50,000 individuals each year in the United States.

View Full Report

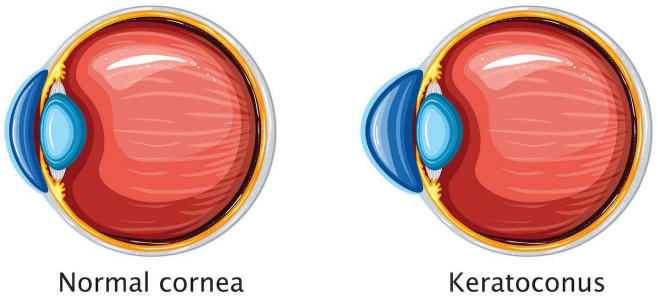
3/2021

Keratoconus (Hardcastle, 2021)

Eyes

Study Summary

Identification of 36 genomic regions associated with keratoconus, a thinning of the cornea that can cause blindness.



Changed shape of the cornea that is typically observed in keratoconus.

Your Result

Study Description

The cornea acts as the “front window” of the eye, allowing in light but also protecting against dirt and germs that could damage the inner parts of the eye. Keratoconus is a disease that causes the thinning of this protective layer. Over time, the thinning of the cornea causes it to change its shape, which can eventually lead to diminished vision and blindness. While eye trauma is a leading cause of keratoconus, genetics also plays a role in many cases.

View Full Report

11/2019

Eosinophilic granulomatosis with polyangiitis (Lyons, 2019)

Lungs Inflammation Blood

Study Summary

Discovery of four genetic variants associated with eosinophilic granulomatosis, a rare autoimmune disease that affects the blood vessels.

Your Result

Study Description

Eosinophilic granulomatosis with polyangiitis (EGPA; also known as Churg-Strauss syndrome) is a rare autoimmune disease. It’s characterized by abnormally high levels of eosinophil white blood cells and inflammation of small- and medium-sized blood vessels. The early stage of the disease is marked by an inflammation of the airways that causes asthma. Later stages also affect other organs, in particular the digestive tract and the heart.

View Full Report

8/2019

Adolescent idiopathic scoliosis (Kou, 2019)

Spine Development

Study Summary

Discovery of 14 novel genetic loci associated with adolescent *idiopathic* scoliosis, or abnormal curvature of the spine.

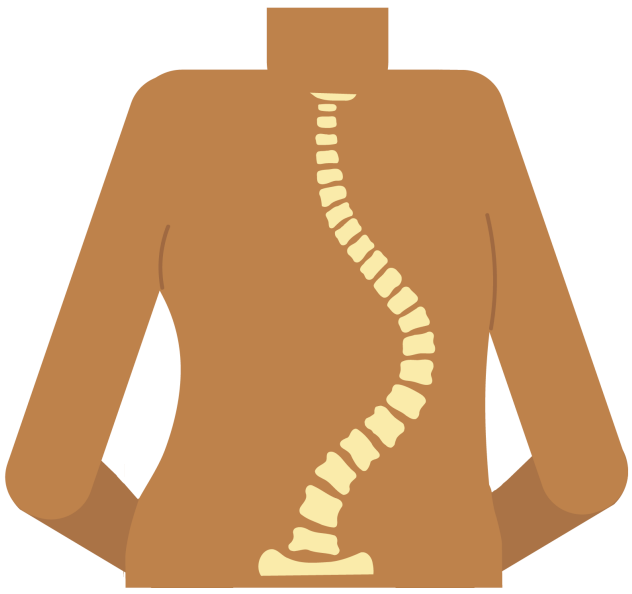
Study Description

Adolescent *idiopathic* scoliosis (AIS) is a sideways curvature of the spine (greater than 10 degrees) that appears in children and adolescent ages 10 to 18. AIS is a common disease, affecting 2-3% of adolescents worldwide. In fact, ~30% of individuals with AIS have a family history of

Your Result

84th
PERCENTILE
Above average score to **adolescent idiopathic scoliosis**

scoliosis, suggesting that genetics plays a role in AIS development.



Scoliosis is a sideways curvature of the spine.

View Full Report

12/2022

REM sleep behavior disorder (Krohn, 2022)

Sleep Brain

Study Summary

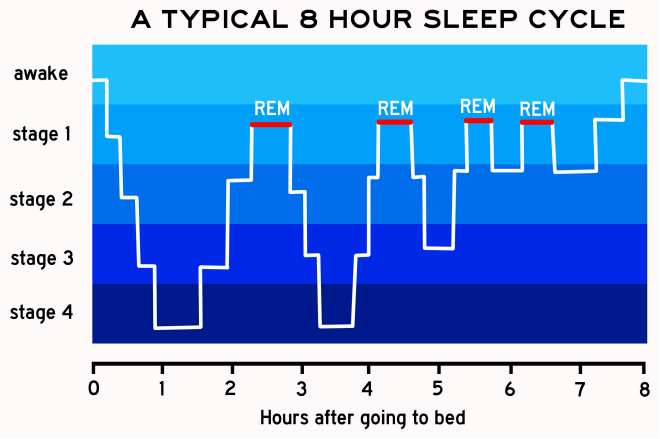
This report is based on a study that discovered 5 genetic variants associated with REM sleep behavior disorder (RBD).

Your Result

83rd
PERCENTILE
Above average score to **RBD**

Study Description

Rapid eye movement (REM) sleep is the phase of sleep during which most dreams occur. During REM sleep, an individual's brain activity, breathing rate, heart rate, and blood pressure increase, and the eyes move rapidly behind the eyelids. Normally, the muscles in the arms and legs become temporarily unable to move during REM sleep, but for some people, movements still occur. This condition, known as REM sleep behavior disorder (RBD), can lead those affected to kick, punch, or jump in response to their dreams. The onset of RBD has been found to be associated with the development of multiple neurological disorders, with over 80% of those affected developing Parkinson's or dementia within 15 years.



Individuals usually enter REM sleep multiple times a night.

View Full Report

2/2020

Plant and fish-based diet (Niarchou, 2020)

Brain Behavior

Study Summary

Identification of 63 genetic variants associated with a plant and fish-based diet.

Your Result

83rd
PERCENTILE
Above average score to **plant and fish-based diet**

Study Description

Schizophrenia is a chronic brain disorder that affects how a person thinks, feels, and behaves. It affects about 1% of the population. While the development of schizophrenia is driven by genetics, environmental factors, such as diet, are also thought to play a role as weight gain and obesity are common in schizophrenia patients. Therefore, to determine the genetic basis of diet and whether there is a link between diet and schizophrenia risk, researchers examined the genomes of over 335,000 individuals of European ancestry.

View Full Report

11/2023

Anxiety disorder (Li, 2023)

Mind Behavior

Study Summary

This report is based on a study that discovered 14 genetic variants associated with anxiety disorder.

Your Result

Study Description

Anxiety acts like a natural alarm system in our brains, alerting us to danger and helping us prepare to face challenges. It's caused by brain chemicals like serotonin and adrenaline, which kick in during stressful situations. A bit of anxiety can be helpful, such as when it makes us more alert during a test or when speaking in front of a class. But sometimes, anxiety can go into overdrive, leading to an anxiety disorder. This happens when our brain keeps telling us we're in danger, even when we're not, causing symptoms like a racing heart, sweating, and feeling really tired or on edge all the time. Continual anxiety disorder can lead to long-term health issues, including increased disease risk, sleep deprivation, and weight gain.

Anxiety disorders can leave individuals on edge.

View Full Report

03/2018

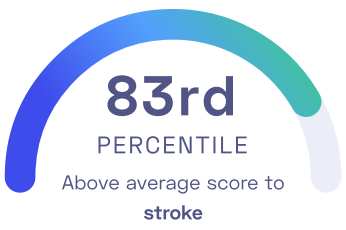
☆ Stroke (Malik, 2018)

Vasculature Brain

Study Summary

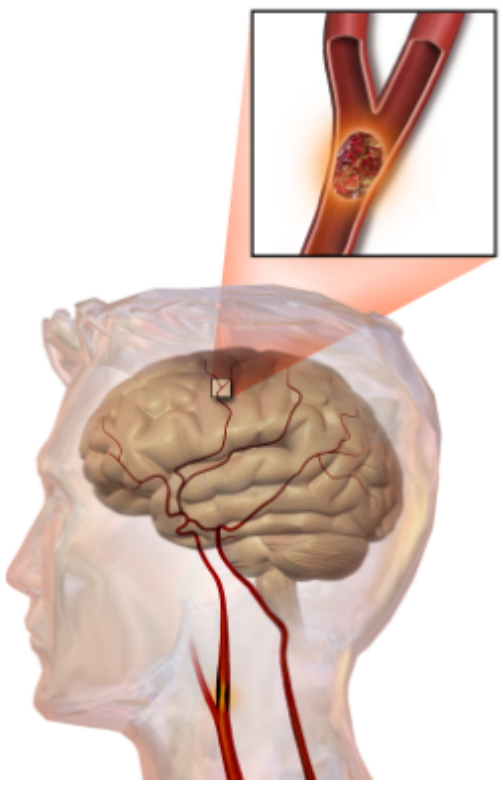
The risk of strokes is associated with genetic variants that are also linked to various cardiovascular traits.

Your Result



Study Description

Strokes are the second leading cause of death worldwide. They are the sudden deprivation of oxygen and blood flow to the brain, resulting in the death of brain cells. A large part of a person's risk of experiencing strokes can be traced to genetics.



View Full Report

3/2011

☆ Ulcerative colitis (Anderson, 2011)

Inflammation Intestines

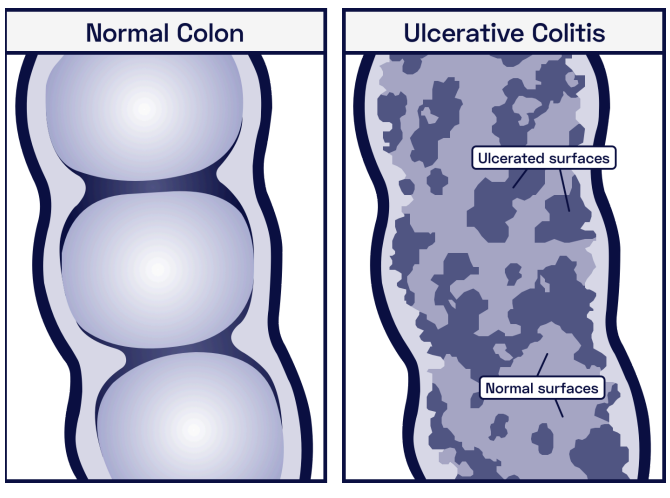
Study Summary

Genetic variants linked to inflammation and programmed cell death may affect the risk for ulcerative colitis.

Your Result

Study Description

Ulcerative colitis is an inflammatory bowel disease that occurs when sores develop in the colon due to an ongoing inflammation. Symptoms such as diarrhea, abdominal pain, and fatigue typically develop over time. Ulcerative colitis is also known to be heritable, yet the genetic factors underlying this are not well understood.



View Full Report

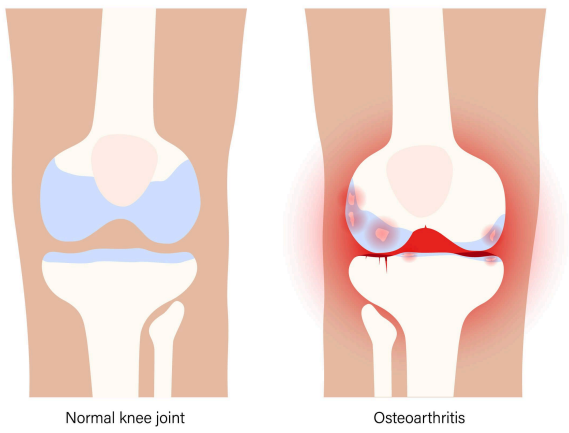
09/2021

Osteoarthritis (Boer, 2021)

Bones Joints

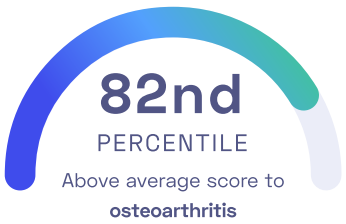
Study Summary

This report is based on a study that discovered 21 genetic variants associated with osteoarthritis.



Osteoarthritis leads to inflammation in joints.

Your Result



Study Description

Joints, including the knee and shoulder, are areas where 2 or more bones meet. Arthritis is a condition that is characterized by inflammation in the joints that leads to painful movement. Osteoarthritis is the most common form of arthritis, and it is often seen in older people. In individuals with osteoarthritis, the protective covering of the joints becomes worn down, causing the bones within the joint to rub together. This causes pain, stiffness, and other symptoms.

View Full Report

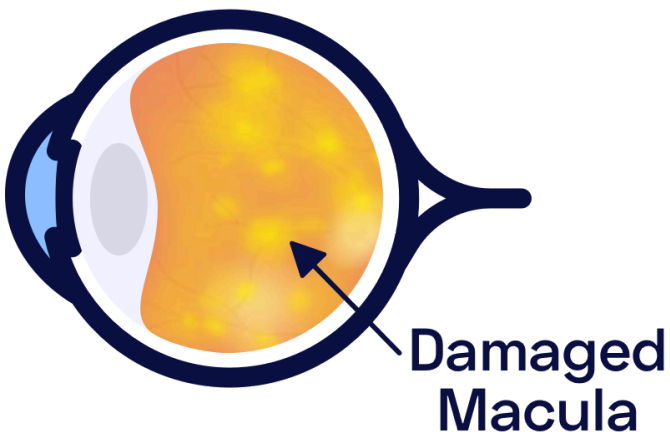
12/2015

Age-related macular degeneration (Fritsche, 2015)

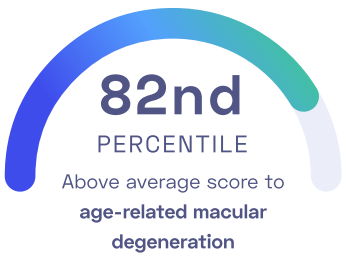
Aging Eyes

Study Summary

Discovery of 16 novel risk loci for age-related macular degeneration.



Your Result



Study Description

The retina, located at the back of the eye, contains cells that detect light and generate signals that are sent to the brain enabling us to visualize the world around us. The center part of the retina is known as the macula. It allows us to see in high-resolution and perceive colors.
Degeneration of the macula is one of the leading causes of vision loss among the elderly, affecting nearly 160 million individuals worldwide.

View Full Report

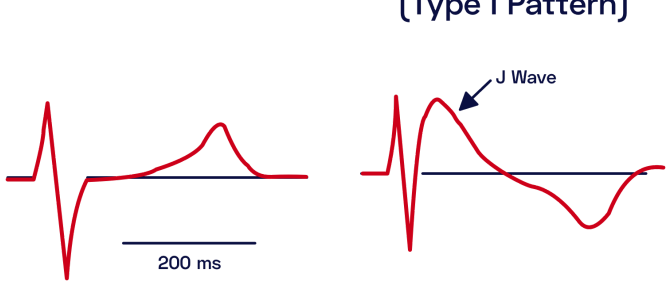
07/2013

Brugada syndrome (Bezzina, 2013)

Heart

Study Summary

Identification of 3 genetic variants associated with Brugada syndrome, a rare heart disorder.



The characteristic electrocardiogram pattern of the Brugada syndrome.

Your Result

Study Description

A healthy heart pumps blood with a regular rhythm that forms our “heartbeat”. This rhythm allows blood to flow into the heart before being successfully pumped back out into the body. When the heart has an abnormal rhythm, known as arrhythmia, the heart does not pump blood as effectively which can impair the blood and oxygen supply of the body. Brugada syndrome, is a type of arrhythmia that can lead to fainting, difficulty breathing, and sudden death.

View Full Report

02/2022

Myasthenia gravis (Chia, 2022)

Autoimmunity Muscles Eyes

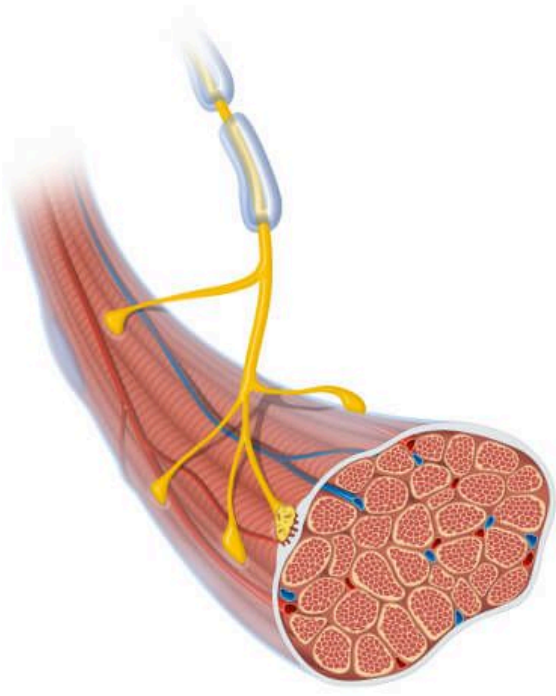
Study Summary

This report is based on a study that discovered 6 genetic variants associated with myasthenia gravis.

Your Result

Study Description

Myasthenia gravis is an autoimmune neuromuscular disease. It occurs when the immune system mistakenly attacks and damages the connections between muscles and nerves. This leads to muscular weakness across the body, and can also cause double vision, a propensity to falling, difficulty speaking, and shortness of breath. This genome-wide association study examined more than 38,000 individuals of European ancestry and discovered 6 genetic variants associated with myasthenia gravis.



Nerves and muscles work together to produce movements.

View Full Report

10/2023

Reaction time (Wootton, 2023)

Brain

Study Summary

This report is based on a study that discovered 7 genetic variants associated with reaction time variability.

Your Result

Study Description

Reaction time refers to the period of time it takes for an individual to respond to a stimulus. It plays a crucial role in the ability to efficiently make decisions and react swiftly to changing environments. Activities like driving a car, playing sports, or even simply catching a falling object require quick and accurate reaction times. On average, the human reaction time takes between 150 and 300 milliseconds, which is about the same time it takes to blink. There is considerable variability in this time between individuals, and some people naturally react faster than others. This variability can be attributed to several factors, including age, physical fitness, consumption of substances such as caffeine or alcohol, and stress levels.

Reaction time is important for many sports.

View Full Report

11/2020

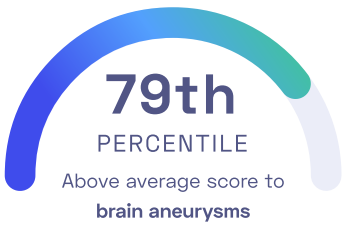
Brain aneurysms (Bakker, 2020)

Brain Vasculature

Study Summary

Discovery of 17 genetic variants associated with brain aneurysms.

Your Result



Study Description

Brain aneurysms occur when blood vessels in the brain balloon outward and fill with blood. Roughly 1 in 50 people live with an aneurysm, and an estimated 50-80% of aneurysms do not lead to medical issues. However, occasionally brain aneurysms rupture, causing blood to flow out into the surrounding brain tissue. Ruptured brain aneurysms are a medical emergency and have a fatality rate of about 50%.

Brain aneurysms are blood vessels in the brain that are ballooned outward and filled with blood.

View Full Report

7/2010

Alopecia areata (Petukhova, 2010)

Autoimmunity Appearance

Study Summary

Identification of 16 genomic regions associated with alopecia areata, an *autoimmune* disease that causes hair loss.

Your Result

Study Description

Alopecia areata occurs when the immune system attacks *hair follicles*, resulting in hair loss. Alopecia areata affects over 6.8 million people in the United States. The genetic basis of alopecia areata remains largely unknown. By examining the genomes of 4,332 individuals, this study identified 16 independent genetic variants that are associated with alopecia areata.

Circular bald patches are typical for alopecia areata.

View Full Report

8/2019

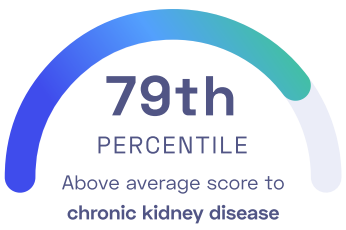
Chronic kidney disease (Hellwege, 2019)

Kidneys

Study Summary

A study of over 1 million participants identified 82 novel genetic variants associated with chronic kidney disease.

Your Result



Study Description

Kidneys have the crucial roles of filtering blood to remove waste and maintaining electrolyte levels in the body. Damage to the kidneys can cause waste to accumulate in the body, leading to higher risks of kidney failure which contributes to heart disease and other conditions. Much of the genetic contribution to kidney diseases is not well understood.

View Full Report

09/2016

High blood pressure (Surendran, 2016)

Vasculature Blood

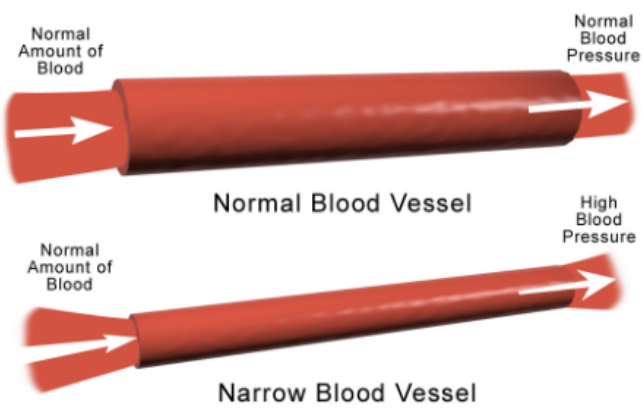
Study Summary

This study links several cell signaling pathways to the risk of developing high blood pressure.

Your Result

Study Description

High blood pressure, also called hypertension, is a major risk factor for many diseases, including heart disease and stroke. High blood pressure is thought to be highly heritable, but the genetic factors that influence the risk of high blood pressure are not well understood.



View Full Report

3/2020

Refractive errors (Hysi, 2020)

Eyes

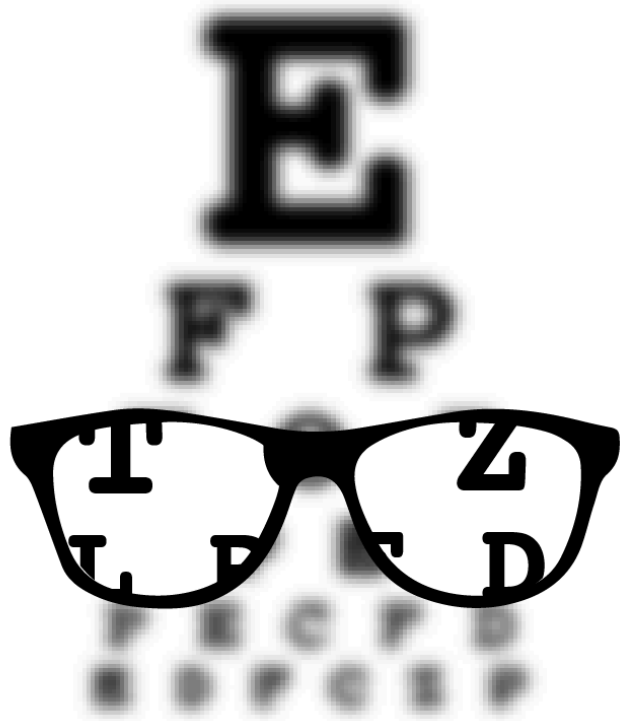
Study Summary

Discovery of 336 new genomic regions associated with refractive errors, including nearsightedness.

Your Result

Study Description

Refractive errors occur when the shape of the eye does not bend light correctly, resulting in unfocused or blurry vision. One of the major types of refractive errors is *myopia*, otherwise known as nearsightedness. Refractive errors are very common, and the prevalence is increasing, likely due to a combination of environmental and genetic factors.



Myopia, or nearsightedness, is the most common refractive error.

View Full Report

10/2020

Sleep quality (Khoury, 2020)

Sleep

Study Summary

Identification of 3 regions of the genome associated with sleep quality.

Your Result

Study Description

Sleep quality is very important for a person's overall health and well-being. Poor sleep quality has been shown to lead to various health issues, ranging from heart disease to depression. Sleep quality is determined by multiple factors including sleep duration, the time it takes to fall asleep, and the number of times a person wakes up during the night. It's estimated that genetic factors may explain over 30% of the observed variation in sleep quality. To identify those genetic factors, this genome-wide association study examined over 100,000 individuals across different ethnicities.

View Full Report

02/2019

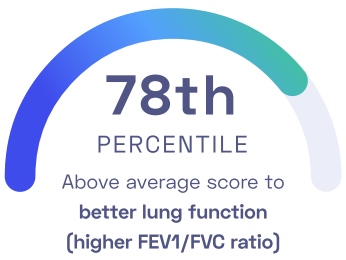
Lung function (Shrine, 2019)

Lungs

Study Summary

Identification of 155 genetic variants correlated with lung function.

Your Result



Study Description

Proper lung function is critical for providing oxygen to the cell in our bodies. It can be assessed by measuring various parameters. One parameter of lung function is the maximum air volume that can be expired after a deep breath, also known as the forced vital capacity (FVC). Another parameter is the air volume that can be expired in the first second of expiration, known as the forced expiratory volume in 1 second (FEV1). A low FEV1/FVC ratio is an indicator for chronic obstructive pulmonary disease (COPD).

View Full Report

12/2019

Anhedonia (Ward, 2019)

Brain Mind

Study Summary

Identification of 11 novel genomic regions associated with anhedonia, the inability to feel pleasure.

Your Result

77th
PERCENTILE
Above average score to **anhedonia**

Study Description

Anhedonia refers to a condition characterized by an inability to feel pleasure from activities that are considered enjoyable. It's a common symptom of depression and other psychiatric disorders and reduces the quality of life. The genetic underpinnings of anhedonia are not well understood.

People suffering from anhedonia are unable to feel pleasure.

View Full Report

8/2019

Venous thromboembolism (Lindstrom, 2019)

Vasculature

Study Summary

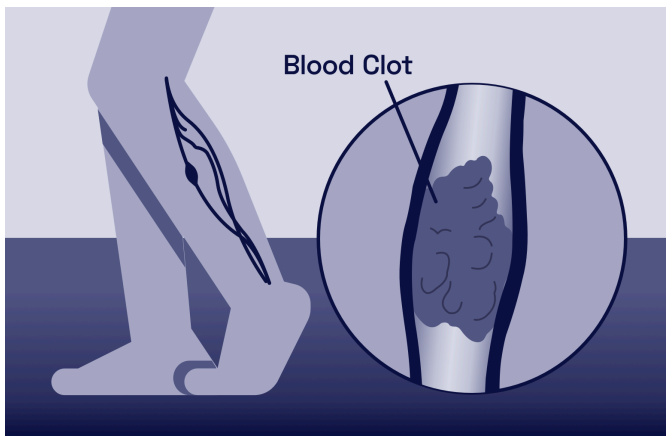
Identification of novel genetic variants associated with venous thromboembolism.

Your Result

77th
PERCENTILE
Above average score to **venous thromboembolism**

Study Description

Venous thromboembolism describes a condition where blood clots form in veins and block the flow of blood. Blood clots that break off and travel to organs can result in life-threatening conditions. Though venous thromboembolism is common, the contributing genetic risk factors are poorly understood.



View Full Report

2/2021

Daytime napping (Dashti, 2021)

Behavior Sleep

Study Summary

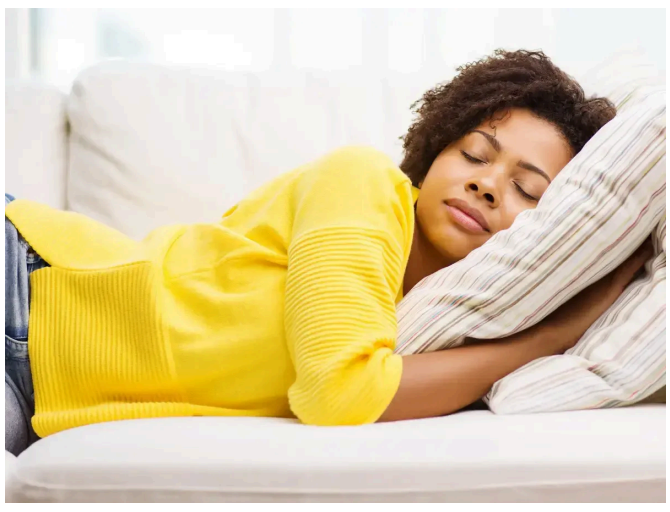
Discovery of 123 regions of the genome associated with daytime napping.

Your Result

77th
PERCENTILE
Above average score to **daytime napping**

Study Description

Nearly one-third of individuals in the United States typically take a nap every day. In other parts of the world, such as in the Mediterranean, napping is even more common. While napping can greatly help improve alertness and memory, a midday snooze is also believed to affect physical health. Genetic factors appear to have a big influence on whether an individual takes regular naps or not.



Daytime napping has some health benefits but has also been linked to certain health risks.

View Full Report

7/2020

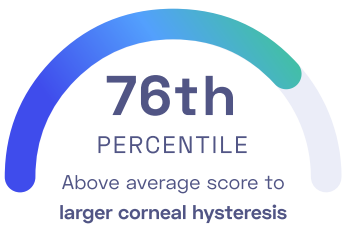
Corneal hysteresis (Simcoe, 2020)

Eyes

Study Summary

Identification of 203 generic variants associated with corneal hysteresis, a measure of the "shock-absorbing" ability of the cornea.

Your Result



Study Description

The cornea is a dome-shaped “window” covering the front part of the eye. It serves to both protect the eye and focus light to help us see. Damage to the cornea can be detrimental to eyesight, so doctors commonly use a number of metrics to measure the cornea’s health. One metric is corneal hysteresis, which is a measure of the “shock-absorbing” ability of the cornea. Decreased corneal hysteresis has previously been connected to glaucoma and other disorders of the eye.

View Full Report

4/2020

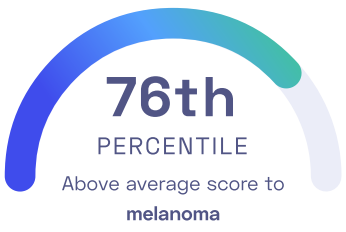
Melanoma (Landi, 2020)

Skin Cancer

Study Summary

Identification of 54 genomic regions associated with melanoma risk.

Your Result



Study Description

Melanoma is the most serious type of skin cancer. This study compared ~36,000 melanoma patients with ~375,000 healthy individuals of European descent and identified 68 genetic variants in 54 different genomic regions. The study also found associations between melanoma risk and lighter skin color as well as a larger number of moles on the body.

View Full Report

07/2019

Asthma, hay fever and eczema (Johansson, 2019)

Allergy

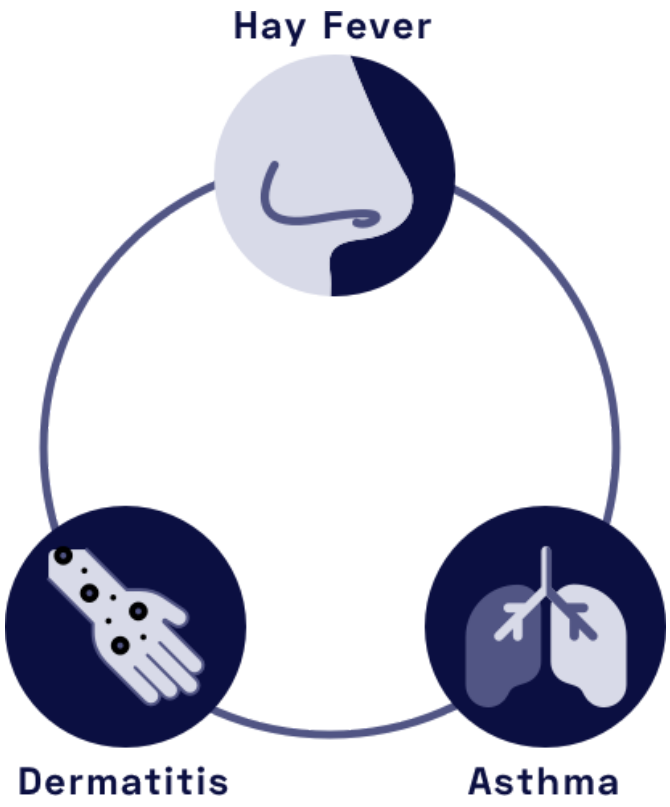
Study Summary

This study discovered 41 new genetic variants that are associated with asthma, hay fever, *eczema* or a combination of the three.

Your Result

Study Description

Asthma, hay fever, and *eczema* are common immunological diseases. All three conditions are linked to the body’s immune system response to an irritant or allergen, though their symptoms are different. Previous genome studies have discovered few variants that explain the genetics of these diseases.



View Full Report

07/2009

Glioma (Shete, 2009)

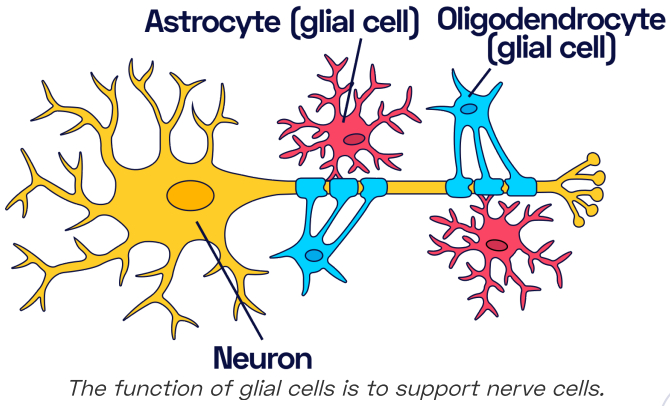
Cancer Brain

Study Summary

Identification of 5 risk variants associated with the development of gliomas.

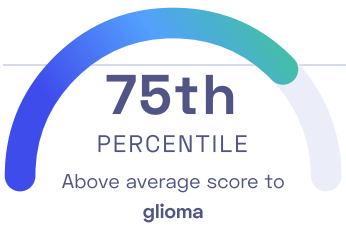
Study Description

Glial cells are found in the brain, spine, and other parts of the nervous system. The function of the glial cells is to protect and support the nervous system. Gliomas are a form of cancer that result from the uncontrolled growth of glial cells. To identify risk variants for glioma, this study examined the genetic information of over 11,000 individuals of Western European ancestry.



The function of glial cells is to support nerve cells.

Your Result



View Full Report

1/2021

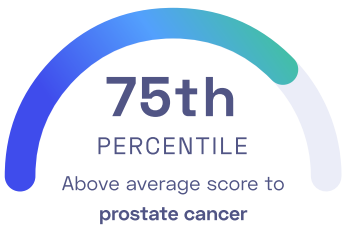
Prostate cancer (Conti, 2021)

Cancer

Study Summary

Identification of 269 genetic variants associated with prostate cancer risk.

Your Result



Study Description

The prostate is a gland slightly smaller than the size of a golf ball that sits below the bladder in males. It produces and releases fluids that help nourish and protect sperm cells. Prostate cancer occurs when the cells of the prostate gland start to grow out of control. Prostate cancer affects roughly 1 in 8 males, making it one of the most common forms of cancer in men. Prostate cancer is also highly heritable, with up to 57% of an individual's risk thought to be due to genetics.

View Full Report

8/2020

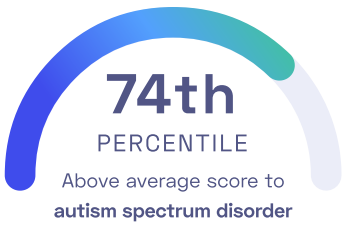
Autism spectrum disorder (Matoba, 2020)

Brain

Study Summary

Discovery of a novel genomic region associated with autism spectrum disorder (ASD).

Your Result



Study Description

Autism spectrum disorder (ASD) is a condition that affects the brain's development. It impacts social skills, speech, and learning. ASD is a highly heritable condition, yet previous studies have identified only a small number of genetic factors. This study found 5 regions in the genome associated with ASD by examining the genetic data of over 6,000 individuals of European, African, and East Asian ancestries.

View Full Report

03/2023

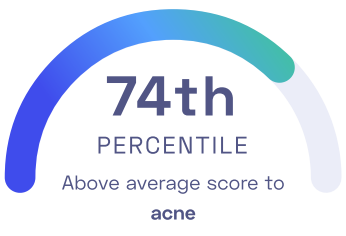
Acne (Teder-Laving, 2023)

Skin Infection

Study Summary

This report is based on a study that discovered 23 genetic variants associated with acne.

Your Result



Study Description

Acne is a common skin condition that develops when hair follicles in the skin get clogged with oil and dead skin cells, leading to pimples and blackheads. It most often occurs during adolescence but can affect individuals of all ages. Acne can range from mild with a few occasional pimples to severe with lots of redness, swelling, and scarring. In addition, acne can significantly impact an individual's self-esteem and quality of life, especially when it is severe or persistent. The exact cause of acne is not fully understood, but it involves factors like hormonal changes, increased oil production, and bacteria. Genetic predisposition, diet, and stress are all factors that can contribute to the appearance of acne.

Over 80% of the world population is affected by acne

View Full Report

5/2021

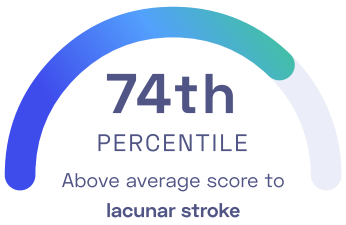
Lacunar stroke (Traylor, 2021)

Brain Vasculature

Study Summary

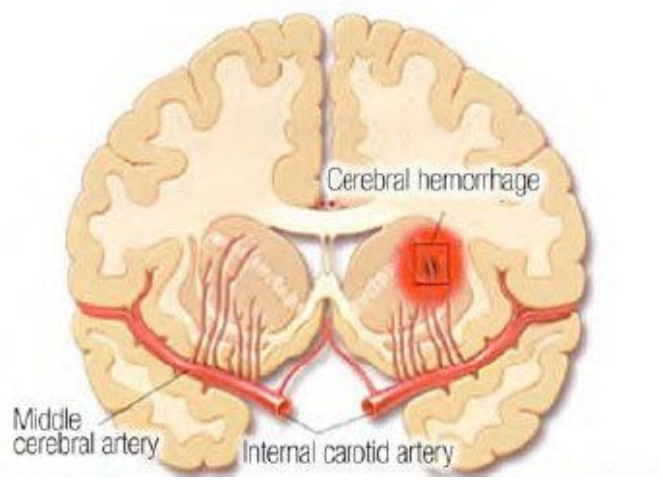
This report is based on a study that discovered 11 novel genetic variants associated with lacunar stroke.

Your Result



Study Description

A stroke occurs when the blood flow to the brain is blocked, which results in brain cells being starved of oxygen. A lacunar stroke is a type of stroke, caused by the blockage of arteries deep in the brain. Lacunar strokes represent about 25% of all strokes, making them one of the most common types of stroke. Common symptoms of a lacunar stroke include slurred speech, difficulty moving, confusion, and loss of consciousness.



Lacunar storkes occur when small arteries that are located deep in the brain become occluded.

View Full Report

3/2020

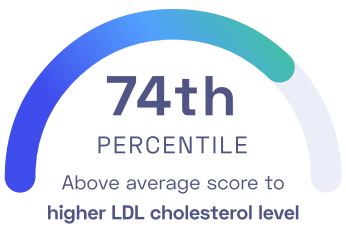
LDL cholesterol level (Richardson, 2020)

Heart Blood

Study Summary

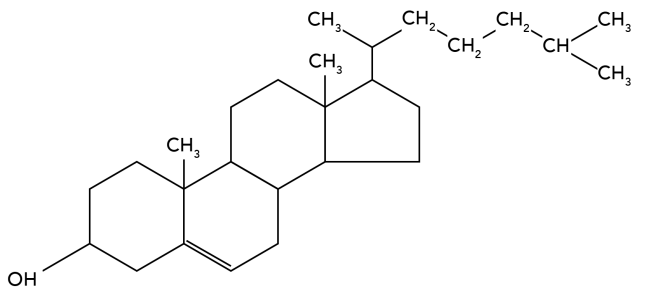
Identification of 220 genetic variants associated with the LDL *cholesterol* level in blood and analysis of its contribution to the risk of coronary heart disease.

Your Result



Study Description

Coronary heart disease (CHD) is a condition that develops when the heart's arteries cannot supply enough oxygen to the heart muscle. Coronary heart disease is the leading cause of death in the United States. It occurs when *plaque* builds up in the heart's arteries and blocks the blood flow to the heart. Arterial *plaque* consists of multiple substances that circulate in the blood. One of the substances that the study examined is LDL (low-density lipoprotein) *cholesterol*, also known as the "bad" *cholesterol*.



The chemical structure of cholesterol resembles steroid hormones, bile acid and vitamin D because it is used for their biosynthesis.

View Full Report

05/2023

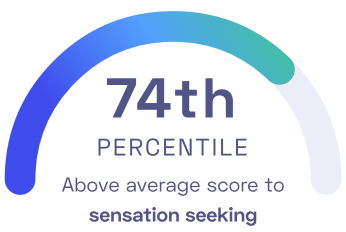
Sensation seeking (Sanchez-Roige, 2023)

Behavior

Study Summary

This report is based on a study that discovered 5 genetic variants associated with sensation seeking.

Your Result



Study Description

Imagine you're at an amusement park, and you have a choice between riding a gentle merry-go-round or trying out a roller coaster with loops and high speeds. If you find yourself drawn to the roller coaster because you enjoy the rush of adrenaline and the thrill of the unknown, you might be more of a sensation seeker. Sensation seekers are often motivated by the desire to experience intense sensations and novel situations, which can take various forms. Some people may be drawn to physical activities like extreme sports, while others may seek intellectual stimulation by solving complex puzzles or exploring new cultures and ideas.

Roller coaster junkies may be sensation seekers

View Full Report

02/2016

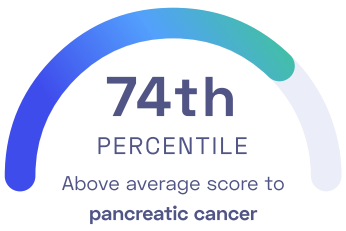
Pancreatic cancer (Childs, 2016)

Pancreas Cancer

Study Summary

Pancreatic cancer may be influenced by variants in the LINC00673, SUGCT, and TP63 genes.

Your Result



Study Description

The pancreas is an organ behind the stomach that helps with digestion and control of blood-sugar levels. To better understand the genetics that help determine pancreatic cancer risk, this study examined 21,494 individuals of European and Asian descent.

View Full Report

03/2019

Carpal tunnel syndrome (Wiberg, 2019)

Nerves

Study Summary

This report is based on a study that discovered 16 genetic variants associated with carpal tunnel syndrome (CTS).

Your Result

Study Description

Carpal tunnel syndrome (CTS) is a medical condition that affects the hand and wrist, causing pain, numbness, and weakness. It occurs when the median nerve, which runs through the wrist's "carpal tunnel", becomes compressed and squeezed. This can occur either from repetitive hand movements, like typing or playing an instrument, or from injury. Individuals experiencing CTS often experience difficulty with fine motor tasks and decreased grip strength. While age, occupation, and carpal tunnel width are all risk factors for experiencing carpal tunnel syndrome, genetics also contributes to an individual's risk of developing the condition.

CTS is sometimes referred to as 'office syndrome' because it affects many office workers.

View Full Report

01/2019

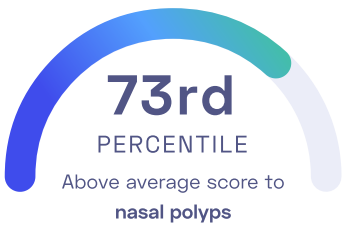
Nasal polyps (Kristjansson, 2019)

Nose

Study Summary

Identification of 10 variants associated with the risk of developing nasal polyps.

Your Result



Study Description

Nasal polyps are growths that form along the lining of the nasal cavity. While not cancerous, they can eventually cause blockage of the nasal passage leading to breathing problems and a loss of smell. At the time of the publication of this study, no genetic risk factors for nasal polyp were known.

View Full Report

07/2023

Heart failure (Danielle Rasooly, 2023)

Heart Blood

Study Summary

This report is based on a study that identified 39 variants associated with heart failure, of which 18 were novel.

Study Description

Heart failure happens when the heart isn't able to pump blood as well as it should. This can cause blood to back up and fluid to build up in the lungs, leading to shortness of breath. Various heart issues, like narrowed arteries and high blood pressure, can weaken the heart over

Your Result

time, making it too weak or stiff to function properly. Treatments can help improve heart failure symptoms and might help some people live longer. Making changes in your lifestyle, such as losing weight, exercising, reducing salt intake, and managing stress, can improve your quality of life. However, heart failure can be very serious, and some people might need a heart transplant or a device to assist the heart in pumping blood. Even though we have learned a lot about what causes heart failure, this knowledge hasn't yet led to many effective ways to prevent it, except for using medications to lower blood pressure and cholesterol.

Heart failure does not mean your heart has stopped working. It means it needs some support to help it work better.

View Full Report

5/2020

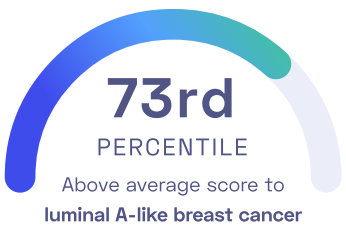
☆ Luminal A-like breast cancer (Zhang, 2020)

Breasts Cancer

Study Summary

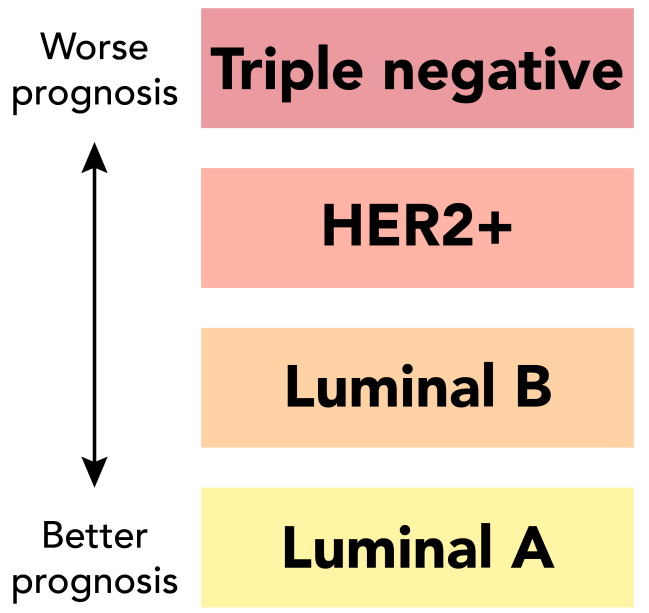
Discovery of novel genetic variants associated with luminal A-like breast cancer.

Your Result



Study Description

Among women, breast cancer is the second most common type of cancer. In fact, about 13% of women in the United States develop breast cancer during their lifetime. Breast cancer types can be classified by tumor markers, such as the *receptors* found on the surface of cancer cells. Luminal A-like is a subtype of breast cancer with the best prognosis, and it accounts for 30-45% breast cancer cases. It is characterized by cancerous cells originating in the inner, or luminal, cells that line the *mammary ducts*.



Luminal A-like breast cancers have the best prognosis, while triple-negative breast cancers have the worst.

View Full Report

5/2020

☆ PR interval (Ntalla, 2020)

Heart

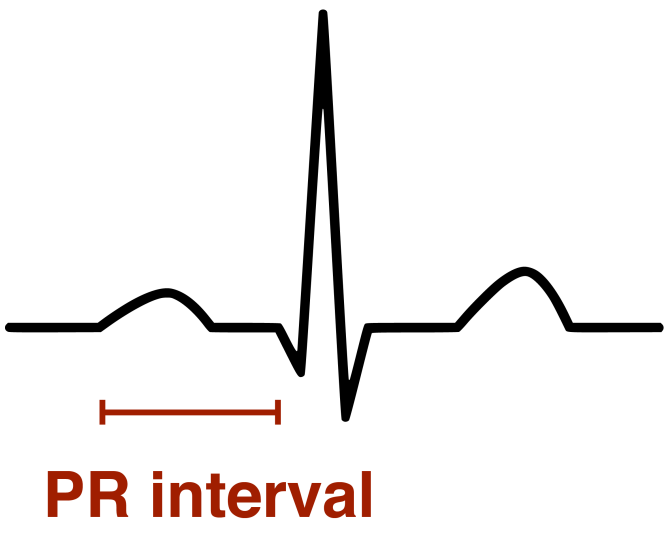
Study Summary

Discovery of 202 regions of the genome associated with the heart's PR interval duration.

Your Result

Study Description

The heart beats at regular intervals to pump blood through the body. To control the timing of a heartbeat, the heart relies on a system that sends electrical signals to the heart's muscle cells. The electrocardiogram, or ECG, is a commonly used medical procedure to measure the electrical activity during a heartbeat. The PR interval is the time between the activation of the heart's *atria* and the activation of the *ventricles*. A normal PR interval duration is between 0.12 and 0.20 seconds. A PR interval duration that is too short, too long, or irregular can be an indication for heart disease.



The PR interval in an electrocardiogram.

View Full Report

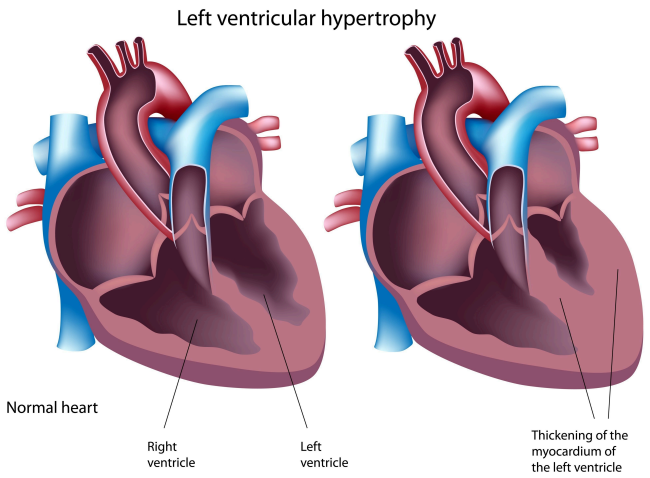
11/2023

Left ventricular wall thickness (Caibo Ning, 2023)

Heart Vasculature

Study Summary

This report is based on a study that identified 72 variants associated with left ventricular regional wall thickness.



Things that can cause the heart to work harder and may possibly lead to left ventricular hypertrophy include: high blood pressure, high blood pressure, intensive athletic training.

Your Result

Study Description

Left ventricular hypertrophy is when the walls of the left side of your heart get thicker. This part of the heart, called the left ventricle, is important because it pumps blood to the rest of your body. When these walls thicken, they can become stiff, making it harder for your heart to pump blood properly. Over time, this can lead to your heart not pumping as strongly as it should. The main cause of this condition is high blood pressure that isn't controlled. If you have left ventricular hypertrophy, you might experience irregular heartbeats (arrhythmias) or even heart failure. Treatment can vary depending on the cause but often involves medication or surgery. It's important to understand that the thickness of the left ventricle's wall can indicate how serious the heart condition is and can predict other problems. That's why catching this condition early is crucial for better heart health.

View Full Report

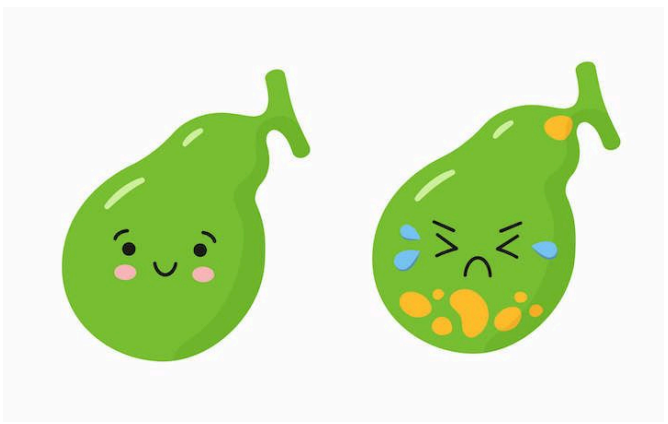
10/2021

Gallstones (Fairfield, 2021)

Stomach Diet Liver

Study Summary

This report is based on a study that discovered 46 novel genetic variants associated with gallstone development.



Gallstones form from the accumulation of bile.

Your Result

Study Description

The gallbladder is a small, pear-shaped pouch located under the liver. It is connected to the intestines and liver by small tubes called bile ducts. Bile ducts carry bile, a yellow-green fluid produced by the liver, which helps with digestion. Occasionally, bile can form hardened clumps known as gallstones, which can cause pain, and in severe cases require surgical removal. Some individuals appear to have a higher propensity for gallstone formation, though the reasons are not clear.

View Full Report

12/2018

Bone fractures (Morris, 2018)

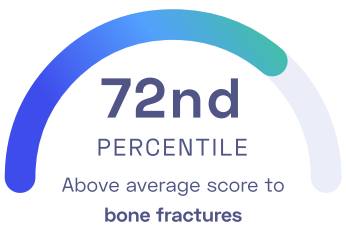
Bones

Study Summary

This report is based on a study that discovered 13 genetic variants associated with bone fractures.

Fractures often heal within weeks or months.

Your Result



Study Description

A bone fracture is a break in the bone. It can happen when you fall, get hit by something, or put too much stress on a bone. There are different types of bone fractures, including open fractures, closed fractures, and stress fractures, which describe different levels of severity. The symptoms of a bone fracture can include pain, swelling, bruising, and difficulty moving the affected area. Adequately taken care of, bones are able to heal in a process that can take several weeks or months. Many factors can make a person more susceptible to bone fractures, including age, gender,

and nutrition. Further, some individuals may have a genetic predisposition to weaker bones that may lead to an increased risk of fractures.

View Full Report

11/2022

Dental development (Grgic, 2022)

Teeth

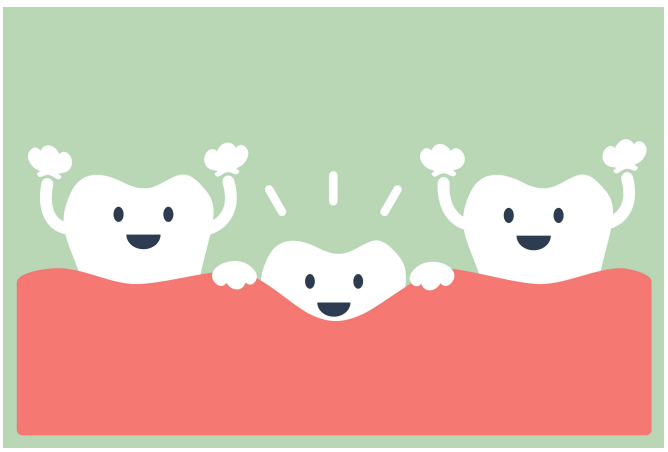
Study Summary

This report is based on a study that discovered 3 variants associated with dental development.

Your Result

Study Description

Dental development starts in earlier stages of gestation with primary teeth formation and ends postnatally around the ages of 18 to 25. The processes of tooth structure formation, eruption, and emergence are interlinked and essential components of human tooth maturation. Delayed dental development typically leads to inadequate dental occlusion, resulting in issues with mastication, pronunciation, and appearance. Dental development is a complex process influenced by various environmental and genetic factors. Tooth eruption is affected by diverse factors such as trauma, surgery, nutrition, and medication. Additionally, secular acceleration in tooth (root) formation likely mirrors changes in environmental factors over time, including improvements in health, better nutrition, and reduced energy expenditure leading to a higher body mass index (BMI). Conversely, several gene families, primarily studied in animal models (FGF, WNT, BMP), have also been associated with dental development. A prior genome-wide association study (GWAS) meta-analysis studying tooth eruption identified 10 loci associated with the age of the first erupted tooth and 11 loci associated with the number of teeth at 1 year of age. In 1973, a radiographic method was devised for estimating dental development based on dental mineralization, shape, and proportions. However, this method has yet to be explored using a GWAS approach.



A complete and nutritious diet will help your child's teeth develop firmly. Not only that, the mother's nutrition during pregnancy also greatly affects the development of the baby's teeth

View Full Report

11/2010

Crohn's disease (Franke, 2010)

Inflammation Intestines

Study Summary

Identification of 71 genetic variants associated with Crohn's disease.

Your Result

Study Description

Crohn's disease is a type of inflammatory bowel disease, a condition characterized by chronic inflammation of the digestive tract. Nearly a million individuals in the United States alone are affected by Crohn's disease. Typical symptoms are pain, diarrhea and weight loss. To better understand the genetics of Crohn's disease, this study examined over 40,000 individuals of European descent.

View Full Report

4/2020

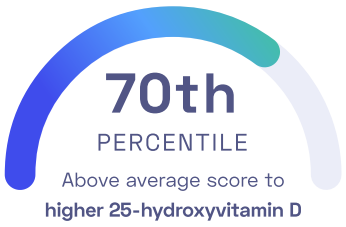
25-hydroxyvitamin D level (Revez, 2020)

Metabolism Bones

Study Summary

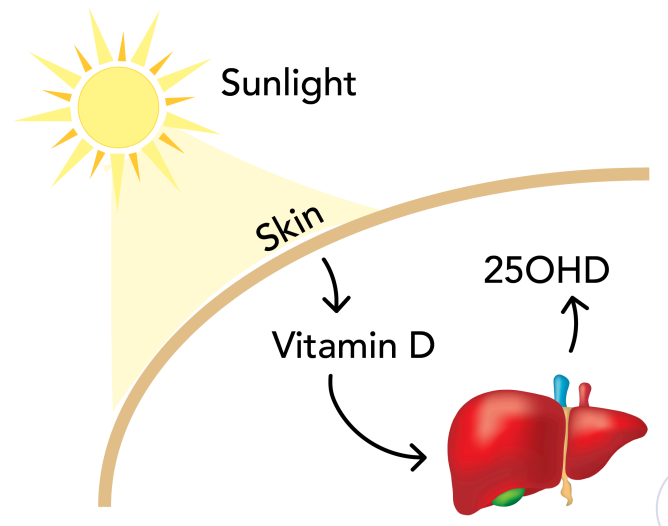
Discovery of 143 genomic regions associated with 25-hydroxyvitamin D levels, an indicator of vitamin D levels in the body.

Your Result



Study Description

Vitamin D is essential for the body. It helps to maintain strong bones, healthy teeth, and may also protect against an array of diseases such as type 1 diabetes. While vitamin D is not present in many foods we eat, our bodies naturally produce it as a response to sun exposure, giving vitamin D the nickname "sunshine vitamin". Produced vitamin D is



25-hydroxyvitamin D is synthesized in the liver from Vitamin D.

further processed by the body in a series of chemical reactions. One of these reactions turns vitamin D into 25-hydroxyvitamin D (25OHD), which is commonly measured as an indicator of vitamin D levels in the body.

View Full Report

5/2020

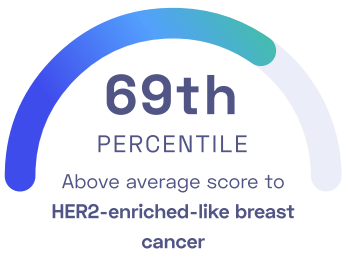
HER2-enriched-like breast cancer (Zhang, 2020)

Breasts Cancer

Study Summary

Discovery of novel genetic variants associated with HER2-enriched-like breast cancer.

Your Result



Study Description

Breasts are complex structures with multiple cell types which can give rise to multiple types of cancer. Breast cancers are classified by what *receptors* cancer cells have on the outside. This classification is helpful for predicting outcomes and effective treatments. Breast cancers that use the human epidermal growth factor 2 receptor (HER2+) make up 15-30% of all breast cancers. HER2+ breast cancers are historically associated with poor prognosis and an increased recurrence, but there are now new drugs that specifically target the HER2 receptor and improve survival.

View Full Report

10/2014

Height (Wood, 2014)

Appearance

Study Summary

Identification of 697 genetic variants associated with height in a study of over 250,000 individuals.

Your Result

Study Description

In the past 150 years, the average human's height has increased by around 4 inches. While environmental factors like nutrition have a strong influence on the growth of a human body, it is clear that height is a highly heritable trait. In fact, up to 80% of a person's height is thought to be genetically determined! However, height is a very complex trait that is influenced by many variants across the genome.

Height is one of the most heritable traits. However, malnutrition during childhood can inhibit natural growth.

View Full Report

6/2020

Resilience to Alzheimer's disease (Dumitrescu, 2020)

Brain Dementia

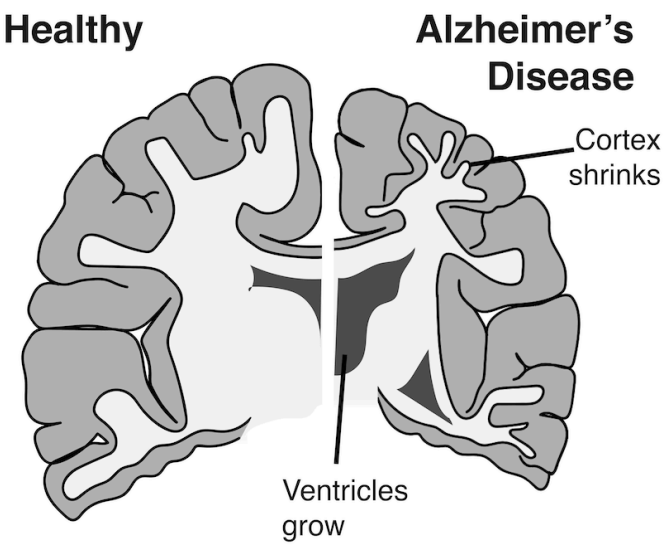
Study Summary

Identification of multiple regions of the genome associated with resilience to Alzheimer's disease.

Your Result

Study Description

Alzheimer's disease is a form of dementia in which brain cells degenerate and die. The condition develops gradually, and over time affects memory, mood, thinking, and behavior. Alzheimer's disease is quite common in seniors, potentially affecting up to half of those older than 85. However, while many people are affected by the degeneration of brain cells, not everyone develops cognitive impairments. These individuals are considered to have "asymptomatic" Alzheimer's disease and little is known about the degree to which genetics influences whether an individual will be asymptomatic or show cognitive decline.



Some people don't show cognitive decline despite Alzheimer's-typical degeneration in the brain.

View Full Report

5/2020

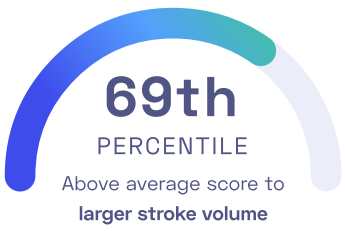
Stroke volume (Pirruccello, 2020)

Heart

Study Summary

Identification of 12 genetic variants associated with the heart's stroke volume.

Your Result



Study Description

The human heart is a muscle that pumps blood throughout the body. It consists of 4 chambers: 2 atria (left and right) and 2 ventricles (left and right). Blood that has been enriched with oxygen in the lungs enters the left atrium and then flows into the left ventricle from where it's pumped to all other parts of the body. Stroke volume is a measurement of how much blood is pumped out of the left ventricle during each beat.

View Full Report

10/2015

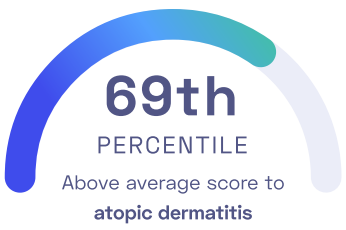
Atopic dermatitis (Paternoster, 2015)

Skin Inflammation

Study Summary

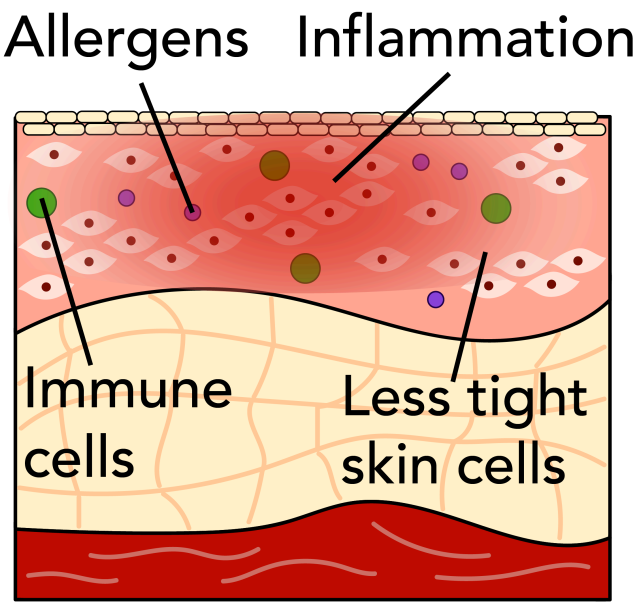
Discovery of 10 new genomic regions associated with atopic dermatitis, also known as eczema.

Your Result



Study Description

The skin is the largest organ in the body, serving as a barrier to the outside world. The immune system helps support this barrier function, attacking "foreign" substances that come in contact with the skin. When this happens, the skin can become inflamed, red, and itchy. Atopic dermatitis, also known as eczema, is a skin inflammation triggered by environmental factors that are actually not harmful to the body. Among many others, these factors can include temperature, soap, and clothing. Atopic dermatitis is highly heritable, with genetics determining up to 90% of an individual's susceptibility to the condition.



Atopic dermatitis is caused by immune cells in the skin that respond to contact with allergens.

View Full Report

6/2020

Chronic wound microbiome diversity (Tipton, 2020)

Skin Infection

Study Summary

Identification of 6 genetic variants that explain variation in wound *microbiome* diversity, a critical factor in the wound healing process.

Your Result

Study Description

Normally wounds heal in a matter of weeks or months, often forming scar tissue over the site of injury. Chronic wounds are defined as wounds that fail to show signs of healing after a period of 3 or more weeks. Previous studies have shown that a wound's successful healing is affected by the *microbiome* composition of the wound. For example, wounds that are predominantly colonized by only a few microbe species (= low *microbiome* diversity) appear to heal at a slower rate.

Chronic wounds often have a characteristic microbiome.

View Full Report

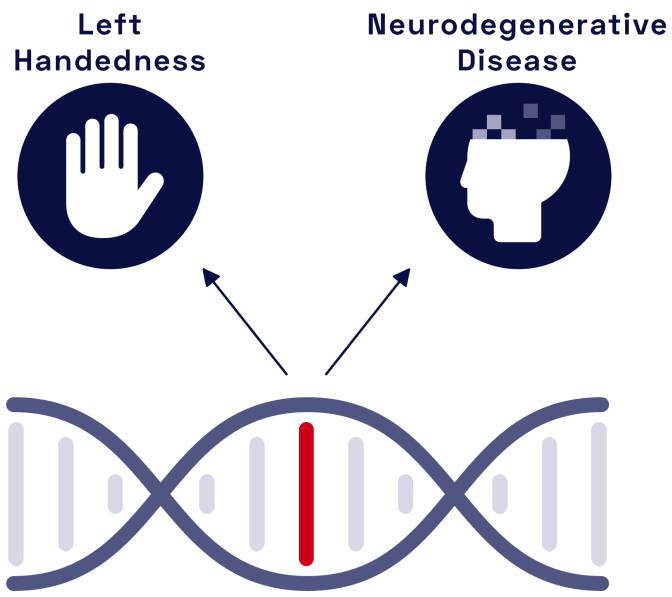
09/2019

Left-handedness (Wiberg, 2019)

Brain

Study Summary

Identification of 4 novel genetic variants correlated with handedness.



Your Result

Study Description

Are you a righty or a lefty? Nearly 90% of individuals are right-handed. While handedness appears to be hereditary, the genetics that determines handedness is poorly understood.

View Full Report

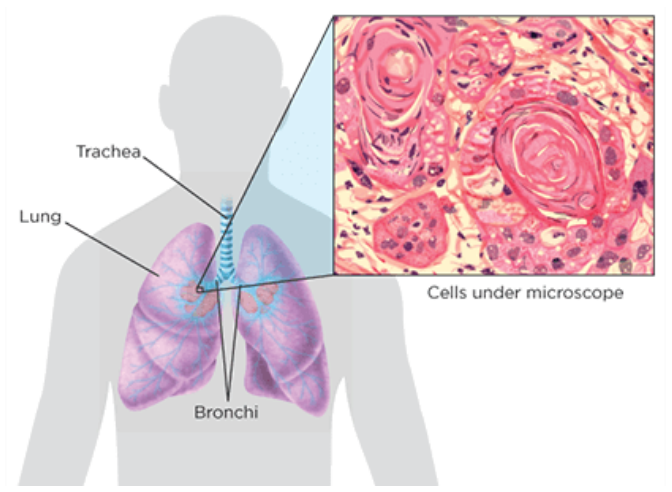
3/2021

Aerodigestive squamous cell cancer (Lesseur, 2021)

Cancer Lungs Mouth Throat

Study Summary

This report is based on a study that discovered 9 genetic variants associated with squamous cell carcinomas in the aerodigestive tract.



Squamous cell cancer of the lungs is often caused by smoking.

Your Result

Study Description

Squamous cells can be found throughout the body where they form outer layers of the skin, the digestive system and the respiratory tract. Squamous cell carcinomas (SCCs) are a form of cancer that can occur when squamous cells begin to multiply uncontrollably. Often, SCCs form when squamous cells are damaged by exposure to UV light, smoke, or other environmental hazards. This study aimed to identify genetic variants associated with SCC of the aerodigestive tract, which includes the lungs, mouth, throat, and the food pipe.

View Full Report

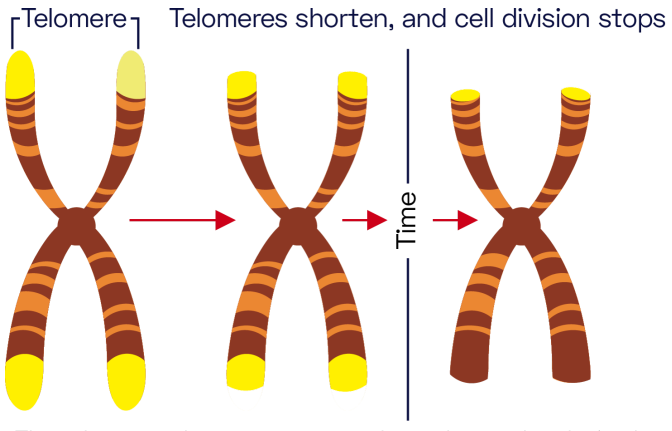
3/2013

Telomere length (Codd, 2013)

Aging

Study Summary

Identification of 5 novel genetic regions linked to the length of telomeres.



The telomeres shorten as we age, but telomere lenght is also influenced by genetics.

Your Result

Study Description

The DNA in our cells is tightly packed into structures called chromosomes. The sequences at the ends of chromosomes form caps known as telomeres. These structures help to protect our chromosomes much like how the plastic tips on shoelaces protect the ends from fraying. Over many cell divisions during which a cell's entire DNA is copied, telomeres progressively get shorter until the DNA gets damaged and the cells eventually die. It is estimated that up to 80% of an individual's telomere length is heritable.

View Full Report

11/2017

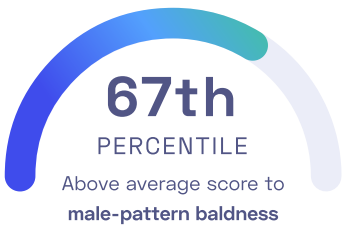
Male-pattern baldness (Pirastu, 2017)

Appearance Hormones

Study Summary

Identification of 71 genetic regions associated with male-pattern baldness.

Your Result



Study Description

Hair loss is an extremely common condition. In fact, by the age of 50, about 50% of men experience major hair thinning, ultimately leading to a bald region surrounded by hair in a horseshoe-like pattern. This is known as male-pattern baldness. Male-pattern baldness is a common, heritable disorder that is linked to *testosterone* levels and is often associated with serious health conditions, such as increased risk of prostate cancer, heart disease, and diabetes. However, the underlying genetic basis of MPB remains poorly understood.

Hairloss in a horseshoe-like pattern is characteristic for male-pattern baldness.

View Full Report

09/2021

Eosinophilic esophagitis (Chang, 2021)

Allergy Intestines Inflammation

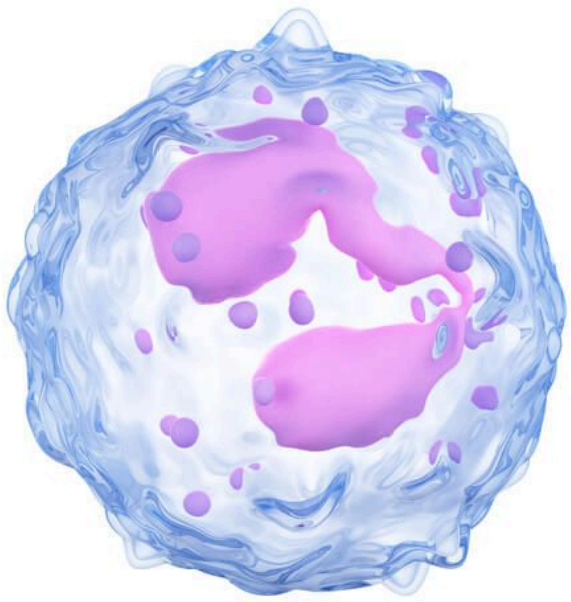
Study Summary

This report is based on a study that discovered 11 novel genetic variants associated with eosinophilic esophagitis.

Your Result

Study Description

Eosinophils are a type of white blood cell that help to fight off infections in the body by promoting inflammation. However, sometimes eosinophils can be damaging to the body. When eosinophils cause inflammation in the esophagus, the tube that connects the mouth to the stomach, a condition called eosinophilic esophagitis (EoE) can develop.



Eosinophils can protect against infections, but can also contribute to allergies.

View Full Report

6/2016

Lung cancer (McKay, 2017)

Lung Cancer

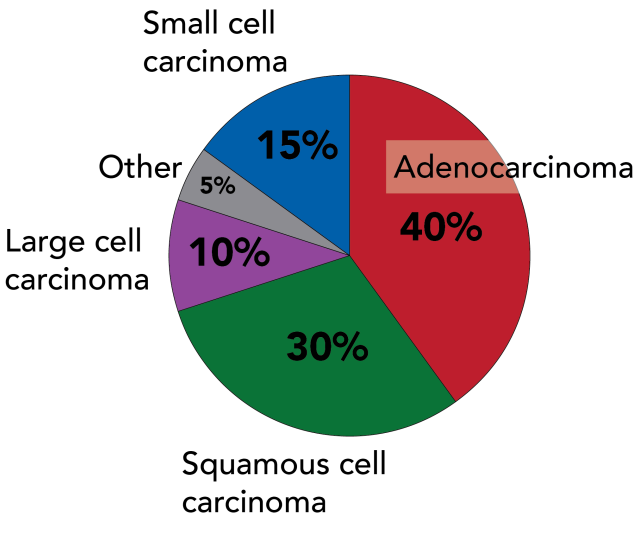
Study Summary

Identification of 4 novel genomic regions associated with lung cancer.

Your Result

Study Description

Lung cancer is a condition in which cells in the lungs divide uncontrollably. It is the leading cause of cancer-related deaths in the United States. There are two main types of lung cancer: small cell lung cancer and non-small cell cancer, with the latter comprising 80 to 85% of all lung cancers. Although smoking is the most common risk factor



associated with lung cancer, genetics is also thought to play a role.

Adenocarcinoma and squamous cell carcinoma are the most common types of lung cancer.

View Full Report

2/2020

Snoring (Campos, 2020)

Sleep Lungs

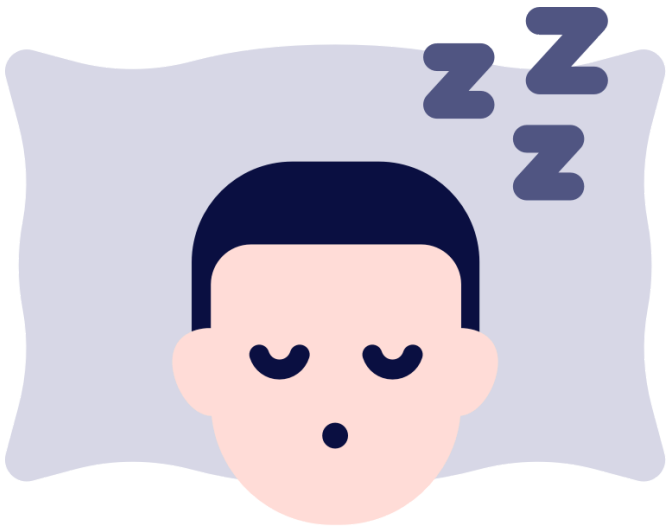
Study Summary

Identification of 42 genetic regions associated with snoring.

Your Result

Study Description

Snoring may disrupt your or your partner's sleep. It is incredibly common and affects more men (35-45%) than women (15-28%). Moreover, snoring may be a sign of a more serious condition known as obstructive *sleep apnea*, which is characterized by pauses in breathing due to blocked upper airways which decreases the amount of oxygen in the blood.



Snoring is often associated with a sleep disorder called obstructive sleep apnea.

View Full Report

10/2013

Sjögren's syndrome (Lessard, 2013)

Mouth Autoimmunity Eyes

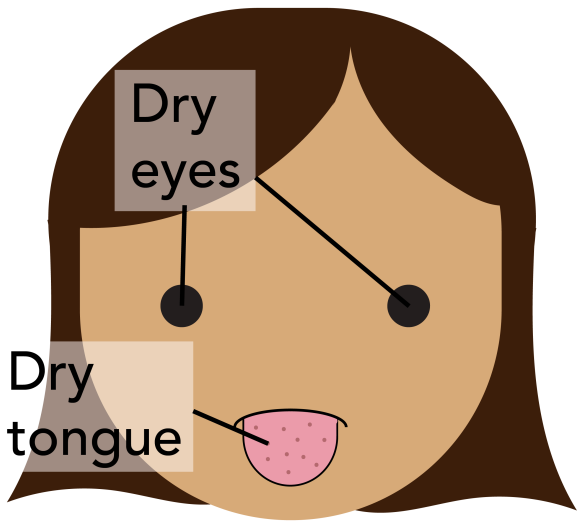
Study Summary

Identification of 7 genomic regions associated with Sjögren's syndrome risk.

Your Result

Study Description

Sjögren's syndrome is an *autoimmune* disorder characterized by dry eyes and dry mouth. It occurs when the body's immune system mistakenly attacks glands, like those that produce saliva and tears. As a result, these glands become inflamed and damaged. Up to 3 million individuals in the United States alone may be affected by Sjögren's syndrome. While Sjögren's syndrome can affect individuals at any age, it is most commonly diagnosed in older women. To better understand the genetics that may predispose a person to Sjögren's syndrome, this genome-wide association study examined nearly 8,400 individuals of European descent.



Dry eyes and tongue are typical symptoms of Sjögren's syndrome.

View Full Report

05/2017

Intelligence (Sniekers, 2017)

Intelligence Mind

Study Summary

Newly identified genetic variants in genes that regulate cell development and cell death are associated with higher intelligence.

Your Result

Study Description

Intelligence is associated with positive socio-economic and health-related outcomes. The more intelligent a person is, the more likely they are to lead long, healthy lives and less likely to experience negative life events like bankruptcy. To better understand the genetic influence of intelligence, this study analyzed data from multiple previous genome-wide association studies.

View Full Report

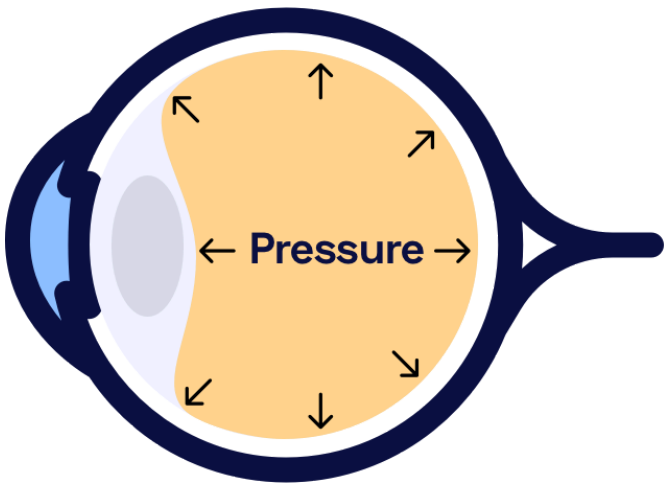
07/2018

Glaucoma (MacGregor, 2018)

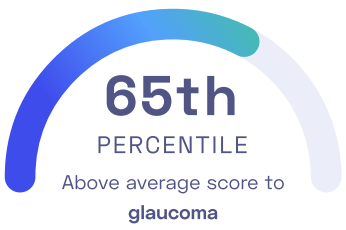
Eyes

Study Summary

Identification of over 24 genetic variants that correlate with the development of glaucoma.



Your Result



Study Description

Glaucoma is one of the leading causes of blindness in older adults, though it can occur at any age. It develops when the optic nerve that connects the eye to the brain becomes damaged, often as a result of increased pressure within the eye. One method of halting glaucoma progression is to decrease that pressure.

View Full Report

02/2020

Telomere length (Li, 2020)

Aging

Study Summary

Identification of 6 novel genomic regions associated with leukocyte telomere length (LTL).

Your Result

Study Description

Telomeres are protective caps at the ends of *chromosomes* which get shorter as our bodies age. Telomere length, typically measured in *leukocytes* from blood samples, can be used as a *biomarker* for aging and age-related diseases like coronary artery disease and some cancers.

View Full Report

04/2017

Birth weight (Horikoshi, 2017)

Pregnancy

Study Summary

Identification of 60 novel genetic variants associated with birth weight and correlated with later-life disease susceptibility.

Your Result

Study Description

Birth weight is influenced by the genetics of the mother and fetus, as well as environmental factors during pregnancy. To better understand the role of the foetal genome, this study analyzed the genomes of almost 154,000 individuals of European, African American, Chinese, Filipino, Surinamese, Turkish, and Moroccan ancestry.

View Full Report

2/2019

Autism (Grove, 2019)

Development Mind

Study Summary

Identification of novel genetic variants linked to autism spectrum disorder.

Your Result

Study Description

Autism spectrum disorder affects cognitive development in childhood, often leading to impaired social skills, compulsive behavior, and obsessive interests. While autism spectrum disorder is thought to be highly heritable, only a few genetic variants have been linked to it.

View Full Report

1/2017

☆ Extraversion (Lo, 2017)

Mind

Study Summary

Identification of novel genetic variants associated with personality traits as well as a genetic correlation between personality and predisposition to psychiatric disorders.

Your Result

Study Description

Personality is determined by environmental and genetic factors. It can be modeled according to five broad domains ("Big Five"): extraversion, neuroticism, agreeableness, conscientiousness, and openness.

View Full Report

01/2023

☆ Inflammatory and infectious upper respiratory diseases (Saarentaus, 2023)

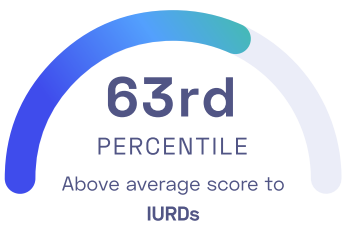
Allergy Inflammation Nose

Study Summary

This report is based on a study that discovered 20 genetic variants associated with susceptibility to inflammatory and infectious upper respiratory diseases (IURDs).

IURDs can be caused by allergens or viruses

Your Result



Study Description

Inflammatory and infectious upper respiratory diseases (IURDs) are a group of diseases that affect the upper respiratory tract, which includes the nose, sinuses, throat, and larynx. Some examples of IURDs include rhinitis (inflammation of the nasal lining), sinusitis (inflammation of the sinuses), and laryngitis (inflammation of the voice box). These conditions are often caused by irritants, allergies, or viruses, which can lead to symptoms such as congestion, runny nose, sore throat, and coughing. For some causes, such as viral infections, the symptoms may only last for a week, while other causes such as allergies can lead to chronic symptoms. Though IURDs can be caused by environment and lifestyle factors, genetics is known to contribute to an individual's susceptibility to developing these diseases.

View Full Report

5/2020

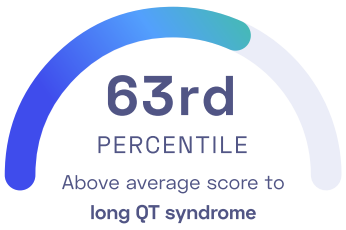
☆ Long QT syndrome (Lahrouchi, 2020)

Heart

Study Summary

Identification of 3 genomic regions associated with long QT syndrome.

Your Result



Study Description

The heartbeat is controlled by electrical impulses which normally pause between beats. During that pause, the heart muscles recharge for the next beat. If this recharge takes too long, an *electrocardiogram* will show a long QT interval. People with long QT intervals can be affected by a fast and chaotic heartbeat which may cause fainting, seizures, and even death.

View Full Report

6/2020

☆ Brain lesions (Armstrong, 2020)

Aging Brain

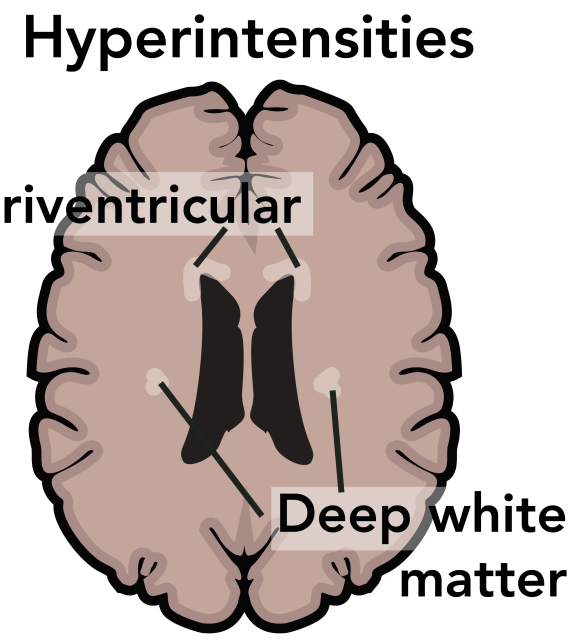
Study Summary

Discovery of 11 genomic regions associated with periventricular white matter hyperintensities that indicate brain lesions.

Your Result

Study Description

The brain is a delicate organ that requires constant blood flow. Strokes occur when a large part of the brain is no longer supplied with blood due to a major clot or a bleed - this leads to obvious brain damage. However smaller clots or bleeds might kill or damage brain cells, possibly causing dementia or movement issues. These might go undetected until the patient gets a brain scan: the damage shows up as a brighter white spot, called a hyperintensity.



Small brain lesions do not necessarily cause immediate symptoms.

View Full Report

01/2023

☆ Bitter taste perception (Gervis, 2023)

Taste Mouth

Study Summary

This report is based on a study that discovered 9 genetic variants associated with the perception of bitterness.

Your Result

Study Description

Bitter is one of the five basic tastes, along with sweet, salty, sour, and umami. It is often described as a sharp, unpleasant taste that is commonly associated with foods such as brussels sprouts, broccoli, and coffee. Bitter taste perception is controlled by taste receptors located on the tongue, which work to recognize and respond to bitter-tasting molecules in food and other substances. The ability to perceive bitter taste is highly variable among individuals, and is influenced by genetic factors as well as environmental and cultural factors. Some people are 'supertasters' and have a heightened sensitivity to bitter tastes, while others are 'non-tasters' and have a reduced ability to perceive bitterness.

Many people find foods such as broccoli and spinach to taste be bitter.

View Full Report

11/2023

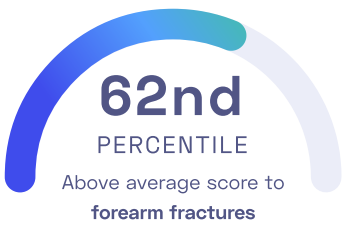
☆ Forearm fractures (Nethander, 2023)

Bones

Study Summary

This report is based on a study that discovered 43 genetic variants associated with forearm fractures.

Your Result



Study Description

The human body comprises 206 bones, among which the forearm bones are particularly prone to fractures. The forearm itself consists of two long bones, the radius and the ulna. Forearm fractures are considered the most common type of bone break, primarily due to the arm's instinctive role in breaking falls, which subjects the forearm to high-impact stress. Various factors contribute to the risk of forearm fractures. Age is a significant factor, with younger individuals tending to have higher fracture risks due to more physically active lifestyles, while older adults face increased risks due to weakened bone density. Additionally, lifestyle choices and general health, including nutritional habits and bone diseases like osteoporosis, can greatly influence the likelihood of experiencing a forearm fracture. Genetics is also a key component of the risk for experiencing forearm fractures.

Forearm fractures are the most common broken bones.

View Full Report

3/2021

Eye color (Simcoe, 2021)

Eyes Appearance

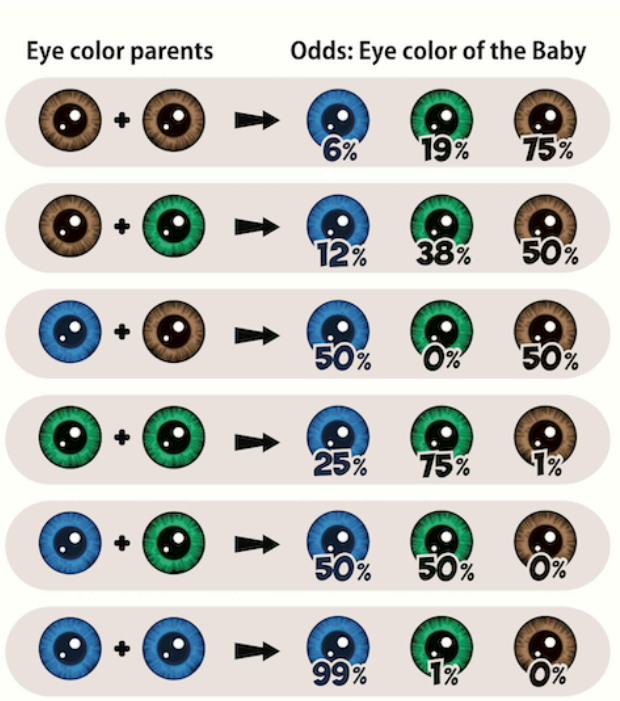
Study Summary

This report is based on a study that identified 115 genetic variants associated with eye color.

Your Result

Study Description

Much like a fingerprint, an individual's exact eye color is unique to them. To better understand the genetics that determine eye color, this genome-wide association study looked at nearly 200,000 individuals of European and Asian ancestry. The scientists identified 115 genetic variants associated with eye color, many of which are novel and have not been previously connected to pigmentation.



Prediction of a child's eye color based on the parents' eye color.

View Full Report

11/2020

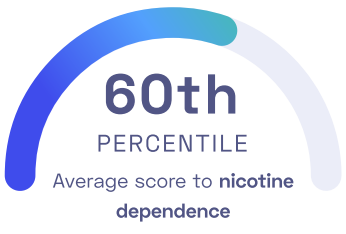
Nicotine dependence (Quach, 2020)

Addiction Behavior

Study Summary

Discovery of 5 genomic regions associated with nicotine dependence.

Your Result



Study Description

Nicotine is a chemical commonly found in tobacco products such as cigarettes, cigars, and e-cigarettes (vapes). Many smokers become dependent on nicotine. Signs of dependence include mood swings, anxiety, and restlessness following attempts to quit. Nicotine dependence is a highly heritable trait, but very few associated genomic regions have been discovered to date. This study examined over 58,000 smokers of European and African ancestry and identified 5 regions of the genome linked to nicotine dependence.

View Full Report

8/2020

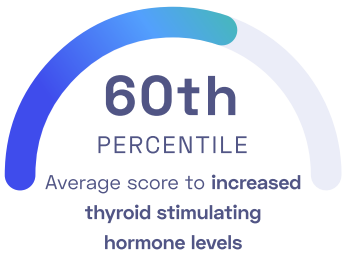
Thyroid stimulating hormone levels (Zhou, 2020)

Cancer Metabolism

Study Summary

Identification of 28 novel regions associated with thyroid stimulating *hormone* levels.

Your Result



Study Description

The thyroid is a butterfly-shaped gland located at the front of the neck. It plays a critical role in controlling the body's metabolism by regulating how fast we burn calories and many other things. The thyroid itself is controlled by the pituitary gland, which is located in the brain, and releases thyroid stimulating *hormone* (TSH) that spurs the thyroid into action. TSH levels are commonly used to diagnose a variety of thyroid disorders, including hypothyroidism, hyperthyroidism, and thyroid cancer.

View Full Report

08/2019

Knee pain (Meng, 2019)

Bones

Study Summary

Identification of 4 genetic variants associated with knee pain.

Your Result

Study Description

Your knee is the largest joint in the body, and it is critical for supporting your body weight as you walk, jog, stand upright, and bend down. Years of wear and tear can take a toll on your knees, causing knee pain. In fact, ~ 50% of individuals over the age of 50 experience knee pain.

View Full Report

09/2019

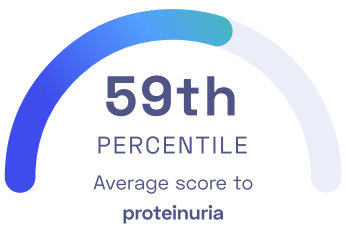
Proteinuria (Teumer, 2019)

Kidneys

Study Summary

Genome-wide identification of 68 variants associated with protein in urine, a key indicator of chronic kidney disease.

Your Result



Study Description

The kidneys have an important role of filtering blood to remove wastes from the body. When the kidneys become damaged, important proteins that normally stay in our blood can leak out into our urine. Increased urinary levels of proteins, called proteinuria, are used to diagnose chronic kidney disease. To date, only a few genetic risk factors contributing to heightened levels of protein in urine have been identified.

View Full Report

12/2013

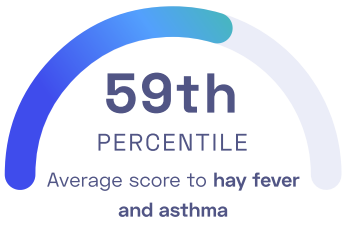
Hay fever and asthma (Ferreira, 2013)

Lungs Allergy

Study Summary

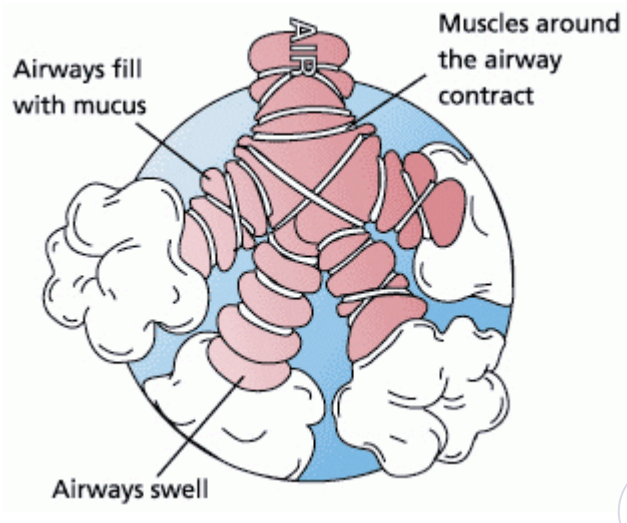
The same genetic variants are associated with hay fever and asthma.

Your Result



Study Description

Asthma is a condition in which your airways produce extra mucus and constrict, making it difficult to breathe. Hay fever is also known as seasonal allergies. Common symptoms include watery eyes, sneezing, and a runny nose. Previous studies have determined that asthma is often associated with hay fever.



View Full Report

4/2020

Computer use for leisure (van de Vegte, 2020)

Behavior

Study Summary

Discovery of 36 genomic regions associated with using a computer for leisure.

Your Result

Study Description

From playing games to binge-watching the latest show to reading the latest entries in the Nebula Research Library, computers can be a great way to spend leisure time. In fact, the average American spends roughly 90 minutes per day using a computer for leisure! To find genetic markers associated with a propensity to use a computer for leisure, this genome-wide association study examined the genetic data of over 420,000 individuals of European descent.

View Full Report

09/2019

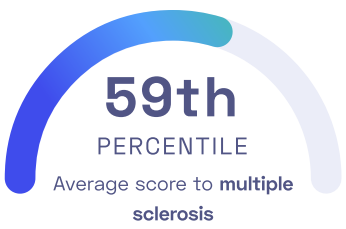
Multiple sclerosis (International Multiple Sclerosis Genetics Consortium, 2019)

Inflammation Autoimmunity

Study Summary

Identification of 233 novel variants associated with multiple sclerosis and the body's immune response system.

Your Result



Study Description

Multiple sclerosis is an autoimmune disease that leads to degeneration of the central nervous system. It's characterized by damage to the nerves that can lead to problems with vision, movement, and speech.

View Full Report

07/2023

Cardiorespiratory fitness (Cai, 2023)

Heart Fitness

Study Summary

This report is based on a study that discovered 14 genetic variants associated with cardiorespiratory fitness.

Your Result

Study Description

The cardiorespiratory system consists of the heart, lungs, and blood vessels, and it works to supply oxygen to the muscles during prolonged physical activity. A strong cardiorespiratory fitness level is vital because it promotes better overall health, reduces the risk of chronic diseases, and enhances mental well-being. Conversely, having low cardiorespiratory fitness can lead to increased risks of conditions like heart disease and obesity. A key measurement of cardiorespiratory fitness is 'V02 max', which represents the maximum amount of oxygen an individual can utilize during intense exercise.

Running is a great way to boost cardiorespiratory fitness

View Full Report

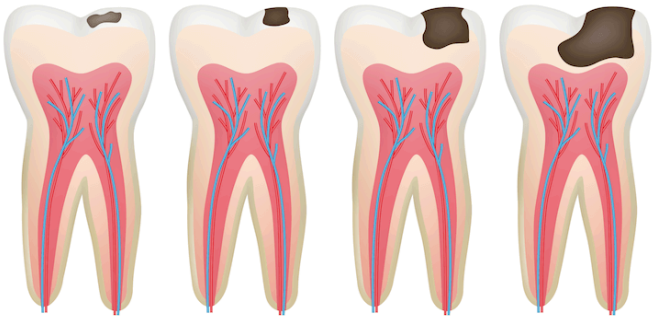
6/2019

Dental caries (Shungin, 2019)

Mouth Teeth

Study Summary

This report is based on a study that discovered 47 genetic variants associated with tooth decay and cavities.



Tooth cavities start small but if left untreated will destroy an entire tooth.

Your Result

Study Description

The enamel is the outermost covering of the teeth that acts as a tough shell. However, bacteria, excess sugar, and acid can degrade the enamel over time. This breakdown leads to the formation of cavities and the destruction of the inner parts of the tooth, a condition known as caries. While caries is usually caused by poor oral hygiene and dietary choices, research suggests that some individuals may have a genetic predisposition to cavity formation.

View Full Report

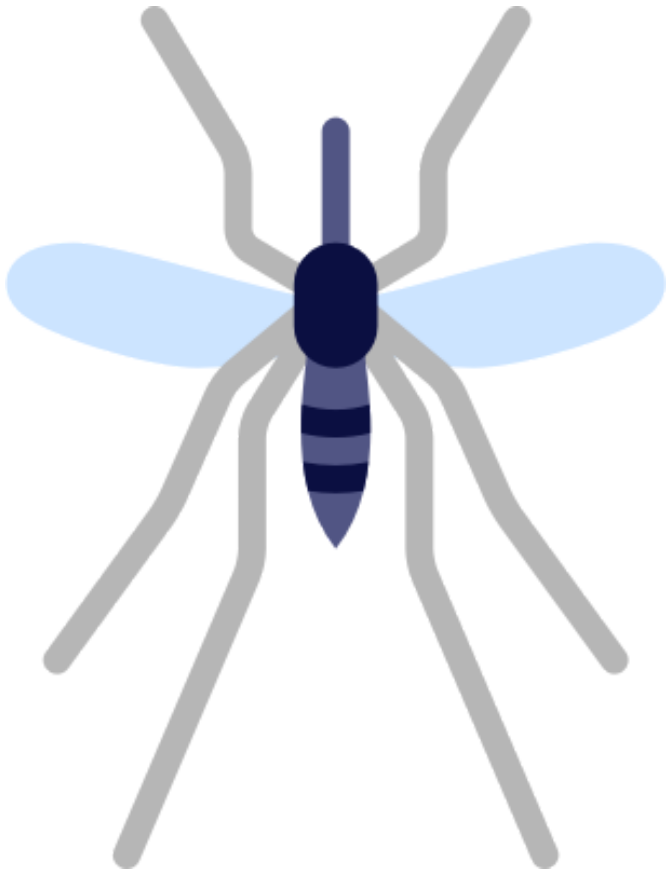
02/2017

☆ Mosquito bite frequency (Jones, 2017)

Infection Skin

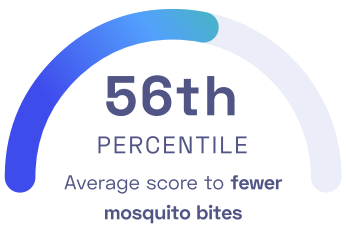
Study Summary

Discovery of 3 genetic variants that are associated with attractiveness to mosquitoes.



Mosquitos kill more humans than any other animal due to the diseases that they transmit.

Your Result



Study Description

There are many enjoyable aspects of spending time outdoors during the summer: campfires, stargazing, and picnics are just a few. Unfortunately, trying to enjoy those long, warm days also means having to contend with mosquitoes trying to feast on you. In addition to being a nuisance and causing itchy bites, mosquitoes are known to transmit many serious diseases, like malaria. But, have you ever wondered why it seems like mosquitoes seem to pick on certain people while leaving others alone?

View Full Report

4/2020

☆ Driving for leisure (van de Vegte, 2020)

Behavior

Study Summary

Identification of 4 genetic variants associated with driving for leisure.

Your Result

Study Description

Leisure sedentary behaviors, like watching Netflix and playing Animal Crossing, sure can be fun! In fact, the average adult in the United Kingdom spends an average of 5 hours per day on activities like this. However, research suggests that long periods of sedentary behaviors could increase an individual's risk for conditions like *coronary artery disease*.

View Full Report

10/2016

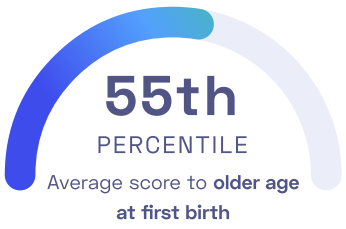
☆ Age at first birth (Barban, 2016)

Behavior Sex

Study Summary

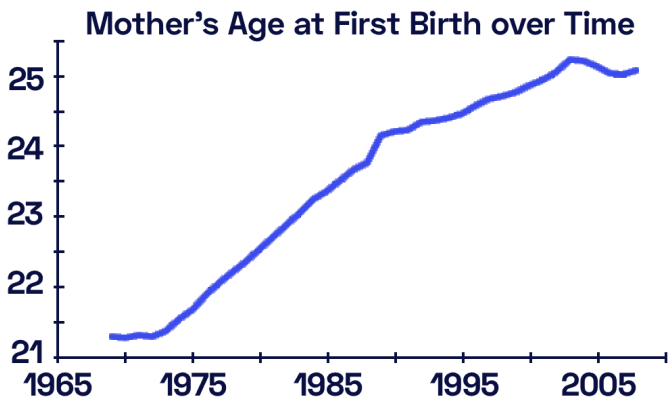
Discovery of 10 genetic variants associated with age at first birth.

Your Result



Study Description

Human reproductive behavior has been associated with infertility and neuropsychiatric disorders. While environmental factors (e.g. cultural and economics) are strongly linked to reproductive behavior, genetics is thought to explain up to 50%.



In the United States, the mother's age at first birth has been increasing over the past decades.

View Full Report

1/2020

Glaucoma (Craig, 2020)

Eyes

Study Summary

Identification of over 100 genetic variants associated with glaucoma.

Your Result

Study Description

Glaucoma is a medical condition characterized by damage to the eye's optic nerve usually due to increased pressure in the eye. Because no cost-effective way to screen for glaucoma currently exists, researchers explored the use of polygenic risk scores to determine an individual's risk.

View Full Report

09/2014

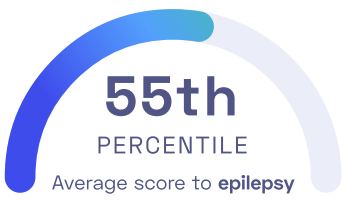
Epilepsy (International League Against Epilepsy Consortium on Complex Epilepsies, 2014)

Mind Brain

Study Summary

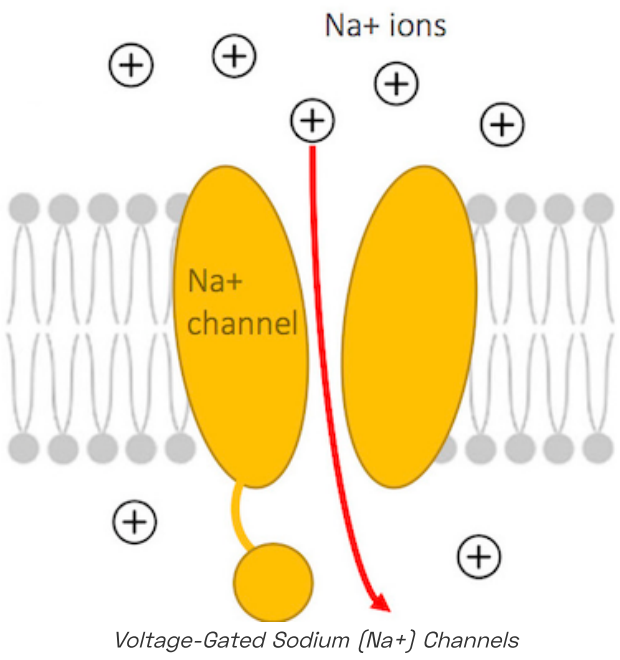
Genetic variants in the SCN1A and PCDH7 genes may influence the risk of epilepsy.

Your Result



Study Description

Epilepsy is a condition that causes unpredictable seizures and other health problems. This study looked at patients with general epilepsy as well as specific types of epilepsy (focal and unclassified) to determine which genetic variants are linked to the disease.



Voltage-Gated Sodium (Na+) Channels

View Full Report

2/2021

Addison's disease (Eriksson, 2021)

Autoimmunity Hormones

Study Summary

Discovery of 9 genetic variants associated with Addison's disease, a condition where the adrenal glands don't produce enough hormones.

Study Description

The adrenal glands are acorn-sized glands located on the top of the kidneys. They produce multiple hormones including cortisol, which helps regulate the body's metabolism and also plays a role in the response to stress. If the adrenal glands become damaged, they may not be able to produce sufficient amounts of hormones. This can cause Addison's disease, which has symptoms including fatigue, weakness, and low blood sugar. If left untreated, it can become life-threatening.

Your Result

54th
PERCENTILE
Average score to **Addison's disease**

Common symptoms of Addison's disease.

View Full Report

05/2016

Type 2 diabetes (Cook, 2016)

Blood Pancreas

Study Summary

Identification of a novel genetic locus associated with risk of developing type 2 diabetes.

Your Result

53rd
PERCENTILE
Average score to **type 2 diabetes**

Study Description

Glucose, also known as blood sugar, is found in many common foods. Insulin, a *hormone* produced by the pancreas, helps the cells of the body to intake glucose from the blood and utilize it as a source of energy. Type 2 diabetes occurs when the pancreas does not produce enough insulin, or the cells of the body do not respond to insulin. This results in high blood sugar levels that can cause damage to the nerves, blood vessels, kidneys, and other organs. While environmental factors, in particular diet, are risk factors for type 2 diabetes, a susceptibility can also be inherited.

View Full Report

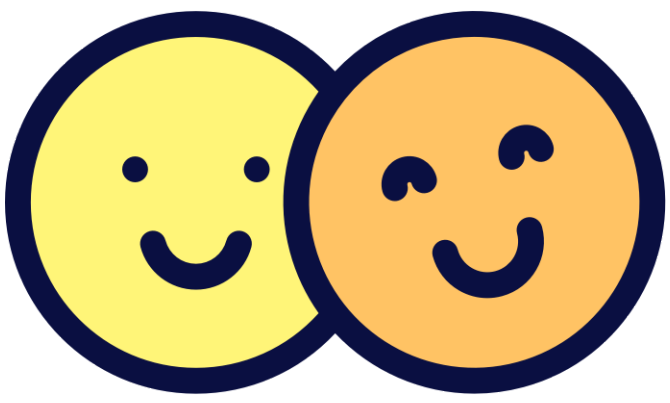
01/2019

Well-being (Baselmans, 2019)

Behavior Mind

Study Summary

Novel method for multivariate traits identifies 304 genetic variants associated with well-being.



Your Result

53rd
PERCENTILE
Average score to **increased well-being**

Study Description

Our well-being is a multivariate trait typically characterized by high life-satisfaction, positive affect, and absence of neuroticism as well as depressive symptoms. Determining genetic predispositions to our well-being can be difficult since a complex array of genetic variants contribute.

View Full Report

04/2024

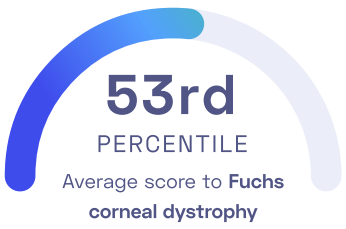
Corneal distrophy (Bryan R. Gorman, 2024)

Eyes Senses

Study Summary

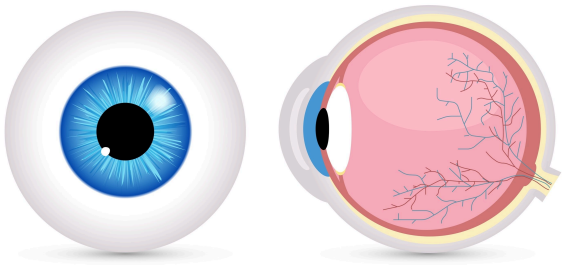
This report is based on a study that identified 12 variants associated with Fuchs corneal dystrophy, of which 8 are novel.

Your Result



Study Description

Fuchs endothelial corneal dystrophy is the most prevalent corneal dystrophy, affecting over 5% of individuals over 40 years old, and is the leading indication for corneal transplantation in the United States. With advancements in surgical and pharmaceutical treatments, early diagnosis of this disease based on genetic information will be critical for directing treatment and preventing irreversible damage. In Fuchs' dystrophy, fluid builds up in the clear layer (cornea) on the front of your eye, causing your cornea to swell and thicken. Normally, the cells lining the inside of the cornea (endothelial cells) help maintain a healthy balance of fluid within the cornea and prevent the cornea from swelling. But with Fuchs' dystrophy, the endothelial cells gradually die or do not work well, resulting in fluid buildup within the cornea. This causes corneal thickening and blurred vision. Fuchs' dystrophy is usually inherited. The genetic basis of the disease is complex - family members can be affected to varying degrees or not at all. Fuchs' dystrophy usually affects both eyes and can cause your vision to gradually worsen over years. Established risk factors for Fuchs endothelial corneal dystrophy are female sex and advanced age. Risk may also vary across populations.



Using glasses with photochromic lenses (lenses that darken in response to light) to aid with light sensitivity can help treat Fuchs corneal dystrophy.

View Full Report

5/2020

Left ventricular end-systolic volume (Pirruccello, 2020)

Heart

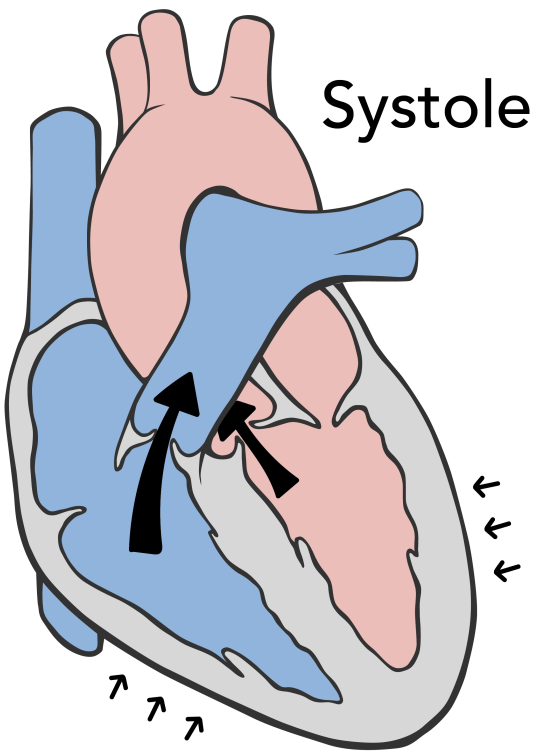
Study Summary

Identification of 28 genetic variants associated with the left ventricular end-*systolic* volume (LVESV).

Your Result

Study Description

The human heart is a muscle that pumps blood throughout the body. It consists of 4 chambers: 2 atria (left and right) and 2 ventricles (left and right). Blood that has been enriched with oxygen in the lungs enters the left atrium and then flows into the left ventricle from where it's pumped to all other parts of the body. Left ventricular end-*systolic* volume (LVESV) is the volume of blood that remains in the left ventricle at the end of a pump.



During the systole phase the heart muscle contracts, the heart chambers shrink and the blood is ejected.

View Full Report

04/2023

Irritable bowel syndrome (Alemany, 2023)

Intestines

Study Summary

This report is based on a study that discovered 42 genetic variants associated with irritable bowel syndrome (IBS).

Study Description

Irritable Bowel Syndrome (IBS) is a gastrointestinal disorder that affects the large intestine, causing symptoms such as abdominal pain, bloating, gas, diarrhea, and constipation. Although IBS can be uncomfortable and interfere with daily life, it does not cause inflammation or damage to the digestive tract. Certain factors have been shown to trigger or worsen IBS symptoms, such as stress, certain foods or drinks, hormonal fluctuations, and gastrointestinal infections. While the exact cause of IBS is not fully understood, several factors are thought to contribute to its development, including genetics.

Your Result

52nd
PERCENTILE
Average score to **IBS**

IBD can affect individuals of all ages

View Full Report

07/2023

Cluster headaches (Winsvold, 2023)

Nerves Eyes

Study Summary

This report is based on a study that discovered 8 genetic variants associated with cluster headaches.

Cluster headaches often affect one side of the head, specifically around the eye.

Your Result

51st
PERCENTILE
Average score to **cluster headaches**

Study Description

In general, headaches occur when sensitive nerves and blood vessels in our head and neck become irritated or disturbed. There are different types of headaches, and one specific type is called 'cluster headaches.' Cluster headaches are a severe and intense form of headache known for their recurring nature, often occurring at the same time of day or night for several weeks or months, followed by periods of relief. Symptoms of cluster headaches include an excruciating pain on one side of the head, often near the eye. Many individuals that suffer from cluster headaches also experience a stuffy or runny nose on the same side as the headache, as well as red or watery eyes. Certain risk factors have been shown to leave individuals more likely to experience cluster headaches, including age and behaviors such as smoking and alcohol consumption.

View Full Report

09/2012

Osteoarthritis (arcOGEN Consortium, 2012)

Autoimmunity Joints

Study Summary

A genetic variant in the GNL3 gene may increase the risk of osteoarthritis.

Your Result

50th
PERCENTILE
Average score to **osteoarthritis**

Study Description

Osteoarthritis is the most common form of arthritis worldwide. It is also called "wear and tear" arthritis and occurs when the *cartilage* between joints breaks down, leading to pain, stiffness, and swelling. Osteoarthritis is known to have a heritable component that contributes to risk, but the genetic factors are not well defined.

View Full Report

03/2016

Chronic lymphocytic leukemia (Berndt, 2016)

Cancer Blood

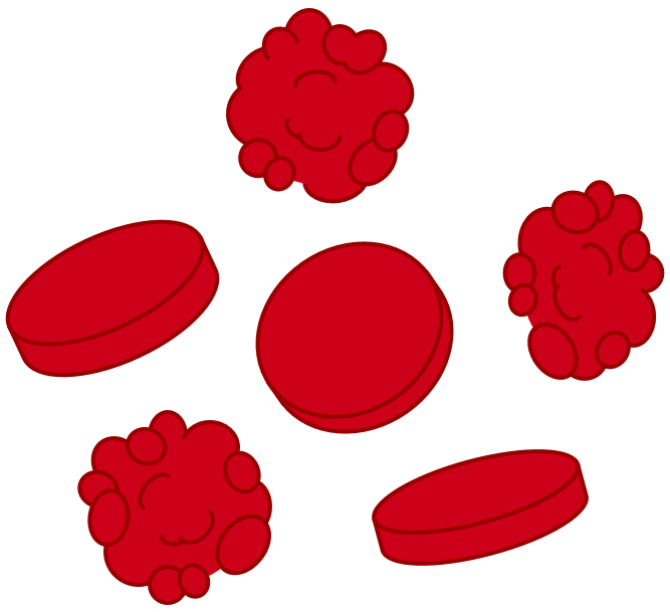
Study Summary

Discovery of novel genetic variants associated with an increased risk of chronic lymphocytic leukemia.

Your Result

Study Description

Chronic lymphocytic leukemia (CLL) is a form of cancer that is characterized by an overproduction of lymphocytes (a type of white blood cells) that makes it difficult for the other blood cells to function properly.



View Full Report

1/2020

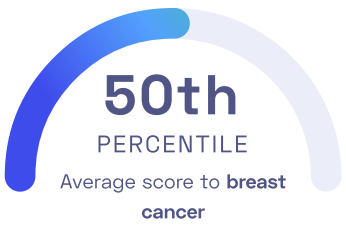
Breast cancer (Fachal, 2020)

Cancer Breasts

Study Summary

Identification of 206 genetic variants associated with a risk of developing breast cancer.

Your Result



Study Description

Breast cancer is currently the second most common cancer among women (behind skin cancer), affecting nearly 1 in 8 during their lifetime. Nearly 10% of all cases of breast cancer are thought to be hereditary.

View Full Report

07/2021

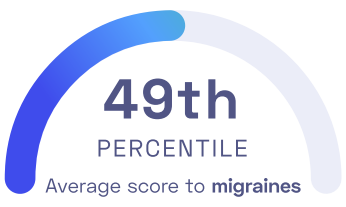
Migraines (Choquet, 2021)

Brain Mind

Study Summary

This report is based on a study that discovered 73 genetic variants associated with migraines.

Your Result



Study Description

A migraine is a headache characterized by throbbing head pain, usually located on one side of the head. It is often accompanied by nausea, vision troubles, and sensitivity to light and/or sound. Women are three times more likely to experience migraines than men. To identify genetic factors linked to migraines, this study examined almost 900,000 individuals of European ancestry.

Migraine pain is usually located on one side of the head.

View Full Report

07/2018

Hay fever (Waage, 2018)

Nose Allergy

Study Summary

Discovery of 41 genetic risk variants associated with hay fever.

Your Result

Study Description

Achoo! When allergens cause inflammation in our sinuses, we begin to sneeze, get watery eyes, and runny noses. This condition, known as hay fever, is the most common form of allergy, affecting 400 million people worldwide. Overall, heritability may explain up to 65% of variation between people in developing hay fever.

View Full Report

9/2020

Left-handedness (Cuellar-Partida, 2020)

Brain

Study Summary

Identification of 41 genetic variants associated with left-handedness.

Your Result

Study Description

Handedness influences how we write, throw a ball and perform many other common activities. Right-handedness is much more common, with only 1 in 10 people being a lefty. Genetics appears to play a role in determining which hand is dominant, perhaps accounting for a quarter of all variation in handedness.

View Full Report

10/2022

Intracranial volume (Nawaz, 2022)

Brain

Study Summary

This report is based on a study that discovered 64 genetic variants associated with intracranial volume.

Your Result

Study Description

Intracranial volume is the measure of the size of the brain and its protective layers in the skull. The average intracranial volume is 1.6 liters for males, and 1.4 liters for females. Interestingly, various diseases have been associated with changes in intracranial volume. These include ADHD, which has been associated with a reduced intracranial volume, and Parkinson's disease, which is associated with increased intracranial volume. To identify genetic variants associated with intracranial volume, this study examined over 79,000 individuals of European ancestry.

The average intracranial volume is 1.5 liters.

View Full Report

10/2021

Fibromuscular dysplasia (Georges, 2021)

Vasculature

Study Summary

This report is based on a study that discovered 4 genetic variants associated with fibromuscular dysplasia.

Study Description

The body's vasculature is a complex network of highways that deliver blood and other nutrients to all corners of the body. In particular, the vasculature consists of arteries and veins. Arteries carry oxygen-rich blood from the heart to the body's tissues, while veins return the blood to the heart. For some, the body's arteries can narrow or bulge, potentially causing a block or reduction in blood flow to the organs. This condition, known as fibromuscular dysplasia (FMD), can eventually lead to dizziness, chronic headaches, numbness, vision changes, and other issues.

Your Result

48th
PERCENTILE
Average score to **fibromuscular dysplasia**

Veins and arteries make up our vasculature.

View Full Report

1/2020

Atrial fibrillation (Okubo, 2020)

Heart

Study Summary

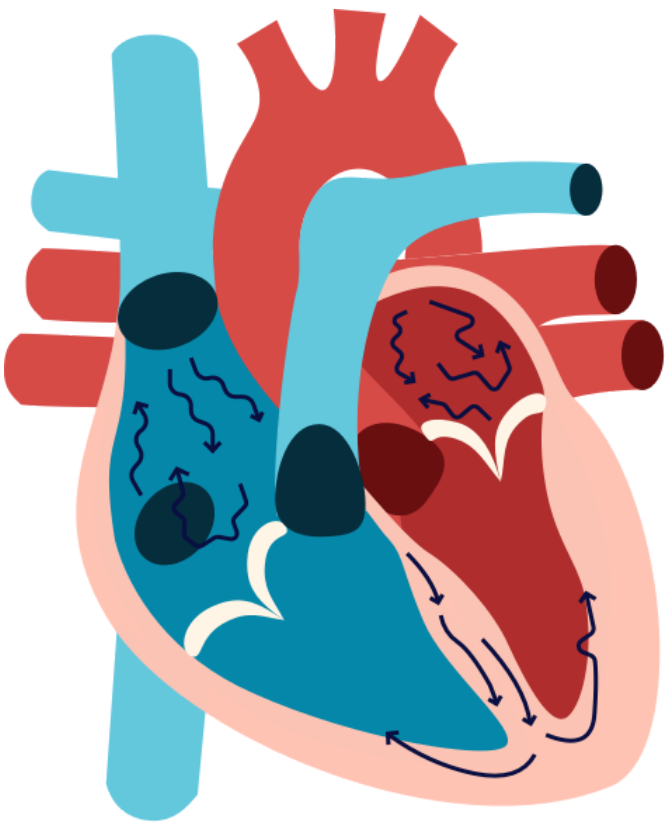
Prediction of atrial fibrillation risk using 5 genetic variants.

Your Result

47th
PERCENTILE
Average score to **atrial fibrillation**

Study Description

Atrial fibrillation (AFib) is an irregular heartbeat that is much faster than normal. It occurs when the two upper chambers of the heart beat out of sync with the lower chambers. This typically causes weakness and shortness of breath. This study sought to combine genetic and clinical factors to predict the risk of AFib in over 1000 individuals of Japanese descent.



Atrial fibrilation results in a turbulent blood flow inside the heart.

View Full Report

6/2016

Lung adenocarcinoma (McKay, 2017)

Cancer Lung

Study Summary

Identification of 6 novel genomic regions associated with lung adenocarcinoma.

Your Result

47th
PERCENTILE
Average score to **lung adenocarcinoma**

Study Description

Lung cancer is a condition in which cells in the lungs divide uncontrollably. Lung adenocarcinoma is a subtype that accounts for ~40% of all lung cancers. It is caused by mutations in mucus-producing glandular cells of the lungs. On average, lung adenocarcinoma tends to grow more slowly than other subtypes of lung cancer.

View Full Report

01/2024

Depression (Meng, 2024)

Brain Mind

Study Summary

This report is based on a study that discovered 190 genetic variants associated with depression.

Your Result

Study Description

Major depression, also known as clinical depression, is a serious mental health disorder characterized by persistent feelings of sadness, hopelessness, and a lack of interest in daily activities. This condition significantly impacts the brain, altering brain chemistry and the function of certain neural pathways, particularly those related to mood, stress, and emotional processing. Symptoms of major depression vary widely but commonly include a deep sense of sadness, changes in appetite or weight, difficulty sleeping or oversleeping, fatigue, feelings of worthlessness or excessive guilt, and difficulty concentrating. Physically, major depression can also have profound effects. Over time, it may lead to a weakened immune system, making the body more susceptible to infections and diseases. It can also cause or exacerbate chronic conditions like heart disease, and lead to changes in weight and sleep patterns, which can have a variety of health impacts.

Depression can result in chronic sadness.

View Full Report

10/2019

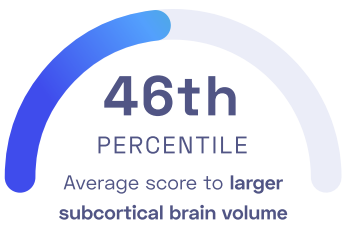
☆ Subcortical brain volume (Satizabal, 2019).

Brain

Study Summary

Identification of 48 genetic loci, including 40 novel loci, associated with the brain's subcortical volume.

Your Result



Study Description

The brain is a complex organ made up of many regions that have different functions allowing us to talk, walk, think, breathe, and do nearly everything else required to live. One set of brain regions residing deep within the brain are called 'subcortical structures'. These structures, which include the amygdala, pituitary gland, brainstem, and others, play critical roles in learning, memory, and emotion. However, changes of subcortical structures are also linked with various cognitive and psychological disorders.

View Full Report

1/2021

☆ Avoidance in PTSD (Stein, 2021)

Mind Behavior

Study Summary

Identification of 12 variants associated with avoidance, a symptom of post-traumatic stress disorder.

Your Result

Study Description

Post-traumatic stress disorder (PTSD) is a mental health condition caused by experiencing a traumatic event. Though many people associate PTSD with war veterans, anyone can experience the disorder. Common symptoms of PTSD include flashbacks and nightmares related to the traumatic event, avoidance of particular situations, and being easily startled. Avoiding particular events or experiences as part of PTSD symptoms is referred to as "avoidance" behavior.

Avoidance of activities or places is common in PTSD patients.

View Full Report

07/2023

☆ Critical COVID-19 (Pairo-Castineira, 2023)

Infection Lungs

Study Summary

This report is based on a study that discovered 49 genetic variants associated with critical illness in COVID-19.

Your Result

Study Description

COVID-19 is the disease caused by the SARS-CoV-2 virus. It is a respiratory illness that can cause many symptoms, including fever, cough, and shortness of breath. Many individuals who experience COVID-19 have relatively mild cases, often resolving without much difficulty. In some critical cases, COVID-19 can become severe, potentially leading to pneumonia, kidney failure, and death. Across the world, there have been nearly 780 million cases of COVID-19 since the virus was first detected in late 2019. Studies have identified that some of these individuals may be more likely to develop critical COVID-19 due to age or underlying health conditions, but genetics also appear to influence the risk of severe COVID-19.

Some individuals are more susceptible to severe COVID-19

View Full Report

10/2023

Heart rate variability (Tegegne, 2023)

Heart

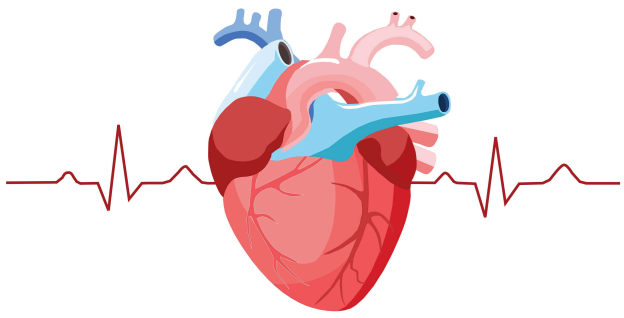
Study Summary

This report is based on a study that discovered 16 genetic variants associated with heart rate variability.

Your Result

Study Description

The heart plays a crucial role in our body, primarily responsible for pumping blood to supply oxygen and nutrients to every cell. While it might seem like the heart beats with a consistent rhythm, there are actually slight variations in the time between each heartbeat. This phenomenon is known as heart rate variability (HRV). There's no strict 'average' HRV because the trait can vary widely among individuals, but in general, a higher HRV is associated with better cardiovascular health and adaptability to stress. Conversely, a low HRV can be indicative of stress, fatigue, or even underlying health conditions. The differences in HRV between individuals can be attributed to a mix of factors, including age, genetics, physical fitness, and overall stress levels, making each person's HRV a unique reflection of their health and well-being.



A higher HRV is generally associated with better heart health.

View Full Report

12/2018

Varicose veins (Fukaya, 2018)

Vasculature

Study Summary

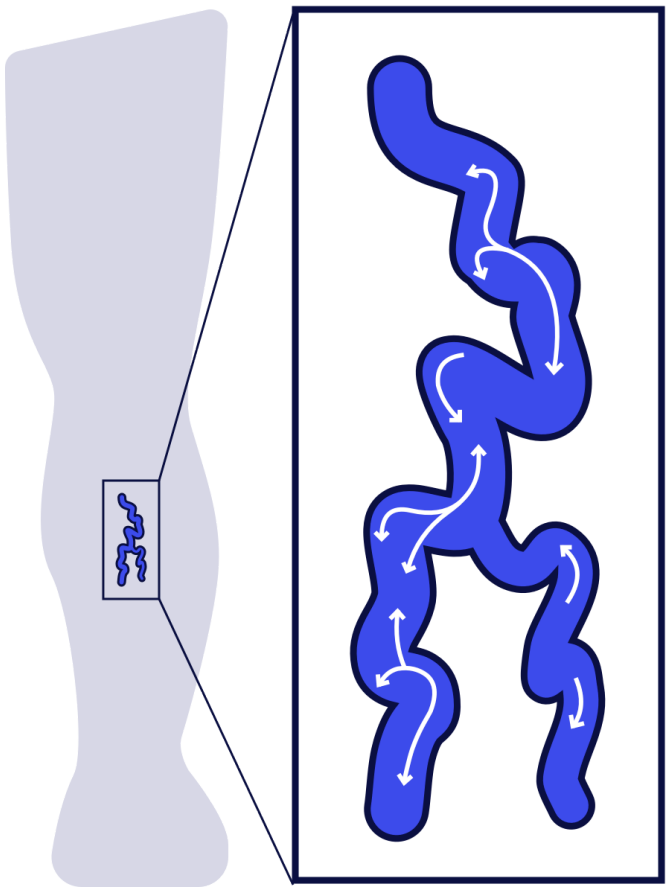
Identification of 30 novel genetic variants linked with the development of varicose *vein*s.

Study Description

Varicose *vein*s are a condition characterized by swollen and twisted *vein*s that occurs when blood pools, typically in the legs. Though varicose *vein*s are sometimes considered a cosmetic concern, they can also increase the risk of blood clots.

Your Result

46th
PERCENTILE
Average score to **varicose veins**



View Full Report

10/2016

Essential tremor (Müller, 2016)

Brain Muscles

Study Summary

Identification of 3 genetic variants associated with essential tremor.

Your Result

46th
PERCENTILE
Average score to **essential tremor**

Study Description

Essential tremor is a neurological disorder characterized by involuntary shaking, especially of the hands, legs, and head. Essential tremor occurs when one tries to use the affected muscles during voluntary movements such as eating and writing. This differentiates the essential tremor from Parkinson's disease that causes shaking of resting muscles.

View Full Report

6/2020

Corneal thickness (Choquet, 2020)

Eyes

Study Summary

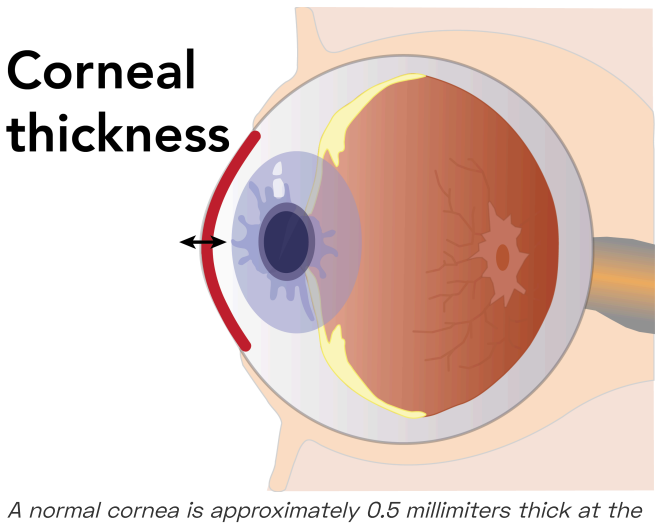
Identification of over 40 new genetic variants associated with central corneal thickness, which is linked to multiple disorders of the eye.

Your Result

45th
PERCENTILE
Average score to **thicker cornea**

Study Description

The cornea acts like a "window" for the eye, allowing light to enter while also serving as a barrier against foreign irritants. The thickness of the cornea is a well-studied indicator of eye health, and reduced thickness has been linked to diseases of the eye such as *glaucoma*. This genome-wide association study aimed to identify genomic regions linked to the thickness at the center of the cornea.



A normal cornea is approximately 0.5 millimiters thick at the center.

View Full Report

3/2012

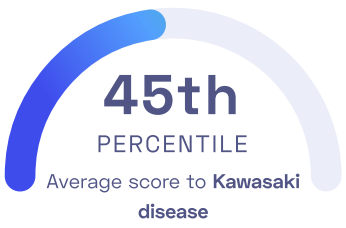
Kawasaki disease (Onouchi, 2012)

Inflammation Vasculature

Study Summary

Identification of 3 genetic variants associated with Kawasaki disease, which causes inflammation and swelling of blood vessels.

Your Result



Study Description

Kawasaki disease is characterized by sudden inflammation and swelling of blood vessels throughout the body that typically persists for several days. It primarily affects children under the age of 5, but cases of Kawasaki disease in adults have also been described. A typical symptom of Kawasaki disease is redness that affects various parts of the body including eyes, tongue, and skin.

Redness of eyes, lips and tongue are characteristic symptoms of Kawasaki disease.

View Full Report

06/2023

Immunoglobulin A nephropathy (Kiryluk, 2023)

Kidneys

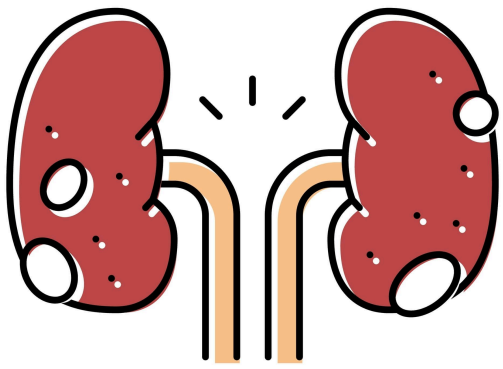
Study Summary

This report is based on a study that discovered 30 genetic variants associated with immunoglobulin A nephropathy (IgAN).

Your Result

Study Description

The kidneys are vital organs responsible for several important functions in the body, including filtering waste from the blood and regulating water and electrolyte balances. Immunoglobulin A (IgA) nephropathy, also known as Berger's disease, is a kidney disorder where the immune system mistakenly attacks the kidneys. IgA is a type of antibody, a protein that the body produces to protect itself from infections. IgA nephropathy is caused by IgA deposits building up in the kidneys, causing inflammation and damaging the kidney filters. Over time, affected individuals may experience blood in the urine, foamy urine, high blood pressure, and swelling of the hands and feet.



The kidneys are bean-shaped organs that filter waste products.

View Full Report

10/2020

Myeloproliferative neoplasms (Bao, 2020)

Blood Cancer

Study Summary

Discovery of 17 regions of the genome associated with a risk of myeloproliferative neoplasms, a type of blood cancer.

Study Description

Blood cells, including red blood cells, white blood cells, and platelets, are produced in the bone marrow, which is a spongy tissue inside bones. Myeloproliferative neoplasms are a type of blood cancer that occurs when the bone marrow overproduces blood stem cells. Common symptoms of myeloproliferative neoplasms include feelings of weakness, tiredness, headaches, and fever.

Your Result

View Full Report

04/2017

Vitiligo (Jin, 2017)

Autoimmunity Skin

Study Summary

Identification of 23 novel genetic variants associated with vitiligo, an autoimmune disease that causes loss of skin color.

Your Result

Study Description

The color of a person's skin is determined by the amount of melanin, a dark pigment that is produced by cells called melanocytes. Vitiligo is a rare disease characterized by the destruction of melanocytes by the body's own immune system. This causes patches of skin to lose their color.

Vitiligo is characterized by patches of discolored skin.

View Full Report

03/2013

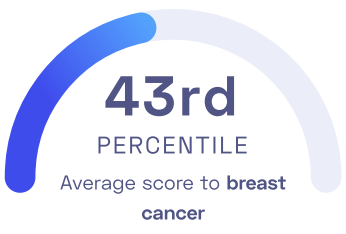
Breast cancer (Michailidou, 2013)

Breasts Cancer

Study Summary

41 novel genetic variants were determined to be associated with breast cancer, most of which are found in genes that play a role in cell death and differentiation.

Your Result



Study Description

Breast cancer is the most common cancer for women worldwide. To identify genetic factors that correlate with a risk of developing breast cancer, this study analyzed genetic data from 9 previous genome-wide association studies.

View Full Report

12/2022

Tinnitus (Bhatt, 2022)

Ears Brain

Study Summary

This report is based on a study that discovered 16 genetic variants associated with tinnitus.

Study Description

Hearing is critical to how we perceive the world around us and communicate with others. Some people may experience a ringing, buzzing, or pulsating noise that seems to be coming from inside their ear, with no outside source. This condition, known as tinnitus, affects around 1 in 10 people annually. Tinnitus can be short-lived, occurring after attending a loud concert or when taking certain medications, but for some tinnitus can become a chronic condition. To identify genetic variants associated with an individual's propensity to experience tinnitus, this study examined over 130,000 individuals of European ancestry.

Your Result

Tinnitus causes ringing or buzzing in the ears.

View Full Report

09/2021

Posttraumatic stress disorder (Maihofer, 2021)

Mind Behavior

Study Summary

This report is based on a study that discovered 5 genetic variants associated with posttraumatic stress disorder.

Your Result

Study Description

Posttraumatic stress disorder (PTSD) is a condition that affects individuals who have experienced a traumatic event. Though commonly associated with experiencing wars, PTSD can also result from experiencing events such as natural disasters, car accidents, sexual violence, and many others. Individuals with PTSD often have disturbing thoughts and feelings related to their traumatic experiences. These persist long after the traumatic event and are often relived through flashbacks or nightmares.

PTSD can severely impact mental and physical health.

View Full Report

05/2021

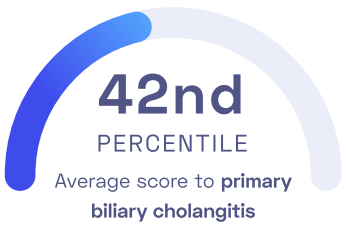
Primary biliary cholangitis (Cordell, 2021)

Liver Autoimmunity

Study Summary

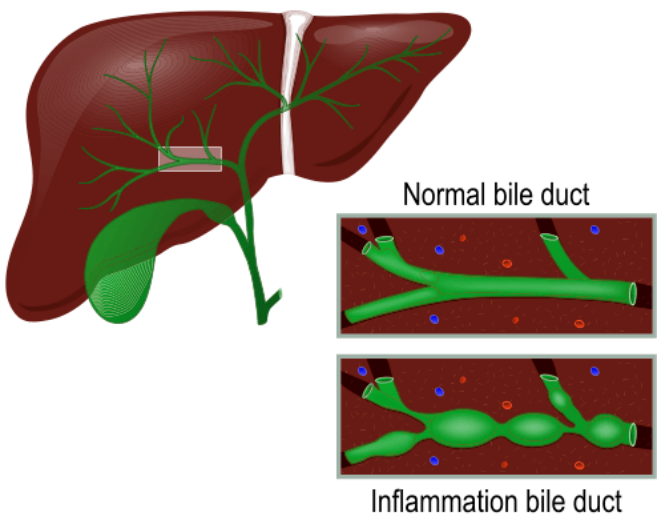
This report is based on a study that discovered 57 genetic variants associated with primary biliary cholangitis, a chronic disease of the liver.

Your Result



Study Description

The liver is a large, football-shaped organ that sits on the right side of the abdomen. It performs many functions for the body, including removing toxins from the blood, assisting in digestion, and processing blood sugar. Primary biliary cholangitis (PBC) is an autoimmune disease that causes progressive destruction of the bile ducts of the liver. This leads to the accumulation of bile in the liver which results in further liver damage. Symptoms include abdominal pain, fatigue, and skin yellowing. This study sought to identify genetic variants associated with the risk of PBC by examining genetic data of over 30,000 individuals of European and East Asian ancestry.



Primary biliary cholangitis causes inflammtion and obstruction of bile ducts in the liver.

View Full Report

09/2018

Chronic back pain (Suri, 2018)

Spine Muscles

Study Summary

This report is based on a study that discovered 4 genetic variants associated with chronic back pain.

Your Result

Study Description

The back comprises bones called vertebrae, as well as cushiony discs between them, muscles, ligaments, and nerves. Many individuals experience back pain at some point in their lives. In fact, next to respiratory infections, back pain is the most common reason why people visit their doctors. For some, back pain is long-lasting, or chronic, which can reduce an affected individual's ability to perform daily activities. Various issues, including worn-out discs, strained muscles from heavy lifting, arthritis, or bad posture can cause chronic back pain.

Nearly 80% of individuals experience back pain at some point.

View Full Report

07/2019

Anorexia (Watson, 2019)

Behavior Mind

Study Summary

Identification of genetic variants associated with anorexia nervosa are also linked to a low body-mass index.

Your Result

Study Description

Anorexia nervosa is a common eating disorder characterized by weight loss or the inability to maintain a healthy body weight. Many individuals with this condition have a distorted body image of themselves. Few genetic variants correlated with a predisposition to anorexia nervosa have been identified.

View Full Report

2/2021

Primary open-angle glaucoma (Gharahkhani, 2021)

Eyes

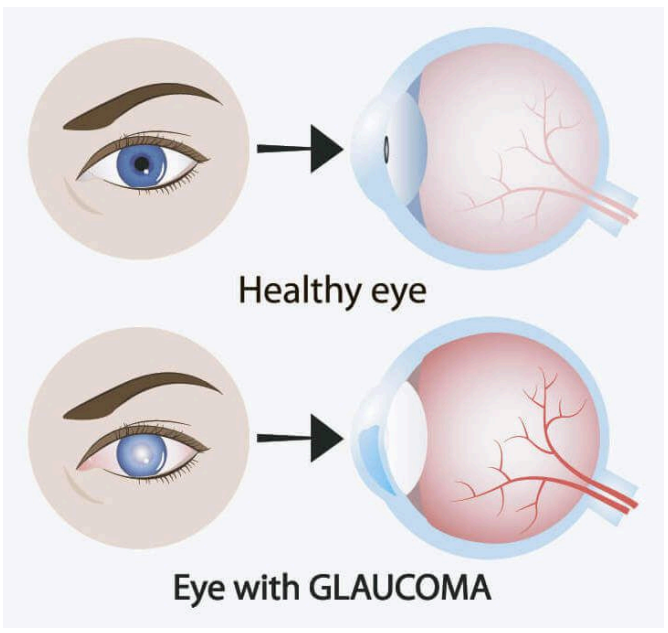
Study Summary

Identification of 127 genetic variants associated with primary open-angle glaucoma, a leading cause of blindness.

Your Result

Study Description

Visual information is relayed from the eyes to the brain through a communication line known as the optic nerve. Glaucoma describes a group of eye conditions where the optic nerve becomes damaged, which leads to progressive vision loss and eventually complete blindness. This study sought to discover genetic variants associated with primary open-angle glaucoma (POAG), a highly heritable glaucoma subtype.



Glaucoma is typically caused by a blockage of a drainage canal in the eye which leads to fluid build up, increase in eye pressure and damage to the optic nerve.

View Full Report

5/2021

Bipolar disorder (Mullins, 2021)

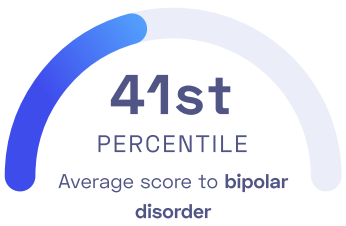
Brain Mind Behavior

Study Summary

This report is based on a study that discovered 64 genetic variants associated with bipolar disorder.

Bipolar disorder is characterized by alternating manic and depressive episodes.

Your Result



Study Description

Bipolar disorder is a mental health condition that causes sharp shifts in an individual's mood, energy, and activity. The condition is characterized by periods of manic episodes, where the patient may feel energetic and irritable, and periods of depressive episodes, where the same person may feel down and hopeless. Like many mental health conditions, genetic factors are known to contribute to an individual's risk of developing bipolar disorder.

View Full Report

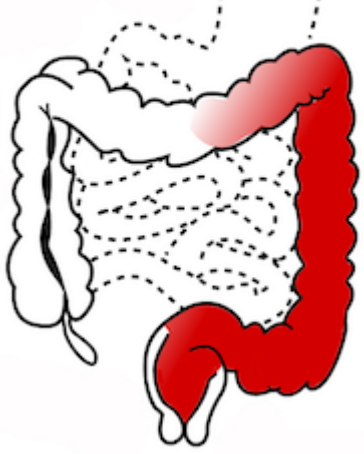
11/2009

Ulcerative colitis (UK IBD Genetics Consortium, 2009)

Autoimmunity Intestines

Study Summary

Risk of ulcerative colitis may be influenced by variants that play a role in *cell adhesion*.



Your Result

Study Description

Ulcerative colitis occurs in the large intestine when the lining of the colon becomes inflamed, forming ulcers (open sores). To better understand the genetic risk factors that may predispose a person to ulcerative colitis, this genome-wide association study examined 15,554 individuals of European descent.

View Full Report

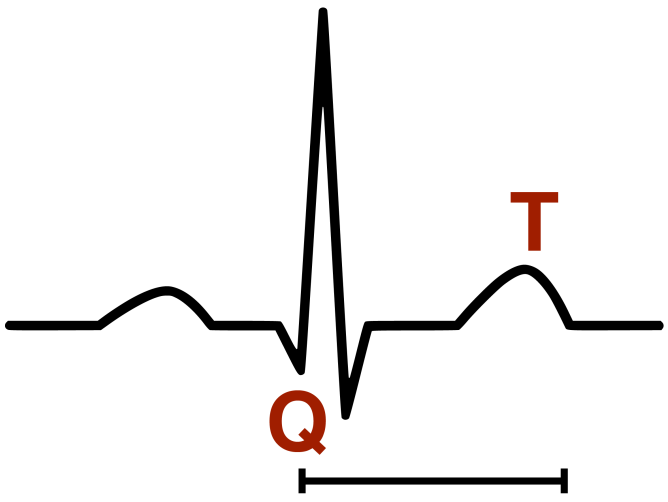
6/2014

QT interval (Arking, 2014)

Heart

Study Summary

Identification of 22 novel genomic regions associated with QT interval duration, which is the time it takes for the heart to recharge for the next beat.



The QT interval is the time between the Q and the T wave in an electrocardiogram (ECG).

Your Result

Study Description

An electrical wave travels through your heart every time it beats. After every heartbeat, your heart needs time to repolarize, or "recharge," before the next beat. This time is known as the QT interval. The longer the QT interval, the longer it takes your heart to recharge between heartbeats. Overly long QT intervals are a risk factor for heart-related conditions, such as abnormal heartbeats and sudden cardiac death.

View Full Report

1/2021

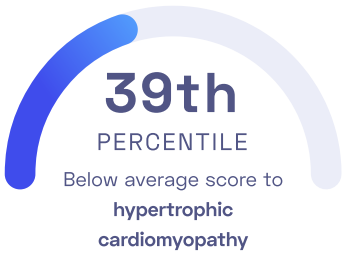
Hypertrophic cardiomyopathy (Harper, 2021)

Heart

Study Summary

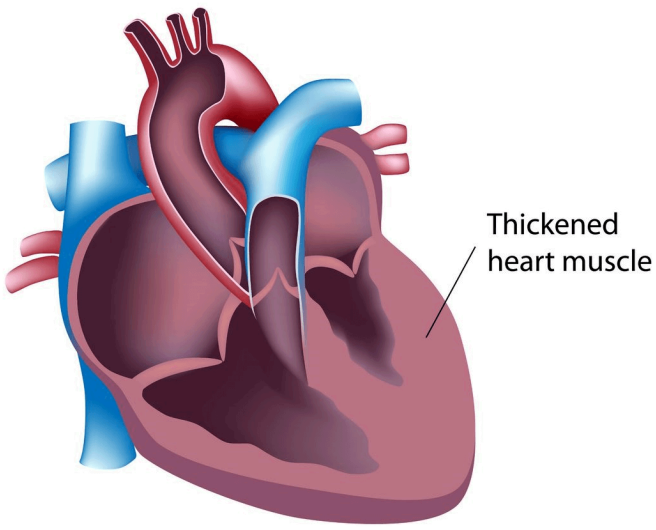
Discovery of 12 regions of the genome associated with hypertrophic cardiomyopathy, a disease that causes the heart's walls to become thicker than normal.

Your Result



Study Description

The heart pumps blood throughout the body, supplying oxygen and nutrients that are critical to sustaining life. Hypertrophic cardiomyopathy (HCM) is a condition that develops when the walls of the heart become thicker, which in turn reduces the amount of blood that can be pumped with each heartbeat. HCM can cause chest pain and abnormal heart rhythms, and can eventually contribute to strokes and heart failure. It is estimated that 1 in 500 people have HCM, though many are undiagnosed.



Hypertrophic cardiomyopathy is caused by a thickening of the heart muscle.

View Full Report

9/2020

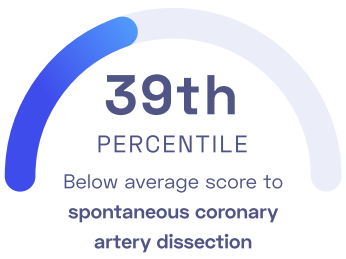
☆ Spontaneous coronary artery dissection (Saw, 2020)

Heart Vasculature

Study Summary

Identification of 4 regions of the genome associated with spontaneous coronary artery dissection (SCAD).

Your Result



Study Description

Arteries are blood vessels that carry blood from the heart to all parts of the body. Spontaneous coronary artery dissection (SCAD) is a condition in which a tear forms in an artery, causing blood to build up between the walls of the blood vessel. This build-up can lead to a blockage of blood flow, which can eventually lead to a heart attack. Though anyone can be affected by SCAD, the condition primarily affects women between the ages of 30 and 60. In fact, SCAD accounts for a quarter of all heart attacks in women under the age of 60.

View Full Report

11/2019

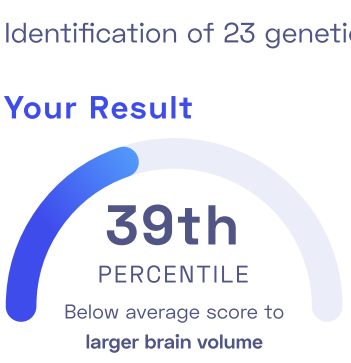
☆ Brain volume (Zhao, 2019)

Brain

Study Summary

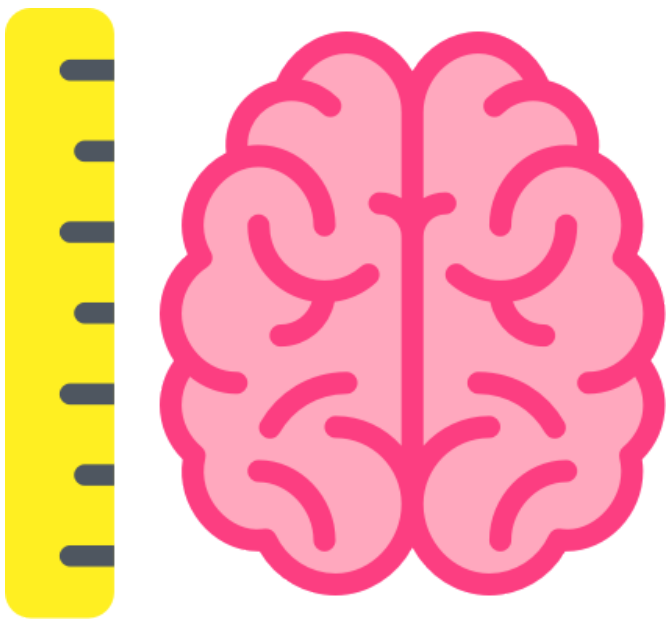
Identification of 23 genetic variants associated with total brain volume.

Your Result



Study Description

Differences in brain volume among people appear to be connected with differences in numerous cognitive and behavioral traits, including intelligence and emotional processing. Furthermore, genes involved in determining brain volume have been linked to diseases such as schizophrenia and bipolar disorder.



View Full Report

12/2019

☆ Retinal detachment (Boutin, 2019)

Eyes

Study Summary

Identification of 11 genetic variants associated with retinal detachment.

Your Result Study Description

38th
PERCENTILE
Below average score to
retinal detachment

The retina is a thin layer of cells in the back of the eye that detects light and enables vision. Retinal detachment is a serious medical condition that occurs when the retina is pulled away from its normal position and damaged in the process. If retinal detachment is not immediately treated it can result in permanent blindness. Though common, genetic predisposition to retinal detachment is not well understood.

View Full Report

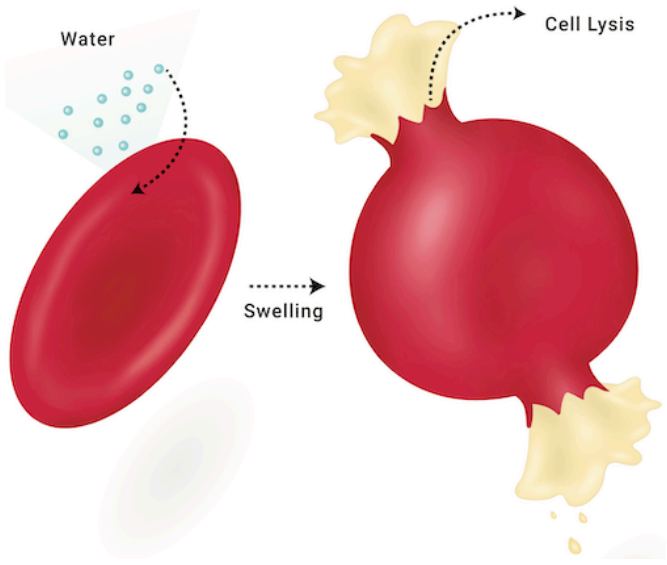
5/2021

Osmotic hemolysis (Page, 2021)

Blood

Study Summary

This report is based on a study that discovered 21 genetic variants associated with osmotic hemolysis, which causes the destruction of red blood cells.



Osmotic hemolysis describes rupturing of red blood cells due to water inflow.

Your Result

37th
PERCENTILE
Below average score to
osmotic hemolysis of red blood cells

Study Description

Blood plays an extremely important role in providing oxygen and nutrients to all parts of the body. Whether due to trauma or disease, occasionally blood needs to be transferred from one individual to another. This procedure, known as a transfusion. Often, the donated blood must spend time in storage before being transfused, and the transfusion process itself may take in excess many hours. As a result, the red blood cells can get damaged during storage or transfusion. To identify genetic factors that may contribute to damage of red blood cells, this study examined genetic data of over 12,000 individuals of European, African, Asian, and Hispanic ancestries.

View Full Report

09/2019

Optic disc size (Hun, 2019)

Eyes

Study Summary

Identification of 115 genetic variants associated with the size of the optic disc.

Your Result

36th
PERCENTILE
Below average score to
larger optic disc

Study Description

The optic disc is an oval structure in the back of the eye that represents the exit point of the optic nerve that connects the eye to the brain. A small optic disc size is correlated with vulnerability of optic nerves to various degenerative diseases.

View Full Report

12/2017

Neuroticism (Luciano, 2017)

Behavior Mind

Study Summary

Identification of 116 genetic variants associated with neuroticism.

Your Result

35th
PERCENTILE
Below average score to
neuroticism

Study Description

Neuroticism is a personality trait characterized by negative emotionality (e.g. anger, guilt, anxiety) and associated with poorer mental and physical health. Though neuroticism is known to be highly heritable, most genetic factors remain unknown.

View Full Report

4/2020

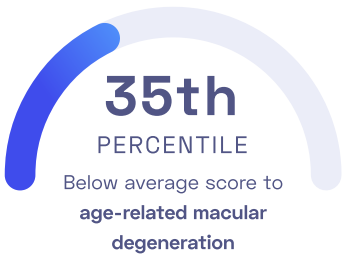
Age-related macular degeneration (Han, 2020)

Eyes

Study Summary

Identification of 12 novel genomic regions associated with age-related macular degeneration.

Your Result



Study Description

The retina is the light-sensitive nerve layer that lines the back of the eye. Age-related macular degeneration describes damage to the macula, the area of the retina that is responsible for central, high-resolution, color vision. Age-related macular degeneration is the leading cause of blindness among elderly individuals, affecting nearly 160 million people worldwide.

View Full Report

03/2023

Childlessness (Mathieson, 2023)

Behavior Sex

Study Summary

This report is based on a study that discovered 9 genetic variants associated with childlessness.

Your Result

Study Description

Childlessness is the condition of not having children, either by choice or due to circumstances beyond one's control. Individuals may remain childless for various reasons, such as personal preferences, career decisions, financial constraints, or health issues. It can have both positive and negative impacts on individuals and couples, allowing some individuals to feel fulfilled and satisfied without children, others may experience sadness or regret. Though there are many potential reasons for an individual to not have a child, genetics may contribute to childlessness.

Couples can be childless for many reasons,

View Full Report

2/2021

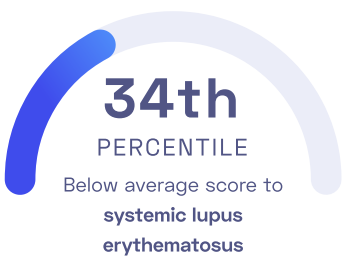
Systemic lupus erythematosus (Wang, 2021)

Inflammation Autoimmunity

Study Summary

Identification of 132 regions of the genome associated with systemic lupus erythematosus.

Your Result



Study Description

Systemic lupus erythematosus (SLE) is an autoimmune disorder. This means that it is caused by the body's immune system mistakenly attacking organs and tissues. Individuals with SLE may experience joint pain, fatigue, fever, and numerous other symptoms. Genetic factors play a key role in the disease, with estimates of its heritability ranging from 43% to 66%.

View Full Report

08/2021

Epilepsy (Song, 2021)

Brain

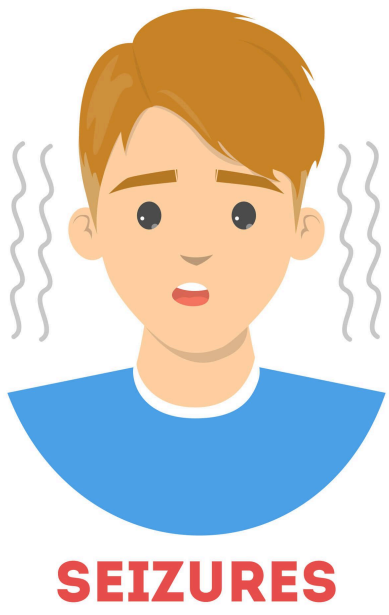
Study Summary

This report is based on a study that discovered 2 novel genetic variants associated with epilepsy.

Study Description

Your Result

The cells in our brains communicate with each other through electrical signals. Normally, this signaling occurs in an orderly and highly-controlled fashion. Sudden alterations of this system have the potential to cause seizures, which may result in changes to an individual's movement, behavior, or thoughts. For some, seizures occur repeatedly, in a condition known as epilepsy. Epilepsy often runs in families, and scientists suspect up to 70 percent of epilepsy cases are caused by genetic factors.



Seizures are caused by distributions in the electrical activity of the brain.

View Full Report

09/2011

Primary biliary cirrhosis (Mells, 2011)

Autoimmunity Liver

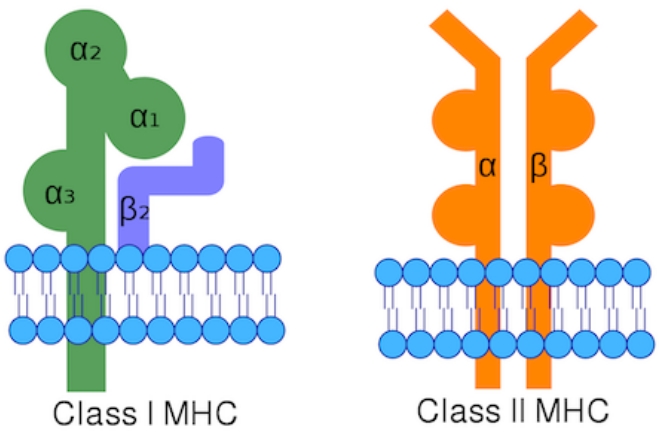
Study Summary

Genetic variants linked to pathways that promote inflammation may play a role in the development of primary biliary cirrhosis.

Your Result

Study Description

Primary biliary cirrhosis is a chronic, *autoimmune* liver disease. *Autoimmune* diseases are characterized by the immune system mistakenly attacking the body's own cells. For primary biliary cirrhosis, this eventually results in the destruction of your bile ducts, where bile is produced. Bile helps in processes like digestion and the elimination of toxins from the body.



Major Histocompatibility Complex Proteins

View Full Report

10/2020

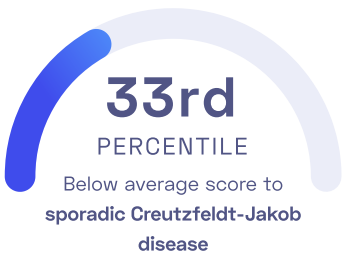
Sporadic Creutzfeldt-Jakob disease (Jones, 2020)

Brain Dementia

Study Summary

Discovery of 4 genomic regions associated with the sporadic Creutzfeldt-Jakob disease, a form of neurodegenerative prion disease.

Your Result



Study Description

Prion diseases occur in the brain when certain proteins fold into the wrong configuration, causing them to aggregate together. Neurodegeneration begins to occur as a result of this clumping leading to a progressive and fatal form of *dementia*. Prion diseases can be inherited (familial) or can occur through the consumption of infected meat (variant), but the vast majority of cases are known to occur spontaneously (sporadic). Little is known about what may make an individual more susceptible to acquiring a form of prion disease known as sporadic Creutzfeldt-Jakob disease (sCJD).

View Full Report

6/2018

Physical activity (Klimentidis, 2018)

Behavior

Study Summary

Identification of 9 genomic regions associated with habitual moderate-to-vigorous physical activity.

Your Result

Study Description

Being physically active is one of the most important things you can do for your health. Physical activity has many benefits such as reduced risk of depression and heart disease. Unfortunately, on average 1 in 4 adults do not meet the recommended levels of physical activity. While many factors contribute to an individual's likelihood to be physically active, genetics has been shown to play a role.

View Full Report

06/2021

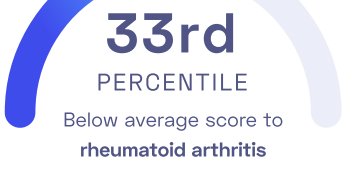
Pernicious anemia (Laisk, 2021)

Blood Autoimmunity

Study Summary

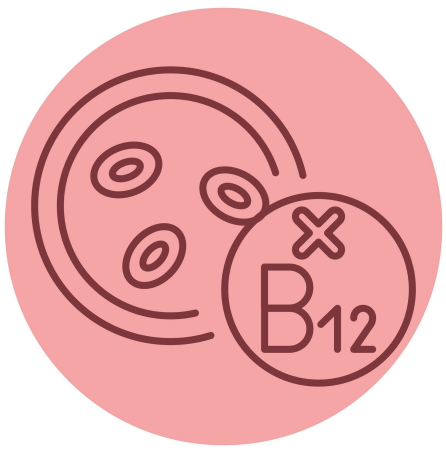
This report is based on a study that discovered 5 genetic variants associated with pernicious anemia.

Your Result



Study Description

Vitamin B12 is a vital nutrient needed for making red blood cells and keeping the nervous system healthy. People usually get vitamin B12 from animal-based foods, including meat, fish, and dairy. Pernicious anemia, a specific type of anemia, is an autoimmune condition that prevents the body from absorbing vitamin B12. This happens because the cells lack a special protein called 'intrinsic factor', which is needed to collect vitamin B12 from food and bring it into the body. The term 'pernicious' means harmful, and pernicious anemia can lead to feeling tired all the time, weakness, numbness or tingling in hands and feet, and memory issues.



Pernicious anemia is caused by a lack of vitamin B12

View Full Report

11/2022

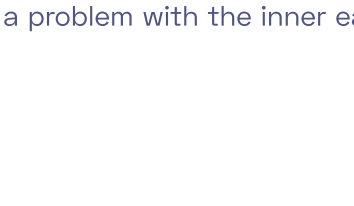
Rheumatoid arthritis (Ishigaki, 2022)

Joints Autoimmunity

Study Summary

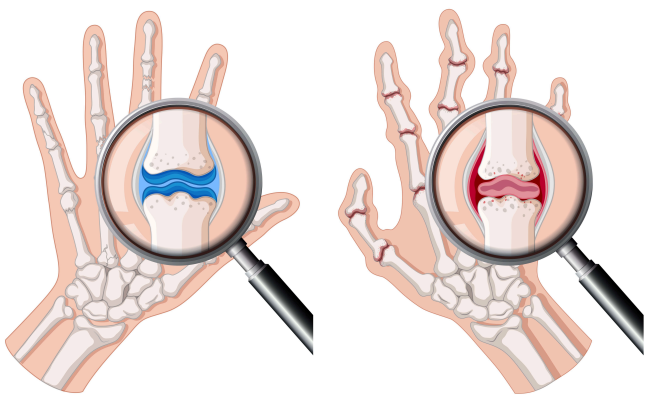
This report is based on a study that discovered 34 novel genetic variants associated with rheumatoid arthritis.

Your Result



Study Description

Rheumatoid arthritis (RA) describes a condition where the immune system mistakenly attacks the body's joints, producing inflammation and swelling. This can lead to immense pain and stiffness that makes it difficult to move. An estimated 2% of people will develop rheumatoid arthritis during their life, with women twice more often affected than men. While factors such as smoking and pollution have been linked to RA, genetic factors also contribute to an individual's susceptibility to developing the condition.



RA leads to inflammation in the joints.

View Full Report

10/2021

Vertigo (Skuladottir, 2021)

Ears

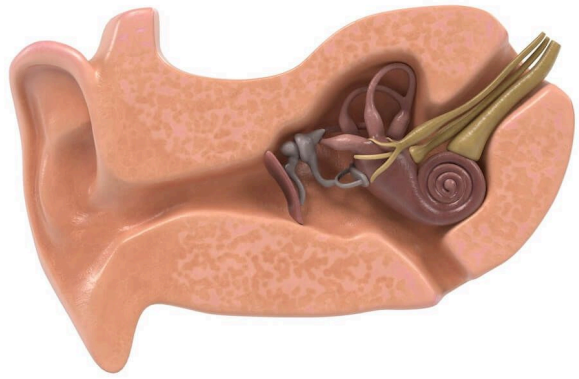
Study Summary

This report is based on a study that discovered 6 genetic variants associated with predisposition to experiencing vertigo.

Study Description

Vertigo causes an illusion of motion, leading to feelings of moving or spinning even when you remain stationary. Vertigo can either result from a problem with the inner ear which is the location of an organ that controls balance, or problems with certain parts of the brain.

Your Result



The vestibular system is an organ located in the inner ear that gives you a sense of balance.

View Full Report

1/2021

☆ Re-experiencing in PTSD (Stein, 2021)

Mind Behavior

Study Summary

Identification of 9 genetic variants associated with re-experiencing, a symptom of post-traumatic stress disorder.

Your Result

Study Description

Post-traumatic stress disorder (PTSD) is a mental health condition caused by experiencing a traumatic event. Though many people associate PTSD with war veterans, anyone can experience the disorder. Common symptoms of PTSD include flashbacks and nightmares related to the traumatic event, avoidance of particular situations, and being easily startled. Flashbacks and nightmares are collectively referred to as "re-experiencing".

Re-experiencing traumatic events is a typical symptom of PTSD.

View Full Report

3/2019

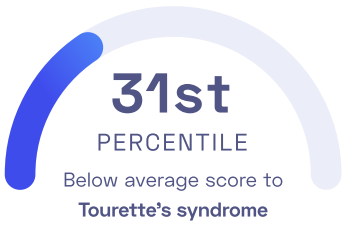
☆ Tourette's syndrome (Yu, 2019)

Behavior Mind

Study Summary

Discovery of multiple genetic variants associated with Tourette's Syndrome.

Your Result



Study Description

Tourette's syndrome is a disorder of the nervous system characterized by uncontrollable movements or sounds that are known as tics. It affects about 1 out of every 150 people to varying degrees. Tourette's syndrome is known to be highly heritable, with up to 80% of the disease risk being inherited from the parents. This genome-wide association study sought to identify genetic variants associated with Tourette's Syndrome by examining over 20,000 individuals of European ancestry.

View Full Report

01/2012

☆ Menopause onset (Stolk, 2012)

Hormones Sex

Study Summary

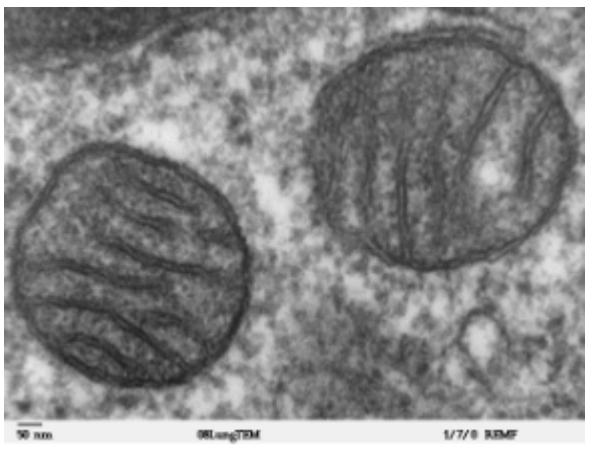
The timing of menopause may be influenced by genetic variants linked to DNA repair, immune function, and mitochondrial dysfunction.

Your Result

31st
PERCENTILE
Below average score to **later menopause onset**

Study Description

Menopause is the end of the reproductive function of the ovaries in women. Menopause is defined to begin 1 year after a woman's periods have stopped. To find genetic variants that correlate with the age at which women's menstrual cycles stop, this study examined 38,968 women of European descent.



Mitochondria (from an electron microscope)

View Full Report

06/2022

Hernias (Fadista, 2022)

Pelvis

Study Summary

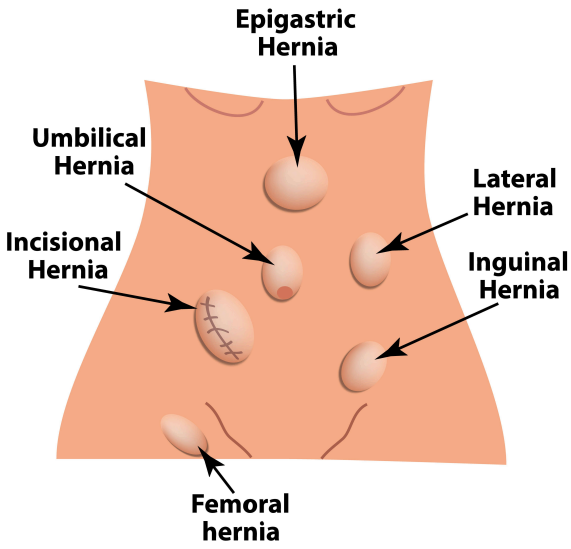
This report is based on a study that discovered 22 genetic variants associated with the occurrence of hernias.

Your Result

30th
PERCENTILE
Below average score to **hernias**

Study Description

A hernia occurs when part of an internal organ or tissue bulges through a weak area of muscle. Many hernias happen in areas around the abdomen, including the groin, stomach, and belly button. Hernias are a fairly common occurrence and are often caused by lifting heavy objects or excessive coughing. When left untreated, they can cause pain and health problems. To discover genetic variants associated with the development of hernias, this study examined over 65,000 individuals of European ancestry.



Hernias can occur in many parts of the body.

View Full Report

01/2023

ADHD (Demontis, 2023)

Mind Behavior

Study Summary

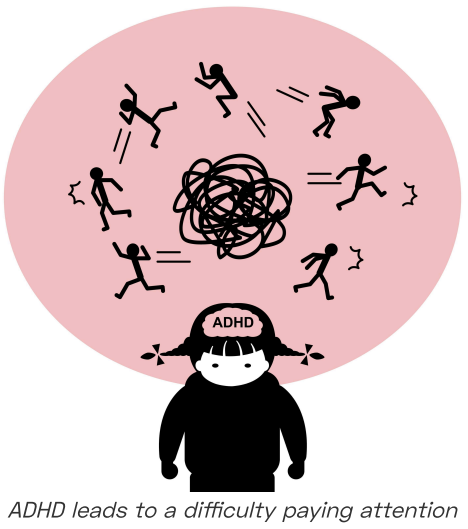
This report is based on a study that discovered 27 genetic variants associated with ADHD.

Your Result

29th
PERCENTILE
Below average score to **ADHD**

Study Description

Attention-deficit hyperactivity disorder (ADHD) is a common neurodevelopmental disorder characterized by difficulty paying attention, hyperactivity, and impulsivity. It is typically diagnosed in childhood and often persists into adulthood. ADHD may impact individuals in many aspects of their life including academic and professional achievements, interpersonal relationships, and daily functioning. The exact cause of the condition is not known, but it is believed to result from a combination of genetic and environmental factors. To better understand the genetic component of ADHD susceptibility, this study examined over 225,000 individuals of European ancestry.



ADHD leads to a difficulty paying attention

View Full Report

08/2022

Trigger finger (Patel, 2022)

Muscles

Study Summary

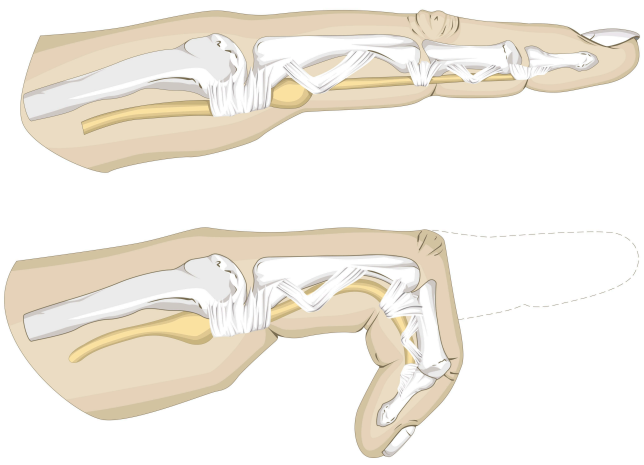
This report is based on a study that discovered 5 genetic variants associated with trigger finger.

Your Result

29th
PERCENTILE
Below average score to **trigger finger**

Study Description

A tendon is a cord of strong, flexible tissue, similar to a rope that connects your muscles to your bones. Trigger finger is a condition that can affect the tendons of the hand, causing pain, stiffness, and a sensation of locking or catching when you bend or straighten your finger. An estimated 2-10% of people will experience trigger finger during their life. In individuals living with conditions such as rheumatoid arthritis, the rate is much higher.



Trigger finger prevents movement.

View Full Report

11/2020

Restless leg syndrome (Didriksen, 2020)

Sleep

Study Summary

Identification of novel 3 regions of the genome associated with restless leg syndrome.

Your Result

29th
PERCENTILE
Below average score to **restless leg syndrome**

Study Description

Restless leg syndrome (RLS) is a disorder of the nervous system that results in uncomfortable feelings in the legs, along with overpowering urges to move them. The condition is thought to affect more than 1 in 10 individuals in the United States. RLS appears to be a heritable condition, with between 40 and 90% of affected individuals having a parent or sibling that is also affected.

View Full Report

03/2020

Membranous nephropathy (Xie, 2020)

Autoimmunity Kidneys

Study Summary

Identification of 4 genomic regions associated with membranous nephropathy, an *autoimmune* disease of the kidneys.

Your Result

28th
PERCENTILE
Below average score to **membranous nephropathy**

Study Description

Kidneys are organs that remove waste and excess water from the blood, which eventually ends up as urine. Membranous nephropathy (MN) is an *autoimmune* disease that leads to kidney failure. This genome-wide association study attempted to identify genetic variants associated with an increased risk of membranous nephropathy.

View Full Report

6/2020

Type 2 diabetes (Vujkovic, 2020)

Metabolism

Study Summary

Discovery of 568 novel genomic regions associated with type 2 diabetes in a multi-ethnic study.

Your Result

28th
PERCENTILE
Below average score to **type 2 diabetes**

Study Description

Insulin is a hormone that promotes cells to intake sugar from the blood. People with type 2 diabetes no longer respond to insulin, meaning sugar has a hard time getting into cells and builds up in the blood. This study looked at the genetics of type 2 diabetes in 228,499 cases and 1,178.783 controls that included Europeans, African Americans, Hispanics, South Asians, and East Asians.

View Full Report

01/2023

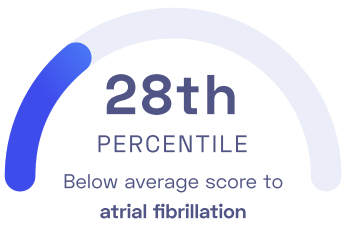
Atrial fibrillation (Miyazawa, 2023)

Heart

Study Summary

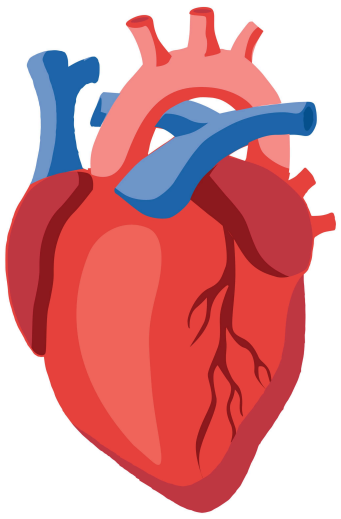
This report is based on a study that discovered 150 genetic variants associated with atrial fibrillation.

Your Result



Study Description

The beating of the heart is controlled by electrical signals that cause the heart to contract and relax in a coordinated manner. During atrial fibrillation (AF), the electrical signals that coordinate the contraction of the heart's upper chambers become disorganized. When the heart muscles contract in a rapid and irregular manner, blood in the heart can pool and potentially form clots. As a result, AF can lead to heart palpitations, shortness of breath, fatigue, and can also increase the risk of stroke. AF is a common condition, affecting millions of people worldwide.



The atria are the upper chambers of the heart.

View Full Report

4/2020

Television watching for leisure (van de Vegte, 2020)

Behavior

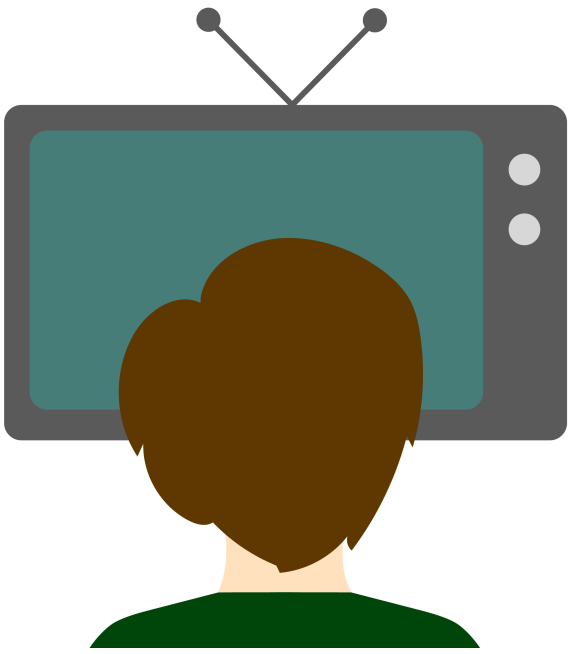
Study Summary

Identification of 145 genetic variants associated with leisure television watching.

Your Result

Study Description

Leisure sedentary behaviors, like watching Netflix and playing Animal Crossing, sure can be fun! In fact, the average adult in the United Kingdom spends an average of 5 hours per day on activities like this. However, research suggests that long periods of sedentary behaviors could increase an individual's risk for conditions like *coronary artery disease*.



Watching television for leisure is an unhealthy sedentary behavior.

View Full Report

6/2020

Autoimmune thyroid disease (Saevarsdottir, 2020)

Autoimmunity Thyroid

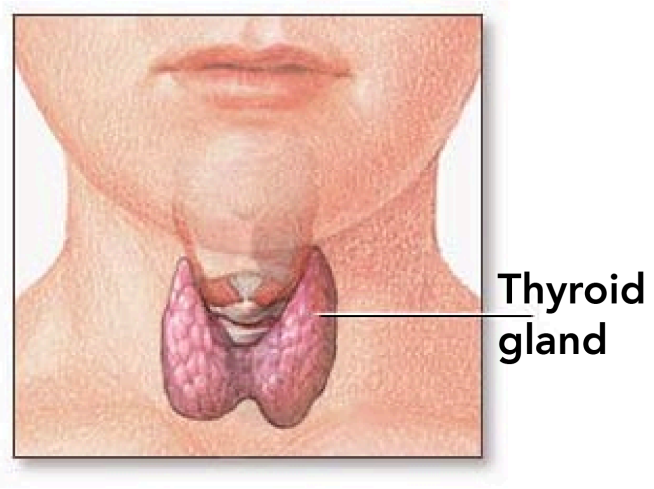
Study Summary

Identification of 99 genetic variants associated with autoimmune thyroid disease.

Your Result

Study Description

The human immune system evolved to defend our bodies against disease-causing microorganisms. However, sometimes a person's immune system may attack the body's own cells, causing an autoimmune disease. When the immune system attacks and destroys the thyroid gland, a bowtie-shaped, hormone-producing organ in the neck, it can slow the heartbeat, cause weight gain, and lead to feeling cold, tired, and depressed.



The thyroid gland produces hormones that regulate protein, fat, and carbohydrate metabolism.

View Full Report

7/2020

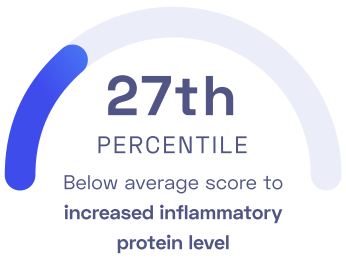
Inflammatory protein level (Hillary, 2020)

Inflammation

Study Summary

Identification of 16 genetic variants associated with the presence of inflammatory proteins in the blood.

Your Result



Study Description

Inflammation is a response of the immune system to an infection or injury. It is caused by a release of inflammatory proteins that attract immune cells to fight the infection and increase blood flow to promote healing. However, sometimes these inflammation-promoting signals can occur and persist even when they aren't needed and cause damage to the body.

View Full Report

09/2019

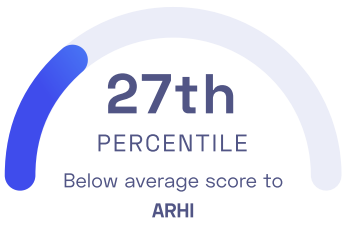
Age-related hearing impairment (Wells, 2019)

Aging Senses

Study Summary

Identification of 44 genetic variants associated with age-related hearing impairment.

Your Result



Study Description

Hearing loss is one of the most common age-associated medical conditions. It has been associated with social isolation, depression, and can be a risk factor for *dementia*. Though believed to be highly heritable, the genetic factors associated with a predisposition to age-related hearing impairment (ARHI) remain largely unknown.

View Full Report

08/2023

Resting heart rate (van de Vegte, 2023)

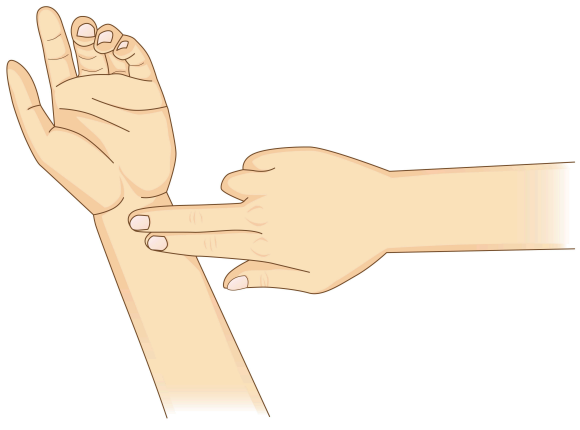
Heart

Study Summary

This report is based on a study that discovered 352 genetic variants associated with resting heart rate.

Your Result

Study Description



The average resting heart rate is between 60 and 100.

The heart, a vital organ in the human body, plays a central role in circulating blood and delivering oxygen and nutrients to various tissues and organs. This continuous process of pumping blood is essential for maintaining bodily functions. Resting heart rate (RHR) refers to the number of times the heart beats per minute while the body is at rest. An individual's RHR is typically measured when a person is awake but in a relaxed state. RHR has been shown to be a key indicator of heart health. A lower resting heart rate generally indicates better cardiovascular fitness, as a stronger heart can pump more blood with fewer beats. Resting heart rate can vary among individuals due to many factors such as age, fitness level, and medications. Generally, adults have an RHR between 60 and 100 beats per minute, while well-trained athletes might have RHRs as low as 40-60 bpm due to their more efficient heart function.

View Full Report

09/2019

Loneliness (Abdellaoui, 2019)

Mind Behavior

Study Summary

Detection of 19 genetic variants associated with feelings of loneliness.

Your Result

Study Description

Humans are social creatures and feelings of loneliness arise when we don't feel as socially connected as we want. Chronic loneliness has been correlated with elevated risks of various mental and physical diseases, and even premature death. While loneliness can be a result of social and environmental circumstances, some genetic factors may lead to a predisposition to loneliness.

View Full Report

05/2016

Fraternal twinning (Mbarek, 2016)

Pregnancy

Study Summary

Discovery of 3 genetic variants that are associated with spontaneous fraternal twinning.

Your Result

Study Description

If you walk past 30 people in the United States, the odds are good that at least one of them will have a twin brother or sister. Travel to many areas of Asia and that number rockets to 70 people, but visit the west African country of Benin and you may only need to walk past 16 people to see a twin. Twins can either be identical or fraternal, but the genetic factors that may influence a woman's chances of having either type are not well understood.

View Full Report

12/2019

Income (Hill, 2019)

Behavior Intelligence

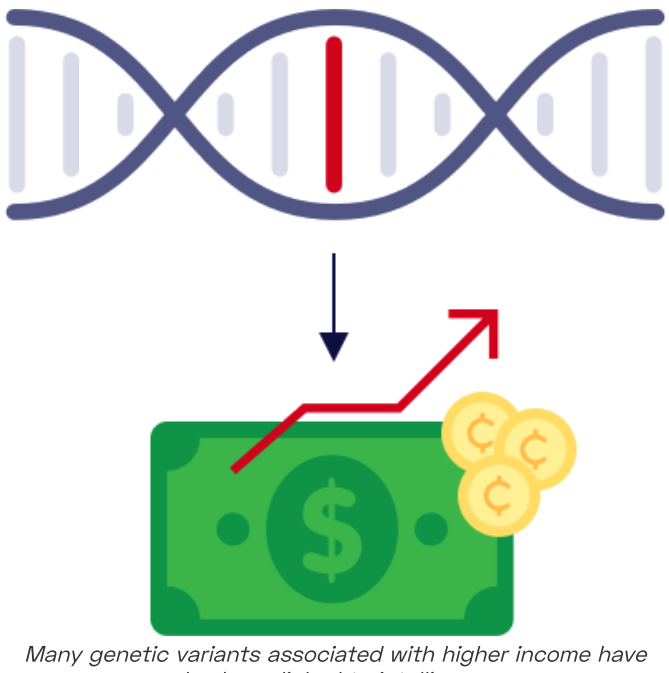
Study Summary

Identification of 149 genetic variants associated with income.

Your Result

Study Description

Socioeconomic position (SEP) is a measure of an individual's economic and social position. Poor health is associated with a decreased SEP, but the genetic contributions to this effect are not well studied.



Many genetic variants associated with higher income have also been linked to intelligence.

View Full Report

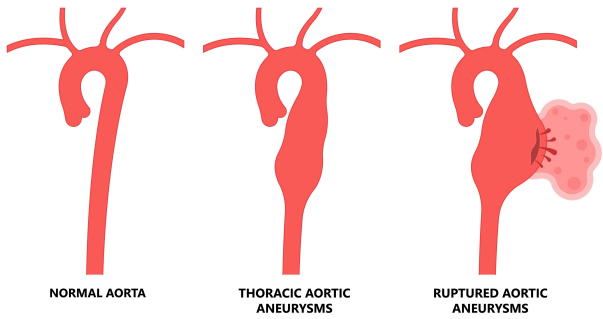
06/2023

Thoracic aortic aneurysm and dissection (Klarin, 2023)

Vasculature

Study Summary

This report is based on a study that discovered 21 genetic variants associated with thoracic aortic aneurysm and dissection (TAAD).



Aneurysms result from the weakening of the aorta

Your Result

Below average score to **thoracic aortic aneurysm and dissection**

Study Description

The aorta is the main artery that carries blood away from your heart to the rest of your body. The thoracic aorta is the part of the aorta that sits within the chest. A thoracic aortic aneurysm occurs when the walls of the thoracic aorta weaken and bulge, forming a balloon-like swelling. An aortic dissection is a tear in the layers of the aortic wall. Both of these conditions can be life-threatening because they can lead to a rupturing of the aorta. They are often caused by high blood pressure or injuries to the chest, though some people are born with a weakness in the aortic wall.

View Full Report

03/2023

Addiction (Hatoum, 2023)

Addiction Behavior

Study Summary

This report is based on a study that discovered 19 genetic variants associated with addiction risk.

Addiction can lead to social isolation.

Your Result

Below average score to **addiction**

Study Description

Addiction is a condition where a person engages in a behavior or uses a substance repeatedly despite negative consequences. It can manifest in various forms, such as substance addiction (e.g., drugs and alcohol) or behavioral addiction (e.g., gambling and gaming). Different forms of addiction have different impacts on an individual's life. Substance addiction, for instance, can lead to organ damage and mental health problems. Behavioral addiction can cause financial distress, social isolation, and deteriorating physical health. Research studies have suggested that genetics plays a significant role in the development of addiction, though environmental and behavioral factors also play a crucial role.

View Full Report

2/2020

Systemic lupus erythematosus (Chen, 2020)

Kidneys Inflammation Autoimmunity

Study Summary

Development of a genetic risk score to predict the risk of systemic lupus erythematosus (SLE).

Study Description

Systemic lupus erythematosus (SLE) is an autoimmune disorder characterized by widespread inflammation and tissue damage. More than 200,000 new SLE cases are diagnosed in the United States every year. About one half of SLE patients experience kidney disease, which is the one of the most common causes of death in SLE patients.

Your Result

24th
PERCENTILE
Below average score to **SLE**

A typical sign of lupus is a butterfly-shaped rash across the cheeks and bridge of the nose.

View Full Report

3/2020

☆ Breast cancer (Shu, 2020)

Cancer Breasts

Study Summary

Discovery of 28 novel genomic regions associated with breast cancer risk.

Your Result

24th
PERCENTILE
Below average score to **breast cancer**

Study Description

Breast cancer is the second most commonly diagnosed cancer in the United States. Much research has been done to find genetic variants associated with predisposition to breast cancer. However, most studies have been conducted in women of European ancestry, potentially missing breast cancer-associated variants that are less common in Europeans.

View Full Report

7/2020

☆ Healthspan (Timmers, 2020)

Aging

Study Summary

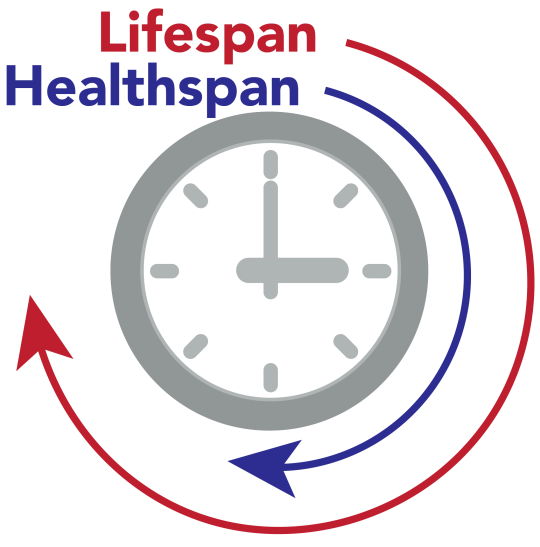
Identification of 10 genetics variants associated with healthspan, or the number of years in good health.

Your Result

24th
PERCENTILE
Below average score to **increased healthspan**

Study Description

Aging is an inevitable part of life. While we may all want to live longer, we don't want our final years to be defined by sickness. Though many people are familiar with "lifespan", or the length of time that someone lives, fewer are familiar with the term "healthspan". Healthspan refers to the length of time that an individual lives in good health, free of chronic diseases commonly associated with aging. These include heart disease, Alzheimer's disease, diabetes, and various forms of cancer.



The average healthspan is unfortunately much shorter than the average lifespan.

View Full Report

01/2023

Otosclerosis (Ramo, 2023)

Ears

Study Summary

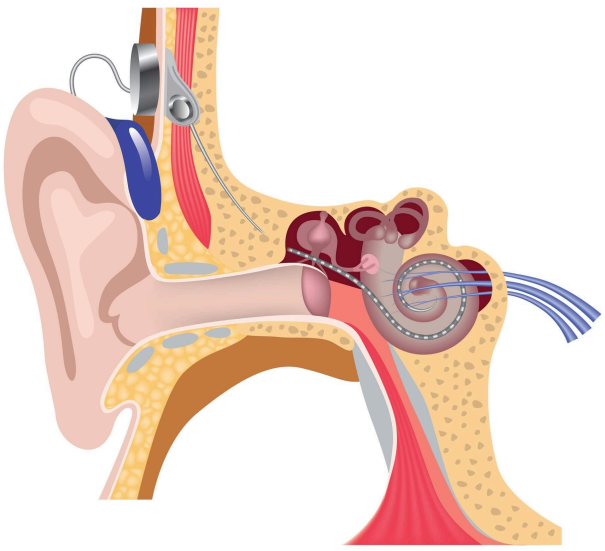
This report is based on a study that discovered 27 genetic variants associated with otosclerosis.

Your Result

24th
PERCENTILE
Below average score to **otosclerosis**

Study Description

When sound waves enter the ear canal, they cause the eardrum to vibrate, which sends vibrations to three tiny bones in the middle ear. These bones amplify the sound vibrations and transmit them to the inner ear. Otosclerosis is a condition that affects the bones of the middle ear. It is characterized by abnormal growth of these bones, which interferes with their movement and ability to transmit sound from the outer ear to the inner ear. This results in hearing loss. The more the movement of the bones becomes constrained, the greater the degree of hearing loss. Otosclerosis is a relatively common cause of hearing loss, occurring in between 2 and 10% of adults.



The bones of the middle ear become enlarged in otosclerosis

View Full Report

07/2011

Restless leg syndrome (Winkelmann, 2011)

Mind Sleep

Study Summary

Restless leg syndrome is associated with variants near the MEIS1 gene and in the TOX3 gene.

Your Result

23rd
PERCENTILE
Below average score to **restless leg syndrome**

Study Description

Restless leg syndrome causes uncomfortable sensations in the legs and irresistible urges to move them. This most often affects the patient at night, making it difficult to get a good night's sleep. While previous genome-wide studies have discovered variants correlated to this condition, they do not explain all of the heritability of it.

View Full Report

1/2020

Heavy alcohol consumption (Thompson, 2020)

Behavior Addiction

Study Summary

Identification of 6 genomic regions associated with heavy alcohol consumption.

Your Result

23rd
PERCENTILE
Below average score to **heavy alcohol consumption**

Study Description

Heavy alcohol consumption is a common disorder. It is characterized by heavy drinking patterns that can lead to dependence on alcohol, and eventually result in major health issues like liver disease and heart problems.

View Full Report

02/2019

Insomnia (Lane, 2019)

Sleep

Study Summary

This report is based on a study that discovered 57 genetic variants associated with insomnia.

Your Result

Study Description

Insomnia is a sleep problem where you have trouble falling asleep, staying asleep, or getting good quality sleep. It can last for a short or long time and may be caused by a number of factors including stress, anxiety, and medications. It can make you feel tired and reduce focus. Over time, insomnia can increase an individual's risk of developing anxiety disorders, alcohol abuse, depression, and heart disease. This study aimed to discover genetic variants associated with insomnia by examining over 500,000 individuals of European ancestry.

Insomnia can be caused by many factors including stress.

View Full Report

3/2020

☆ Cerebral cortex surface area (Grasby, 2020)

Brain

Cortical surface area

Study Summary

Identification of over 250 genetic loci associated with cortical surface area.

Your Result

Study Description

The *cerebral cortex* is the outer layer of the brain that is responsible for cognitive tasks such as perception, thought and memory. It is characterized by folds that increase its surface area. To identify genetic variants associated with human cortical surface area, this study combined genetic data with brain imaging data from over 50,000 individuals.

The many folds of the brain cortex increase its surface area.

View Full Report

12/2020

☆ Cerebral small vessel disease (Sargurupremraj, 2020)

Vasculature Brain

Study Summary

Discovery of 27 genomic regions associated with cerebral small vessel disease.

Your Result

Study Description

Like all other organs and tissues across the body, the brain needs a constant supply of blood to receive oxygen and nutrients. Cerebral small vessel disease is a condition that results from damage to the small blood vessels in the brain. The disease can affect the brain function, eventually leading to cognitive decline and problems with muscle coordination.

View Full Report

3/2020

☆ Pelvic organ prolapse (Olafsdottir, 2020)

Bladder Uterus Pelvis

Study Summary

Identification of 8 genetic variants associated with pelvic organ prolapse.

Study Description

The muscles that support a woman's pelvic organs can weaken, causing organs like the bladder and uterus to drop lower in the *pelvis*. This condition is called pelvic organ prolapse, which results in symptoms like pressure in the pelvic area, bowel problems, and sexual dysfunction. Pelvic organ prolapse is very common, affecting nearly 1 in 3 women at some point during their lifetime.

Your Result

20th
PERCENTILE
Below average score to
pelvic organ prolapse

View Full Report

11/2023

Kidney stone disease (Xingjie Hao, 2023)

Kidneys

A meta-analysis from the National Kidney Foundation found that people who produced 2 to 2.5 liters of urine daily were 50% less likely to develop kidney stones than those who produced less.

Study Summary

This report is based on a study that discovered 28 variants associated with kidney stone disease.

Your Result

20th
PERCENTILE
Below average score to
kidney stone disease

Study Description

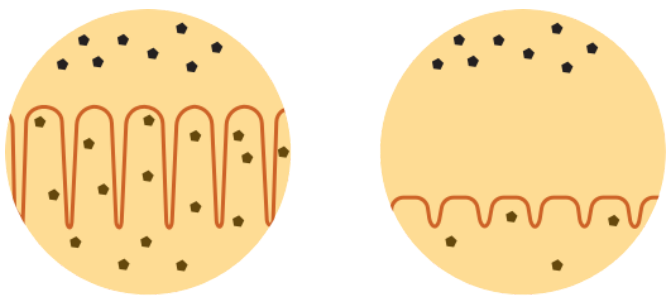
Kidney stone disease , also known as nephrolithiasis is a prevalent disorder with high heritability impacting roughly 10-15% of the world's population, and its prevalence is increasing. Kidney stones, composed primarily of calcium and salts, form within the kidneys and can obstruct the urinary tract, leading to intense pain. The development of kidney stones is influenced by a variety of factors, including genetics, obesity, dehydration, and a high-sodium diet. Kidney stone disease tends to recur, with recurrence rates reaching up to 50% within the initial 5 years and 75% over a span of 20 years. A significant risk factor for recurrent kidney stone disease is a family history of kidney stones, with twin studies suggesting a heritability estimate of 0.46-0.57. This study aims to identify novel mechanistic candidate loci where the final goal is to unravel kidney stone disease's genetic architecture. A large-scale genome-wide association meta-analysis was conducted for kidney stone disease involving over 720,000 individuals, identifying 44 susceptibility loci, including 28 novel ones. Through a cell type-specific analysis, the proximal tubule was pinpointed as the most relevant cells where susceptibility variants might act through a tissue-specific fashion. By integrating kidney-specific omics data, 223 genes were prioritized which strengthened the importance of ion homeostasis, including calcium and magnesium in stone formation, and suggested potential target drugs for the treatment.

View Full Report

2/2010

Celiac disease (Dubois, 2010)

Intestines Autoimmunity Diet



Destruction of the lining of the small intestines leads to malabsorption of nutrients.

Study Summary

Discovery of 13 new genomic regions associated with celiac disease.

Your Result

20th
PERCENTILE
Below average score to
celiac disease

Study Description

Celiac disease is characterized by an inability to eat gluten, a protein found in wheat and some other types of grain. The disorder is an autoimmune disease, in which the body's own immune system attacks the intestines in the presence of gluten. This can lead to pain, diarrhea, and other digestive problems.

View Full Report

5/2020

Carbohydrate consumption (Meddens, 2020)

Diet

Study Summary

Identification of 13 genetic variants associated with carbohydrate consumption.

Your Result

19th
PERCENTILE
Below average score to
higher carbohydrate consumption

Study Description

Carbohydrates (carbs) are found in many foods, both healthy and unhealthy, that we regularly consume. The body breaks down carbs into glucose, a sugar that is used as an energy source. There are two types of carbohydrates: simple and complex. Simple carbs include white bread and soda. They are rapidly broken down, leading to a spike in blood sugar. Examples of complex carbs are whole-grain bread and oatmeal. Unlike simple carbs, complex carbohydrates are broken down slowly, leading to a gradual and stable increase in blood sugar.

View Full Report

11/2018

C-reactive protein level (Ligthart, 2018)

Inflammation

Study Summary

Identification of 58 genetic variants associated with the blood level of C-reactive protein, a marker of inflammation.

Your Result

19th
PERCENTILE
Below average score to
higher blood CRP level

Study Description

Inflammation is a defense mechanism our body induces as a response to infections. However, chronic inflammation has been associated with many diseases including type 2 diabetes and cardiovascular disease. Inflammation can be assessed by measuring the level of C-reactive protein (CRP) in the blood which are typically increased if there is inflammation in the body.

View Full Report

12/2020

Critical COVID-19 illness (Pairo-Castineira, 2020)

Infection Inflammation

Study Summary

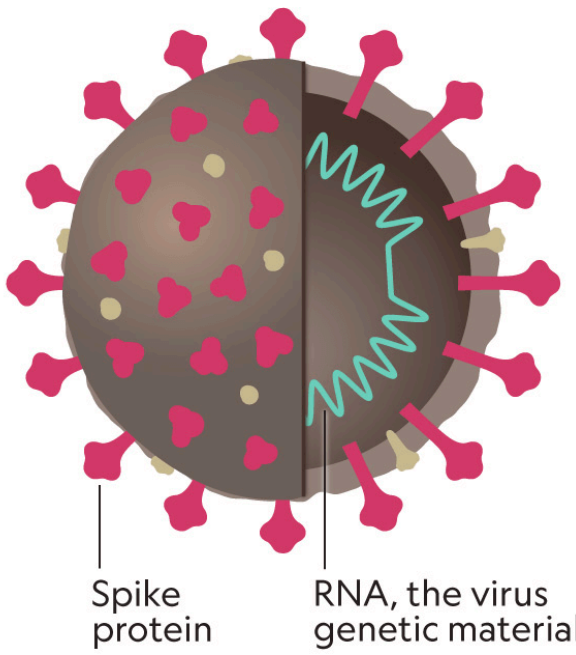
Identification of 8 genetic variants associated with critical illness following COVID-19 infection.

Your Result

19th
PERCENTILE
Below average score to
critical COVID-19 illness

Study Description

COVID-19 is a transmissible disease caused by the SARS-CoV-2 virus. Though symptoms vary from person to person, many develop a fever, cough, difficulty breathing, and a loss of taste/smell. For most people, these symptoms are only mild and resolve within a few weeks. However, around 5% of infected individuals develop a more severe disease, which can include respiratory failure, septic shock, and multi-organ failure. While comorbidities such as obesity and asthma make individuals more susceptible to critical illness, genetics is also believed to contribute to disease severity.



COVID-19 is caused by a novel coronavirus that first emerged in 2019. The virus has an RNA genome and characteristic spike proteins on the surface.

View Full Report

05/2019

Coffee consumption (Zhong, 2019)

Taste

Study Summary

Identification of 15 genetic variants correlated to the consumption of coffee.

Your Result

19th
PERCENTILE
Below average score to
higher coffee consumption

Study Description

There's no denying that coffee helps to power our society! In fact, Americans drink nearly 400 million cups of it daily. While coffee helps us stay productive throughout the day, the opinions about its taste vary. While some need to cover the taste of coffee with milk and sugar to find it palatable, others enjoy the taste of a black cup of joe. Taste perception, such as bitterness and sweetness, and taste preference is known to be heritable.

View Full Report

11/2019

Parkinson's disease (Nalls, 2019)

Dementia Brain

Study Summary

Identification of 90 genetic variants associated with Parkinson's disease.

Your Result

19th
PERCENTILE
Below average score to
Parkinson's disease

Study Description

Parkinson's disease is a neurodegenerative disorder caused by reduced *dopamine* signaling in some regions of the brain that leads to tremors. This can impair various activities that involve muscle movements including walking, speaking and eating. To date, Parkinson's disease remains largely a genetic mystery.

View Full Report

12/2021

Stool frequency (Bonfiglio, 2021)

Intestines

Study Summary

This report is based on a study that discovered 14 genetic variants associated with stool frequency.

Your Result

19th
PERCENTILE
Below average score to
stool frequency

Study Description

When you gotta go, you gotta go. But, while there is no "normal" number of bowel movements, many healthcare providers agree that healthy bowel movement frequency can range from three times a day to three times a week. For some individuals, such as those affected by irritable bowel syndrome, stool frequency can be much higher.

The number of bowel movements a person has each day can greatly vary

View Full Report

3/2020

Familial short stature (Lin, 2020)

Appearance

Study Summary

Discovery of 10 genetic variants associated with familial short stature.

Your Result

18th
PERCENTILE
Below average score to
familial short stature

Study Description

Height varies wildly across the globe! In the Netherlands, the average height for men and women is 6ft and 5ft 7in, respectively. Across the ocean, men and women in Peru are, on average, 5ft 5in and 4ft 11in tall. While environmental factors do contribute to height differences, studies of twins have estimated that nearly 86% of a person's height may be due to genetics. This study aimed to understand the genetics of familial short stature, which is defined as having a shorter stature than 97% of people of the same age and gender.

View Full Report

07/2011

Prostate cancer (Schumacher, 2011)

Prostate Cancer

Study Summary

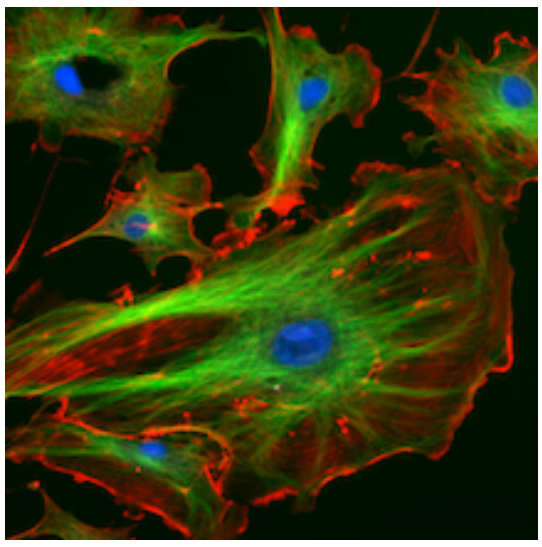
Prostate cancer may be linked to variants in the MLPH gene and genes that encode proteins of cytoplasmic filaments.

Study Description

Prostate cancer is the most common cancer among men after skin cancer. It occurs in the prostate - a gland in males that produces the seminal fluid. To identify novel genetic variants associated with prostate cancer, this study examined the genomes of 7,240 individuals.

Your Result

18th
PERCENTILE
Below average score to
prostate cancer



Cytoplasmic filaments that form the cytoskeleton.

View Full Report

09/2011

⭐ Schizophrenia (Schizophrenia Psychiatric Genome-Wide Association Study Consortium, 2011)

Mind

Study Summary

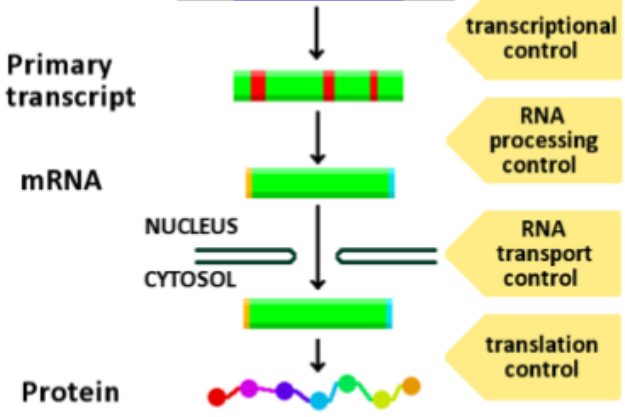
Increased risk of schizophrenia is associated with a genetic variant in the *intron* of the MIR137 gene.

Your Result

18th
PERCENTILE
Below average score to
schizophrenia

Study Description

Schizophrenia is a severe mental disorder that affects how a person thinks and behaves. Individuals with schizophrenia may experience hallucinations, paranoia, and confused thoughts. It is known to be a heritable disorder, meaning it can be passed down from generation to generation.



Gene Expression: DNA to Proteins

View Full Report

07/2023

☆ Eicosanoid levels (Rhee, 2023)

Blood Metabolism

Study Summary

This report is based on a study that discovered 41 genetic variants associated with blood eicosanoid levels.

Your Result

17th
PERCENTILE
Below average score to
higher eicosanoid levels

Study Description

Fats are essential to our bodies, functioning as cellular building blocks and playing a crucial role in various cellular processes. From certain types of fats, our bodies produce eicosanoids, small messenger molecules with many different functions. Eicosanoids come in three primary forms: prostaglandins, which regulate pain, inflammation, and blood vessel function; leukotrienes, which act as immune system triggers; and thromboxanes, vital for blood clotting. Imbalances in eicosanoid levels can lead to chronic inflammation, blood clotting disorders, and respiratory issues. Factors such as diet, exercise, and health conditions influence eicosanoid levels, but genetics also plays a role.

Eicosanoids levels can be measured using blood testing.

View Full Report

12/2023

☆ Problematic alcohol use (Zhou, 2023)

Alcoholism Behavior

Study Summary

This report is based on a study that discovered 110 genetic variants associated with problematic alcohol use.

Your Result

17th
PERCENTILE
Below average score to **problematic alcohol use**

Study Description

At moderate levels, alcohol typically has effects that include relaxation and temporary mood enhancement, but problematic alcohol use arises when consumption exceeds these levels. Excessive or frequent drinking can lead to short-term issues such as impaired judgment, coordination problems, mood swings, and in extreme cases, alcohol poisoning. Long-term risks of such consumption include serious health concerns like liver diseases, heart problems, increased cancer risk, and brain damage affecting memory and learning. Additionally, it can lead to dependency and alcohol addiction. The risk of developing problematic alcohol use varies among individuals and can be influenced by environmental factors, trauma, the existence of mental health conditions, and genetic factors.

Alcohol overuse can lead to a range of mental and physical issues.

View Full Report

7/2021

Age at first sexual intercourse (Millis, 2021)

Behavior Sex

Study Summary

This report is based on a study that discovered 282 genetic variants associated with an individual's age at first sexual intercourse.

Your Result

17th
PERCENTILE
Below average score to **older age at first sexual intercourse**

Study Description

Sexual activity is a basic and natural part of our development as humans. By 18 years of age, roughly 65% of individuals have had sexual intercourse, and that number rises to nearly 93% by the age of 25. The age that an individual begins having sexual intercourse can have implications on their reproductive health, development, mental health, and various behaviors. While many factors influence an individual's age at the time of first sexual intercourse, genes also play a role in when we first have sex.

The age at which an individual has sex for the first time is influenced by genetics.

View Full Report

09/2019

Gastroesophageal reflux disease (An, 2019)

Stomach Cancer

Study Summary

Identification of 25 genetic loci that are associated with an increased risk of gastroesophageal reflux disease.

Study Description

Gastroesophageal reflux disease (GERD) occurs when stomach acid flows up into the esophagus, or food pipe. This acid irritates the lining of the esophagus, and over time can lead to an increased risk of esophageal cancer. While nearly a third of an individual's risk of developing GERD is believed to be heritable, no genetic loci that are linked to GERD have been identified to date.

Your Result

Below average score to
GERD

View Full Report

02/2023

Aortic stenosis (Small, 2023)

Heart

Study Summary

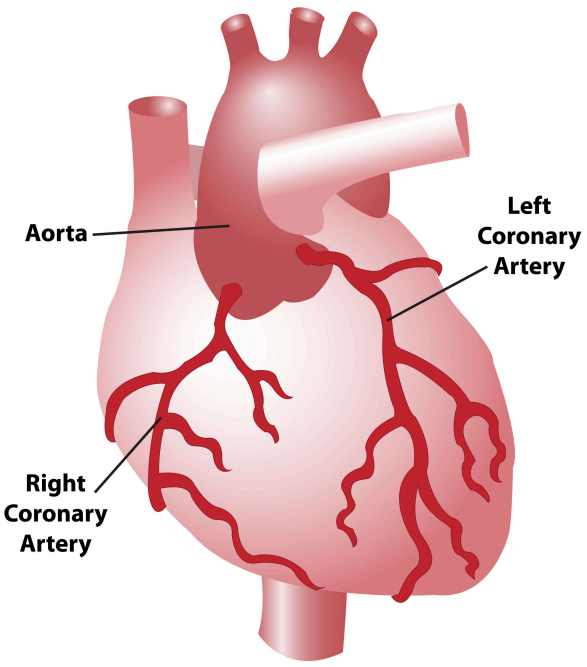
This report is based on a study that discovered 23 genetic variants associated with aortic stenosis.

Your Result

Below average score to
aortic stenosis

Study Description

The aorta is a large artery originating from the heart and extending throughout the body, branching into smaller vessels to supply blood to organs, muscles, and nerves. Aortic stenosis is a common heart valve disease that occurs when the aortic valve at the beginning of the aorta narrows or becomes blocked. This valve is responsible for regulating blood flow from the heart, and when it becomes narrowed, the heart has to work harder to pump blood out to the body. Often, symptoms of aortic stenosis can include chest pain, shortness of breath, and fatigue. In severe cases, the narrowing can eventually lead to heart failure or sudden death.



The aorta sends blood out through the body

View Full Report

06/2014

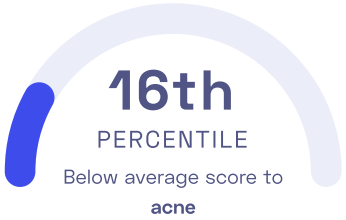
Acne (Navarini, 2014)

Skin Infection

Study Summary

Dysregulation of the TGFβ signaling pathway may increase susceptibility to acne.

Your Result



Below average score to
acne

Study Description

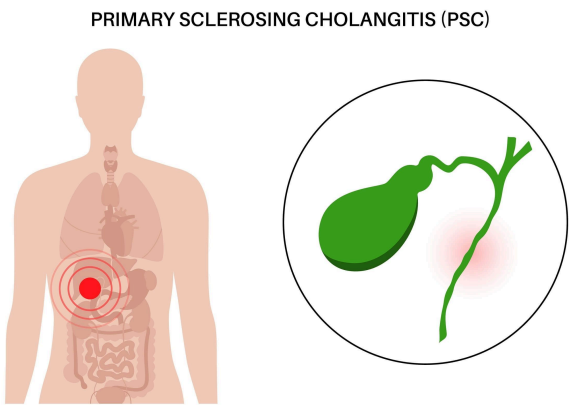
Acne is an inflammatory disease of the skin in which hair follicles become clogged with oil and dead skin cells. Acne is about 80% heritable. This genome-wide association study included 1,893 patients with severe acne and 5,132 healthy individuals from the United Kingdom.

View Full Report

12/2016

Primary sclerosing cholangitis (Ji, 2016)

Liver Inflammation



PSC causes inflammation of the bile ducts

Study Summary

This report is based on a study that discovered 19 genetic variants associated with primary sclerosing cholangitis.

Your Result

16th
PERCENTILE
Below average score to
PSC

Study Description

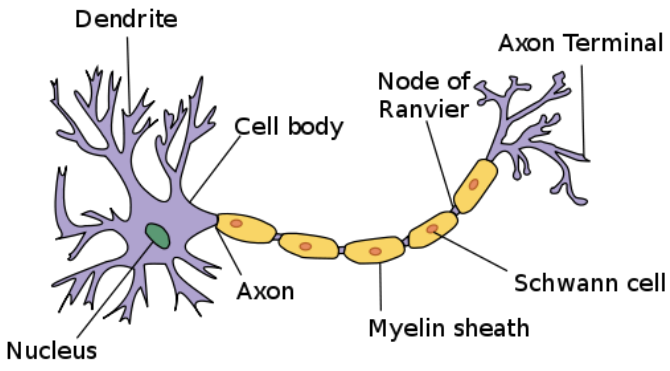
The liver is a vital organ responsible for various functions, including detoxifying the blood, producing proteins, and processing nutrients. Primary sclerosing cholangitis (PSC) is a rare and chronic liver disease that primarily affects the bile ducts, which are small tubes that carry bile from the liver to the small intestine to aid digestion. PSC occurs when the bile ducts become inflamed, narrowed, and scarred due to ongoing inflammation. This scarring and narrowing can block the flow of bile, causing abdominal pain, jaundice (yellowing of the skin and eyes), and dark urine. Over time, PSC can progress to more severe complications, such as liver scarring and liver failure.

View Full Report

06/2012

Migraine without aura (Freilinger, 2012)

Mind Brain



Neuron Structure

Study Summary

Migraine without aura may be influenced by genetic variants that affect neuronal signaling, migration, and growth.

Your Result

15th
PERCENTILE
Below average score to
migraine without aura

Study Description

Migraine without aura, also called the common migraine, is characterized by recurring, painful headaches. It does not have the early symptoms (aura) that other types of migraines have, such as dizziness, prickling skin, or weakness. Migraines appear to be heritable, yet few genetic variants have been discovered.

View Full Report

5/2020

Fat consumption (Meddens, 2020)

Diet

Study Summary

Identification of 6 genetic variants associated with fat consumption.

Your Result

14th
PERCENTILE
Below average score to
higher fat consumption

Study Description

Fats are essential *macronutrients* that serve as structural building blocks in the body. More specifically, the *membranes* of our cells are mostly made of fat. Moreover, fats also allow certain vitamins to be absorbed by the intestines. On average, adults consume 44 to 77 grams of fat per day. To identify genetic variants that are associated with fat consumption, this genome-wide association study examined the genomes of over 260,000 individuals of European ancestry.

View Full Report

11/2018

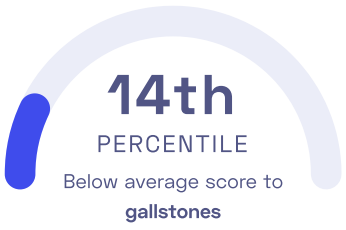
Gallstones (Ferkingstad, 2018)

Inflammation Gallbladder

Study Summary

Discovery of 21 genomic regions associated with gallstone formation.

Your Result



Study Description

The gallbladder stores a fluid called bile. It releases bile into the intestines where it helps with digestion. Bile contains bile acids which are produced in the body from *cholesterol*. Gallstones are stones that can form in the gallbladder when there is too much *cholesterol* and not enough bile acids. Gallstones can cause pain in the upper right abdomen and may require surgery.

View Full Report

12/2018

Waist-to-hip ratio (Lotta, 2018)

Obesity

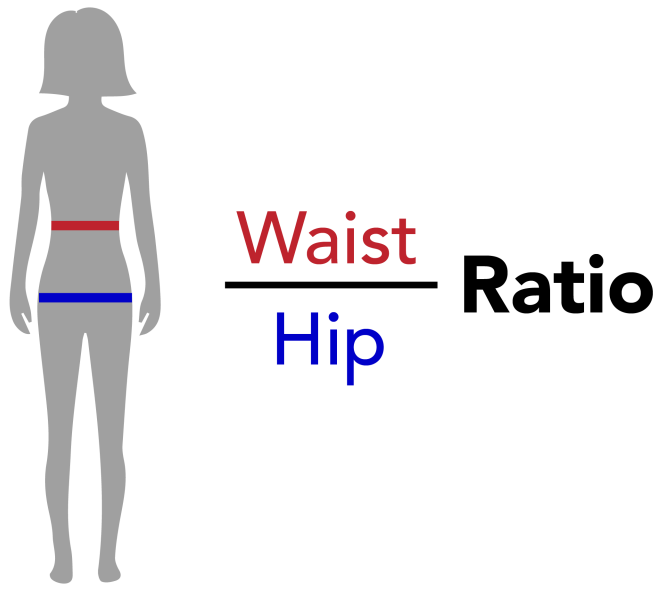
Study Summary

Identification of 202 genetic variants associated with waist-to-hip ratio.

Your Result

Study Description

Increased body fat is commonly associated with an increased risk of various cardiovascular and metabolic diseases, including coronary artery disease and type 2 diabetes. The waist-to-hip ratio (WHR) is a common measurement of the distribution of fat around the body. It is obtained by dividing the circumference (or distance around) the waist by the circumference of the hips. A healthy WHR is below 0.9 for men and below 0.85 for women. A WHR above 1.0 may signal an increased risk of disease.



A high waist-to-hip ratio is considered unhealthy.

View Full Report

1/2019

Mitochondrial DNA copy number (Guyatt, 2019)

Heart Metabolism

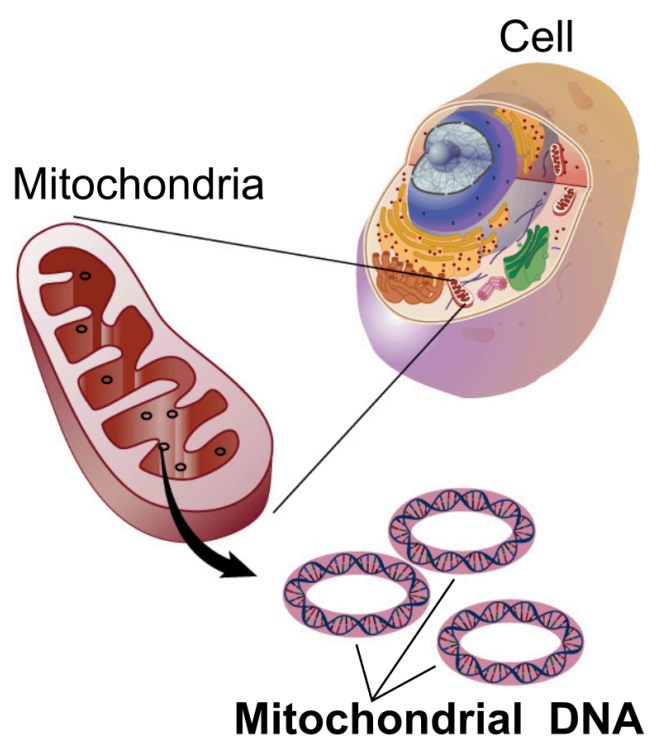
Study Summary

Discovery of 3 variants associated with mitochondrial DNA copy number.

Your Result

Study Description

The mitochondria have been nicknamed “the powerhouse of the cell” because they are responsible for producing up to 90% of a cell’s energy. Though mitochondria are part of a cell, they have their own, small genomes. Different types of cells in the body have different energy requirements, and as a result, have varying numbers of mitochondria inside them. For example, cells that require more energy for their functions, such as muscle cells, generally have more mitochondria.



Mitochondria are structures inside cells that produce energy and have their own genomes.

View Full Report

11/2021

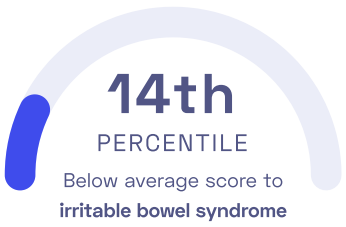
Irritable bowel syndrome (Eijsbouts, 2021)

Stomach Intestines

Study Summary

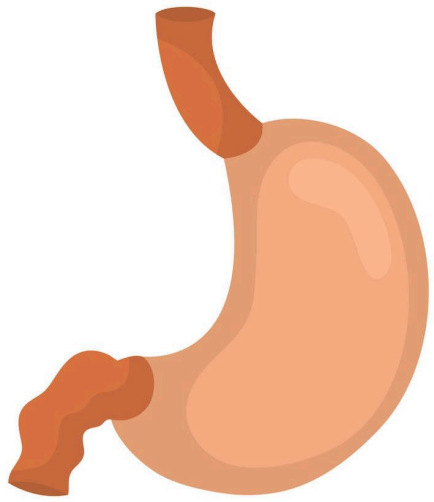
This report is based on a study that discovered 6 genetic variants associated with irritable bowel syndrome.

Your Result



Study Description

Irritable bowel syndrome (IBS) is a chronic condition that can cause abdominal cramping, bloating, and a change in bowel habits. Some people with the disorder have constipation, others have diarrhea, and some go back and forth between the two. Although IBS can cause a great deal of discomfort, it does not harm the intestines. Overall, IBS is a common condition thought to affect between 10 and 15% of people in the United States.



IBS can cause extreme distress in the stomach and bowels.

View Full Report

04/2010

Creatinine level (Chambers, 2010)

Kidneys

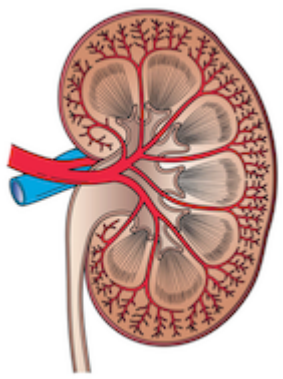
Study Summary

Chronic kidney disease is linked to genetic variants that influence serum creatinine and cystatin C - two of the main *biomarker*s of kidney function.

Your Result

Study Description

Chronic kidney disease is a permanent loss of kidney function over time. This study examined the genomes of 23,812 people of European ancestry to identify genetic variants that are associated with an increased risk of chronic kidney disease.



Blood flow in the kidney.

View Full Report

12/2019

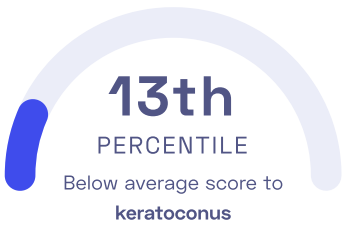
Keratoconus (McComish, 2019)

Eyes

Study Summary

Discovery of 3 genetic regions associated with keratoconus, an eye condition characterized by thinning of the cornea.

Your Result



Study Description

The cornea is a thin, clear layer of tissue that covers the front of the eye. Like a car's windshield, the cornea enables you to see clearly while protecting the inner parts of the eye. Keratoconus is a disease characterized by thinning and deformation of the cornea which can lead to blurry vision and nearsightedness.

View Full Report

07/2023

Urticaria (Kristjansson, 2023)

Skin

Study Summary

This report is based on a study that discovered 9 genetic variants associated with urticaria.

Study Description

Urticaria, also commonly known as hives, is a skin condition that appears as red, itchy bumps on the skin's surface. These bumps, called welts, can vary in size and may join together to form larger areas known as plaques. They can appear anywhere on the body and cause

Your Result

12th
PERCENTILE
Below average score to **urticaria**

discomfort due to their swelling and itching sensation. Welts usually disappear within 24 hours, but they can re-appear elsewhere on the body over several weeks. There are several factors that can make the symptoms of urticaria worse, including temperature and foods.

Urticaria can be extremely itchy

View Full Report

7/2021

Age at first birth (Millis, 2021)

Behavior Sex

Study Summary

This report is based on a study that discovered 89 genetic variants associated with an individual's age when they first become a parent.

Your Result

12th
PERCENTILE
Below average score to **older age at first birth**

Study Description

Historically, the age at which people become parents for the first time has been young, often in their 20s or earlier. With societal, cultural, and medical changes, people today often reach the age of 30 before having their first child. While many of the environmental and cultural factors influence the age at which person has their first child, genetics also plays a role.

The age at which an individual has their first child is influenced by genetics.

View Full Report

10/2014

Iron level (Benyamin, 2014)

Liver Blood

Study Summary

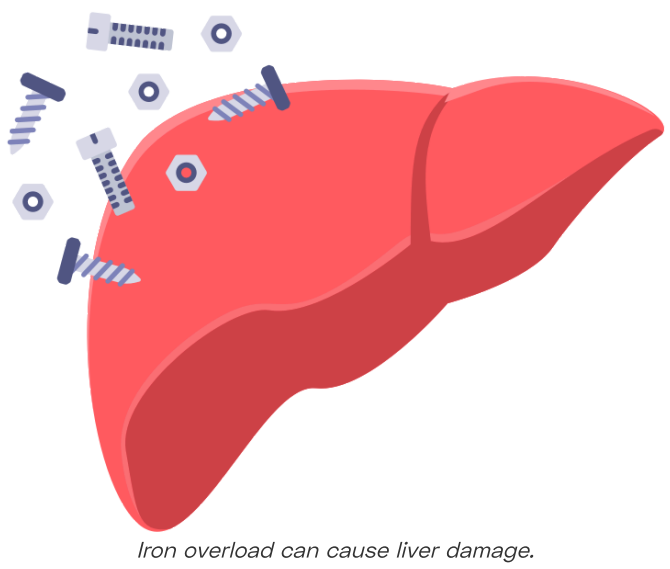
Identification of 6 genomic regions linked to iron level in the blood.

Your Result

12th
PERCENTILE
Below average score to **higher blood iron level**

Study Description

Iron is a mineral that is needed by our bodies for proper function. While all cells need iron, most of the body's iron is used by red blood cells where it facilitates the transport of oxygen. While a low iron level can lead to illnesses, an elevated iron level is also dangerous. Hemochromatosis is a disease characterized by an elevated iron level and damage to the liver and heart. Body iron level is known to be a heritable trait.



Iron overload can cause liver damage.

View Full Report

12/2018

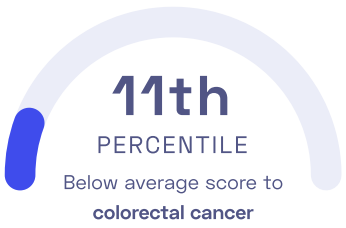
Colorectal cancer (Huyghe, 2018)

Intestines Cancer

Study Summary

Genetic variants in genes involved in *transcription*, cell signaling, and the immune system are associated with the risk of colorectal cancer.

Your Result



Study Description

Colorectal cancer occurs in either the colon or rectum, which are parts of the large intestine. It is the third most common cancer in the United States, but genetic risk factors of colorectal cancer remain poorly understood.

View Full Report

8/2019

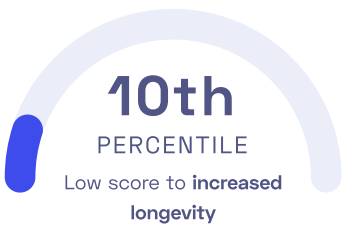
Longevity (Deelen, 2019)

Aging

Study Summary

Identification of multiple genetic variants associated with human longevity.

Your Result



Study Description

The average human lifespan has increased significantly over the past two centuries. However, genetic factors that determine human longevity are not well understood.

View Full Report

8/2013

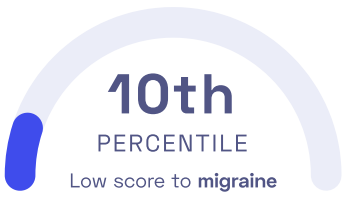
Migraine (Anttila, 2013)

Brain Mind

Study Summary

Identification of genetic variants associated with migraines and synaptic function.

Your Result



Study Description

Migraines are recurring headaches characterized by severe pain, nausea, and sensitivity to light and sound. A migraine is the most common brain disorder, affecting 14% of adults. Currently, few genetic factors that associate with an increased predisposition to migraines have been found.

View Full Report

01/2023

Varicose veins (Levin, 2023)

Vasculature

Study Summary

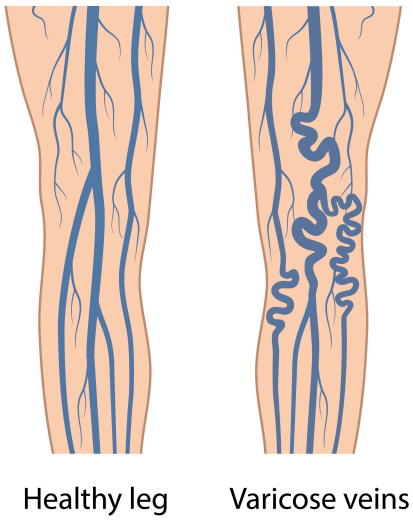
This report is based on a study that discovered 139 genetic variants associated with varicose veins.

Your Result

Study Description

Veins are blood vessels that carry blood from all parts of the body back to the heart. Varicose veins are swollen, twisted veins that occur when the veins do not adequately transport blood back to the heart. This can lead to blood buildup and increased pressure in the veins, which can cause the veins to enlarge and become visible beneath the skin. It can also result in discomfort and other symptoms.

Genetics is known to contribute to an individual's propensity for developing varicose veins, with nearly half of all people with varicose veins having other family members with the condition.



Varicose veins are enlarged and wind around.

View Full Report

04/2021

Orofacial clefts (Mukhopadhyay, 2021)

Mouth Development

Study Summary

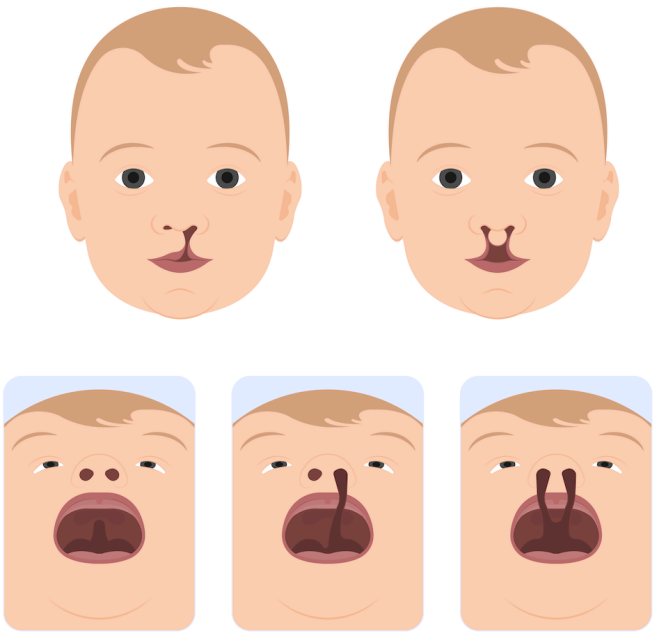
This report is based on a study that discovered 18 genetic variants associated with orofacial clefts.

Your Result

10th
PERCENTILE
Low score to **orofacial clefts**

Study Description

Cleft lips and cleft palates are birth defects that occur during the development of a baby's lips and mouth, respectively. Babies with these conditions are born with openings in their lips or roof of their mouth, which can affect activities such as speaking and eating. Together, these 2 birth defects are known as orofacial clefts. Orofacial clefts are a common condition, occurring in nearly 1 in 1000 births, but their causes are not fully understood.



Types of orofacial clefts.

View Full Report

10/2014

Febrile seizures (Feenstra, 2014)

Brain Infection

Study Summary

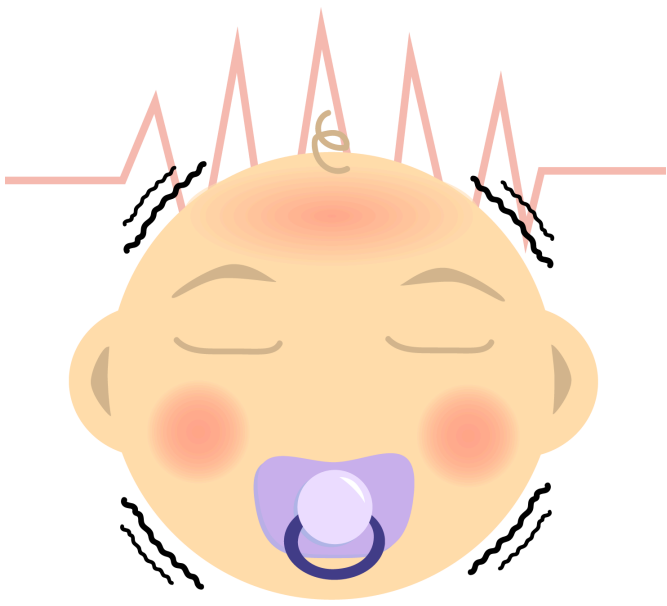
Identification of 6 genetic variants associated with *febrile* seizures.

Your Result

10th
PERCENTILE
Low score to **febrile seizures**

Study Description

In small children, high fevers can induce convulsions, causing uncontrollable shaking and loss of consciousness. This condition is known as *febrile* seizures and is a terrifying experience for many parents. However, *febrile* seizures are typically harmless and also quite common, affecting 2 - 9% (depending on ethnicity) of children before the age of 5. Because *febrile* seizures are caused by fever, they can occur after vaccinations.



Febrile seizures are fever-induced seizures that are common in small children.

View Full Report

1/2017

Systolic blood pressure (UK Biobank Cardiometabolic Traits Consortium Blood Pressure Working Group, 2017)

Vasculature Heart

Study Summary

Identification of 32 novel genetic variants associated with high blood pressure.

Your Result

9th
PERCENTILE
Low score to **elevated systolic blood pressure**

Study Description

High blood pressure contributes to many diseases, especially cardio*vascular* conditions such as heart attack and stroke. Genetic factors are thought to play a role in determining a person's risk of developing high blood pressure.

View Full Report

7/2020

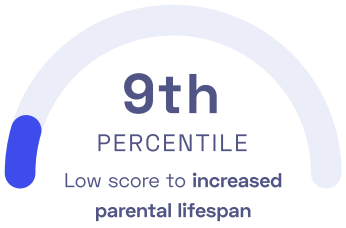
Parental lifespan (Timmers, 2020)

Aging

Study Summary

Identification of 10 genetic variants linked to parental lifespan.

Your Result



Study Description

Worldwide, the average lifespan is 70 years for males and 72 years for females. Many people, though, live well into their 90s or 100s. Though factors such as diet and access to health care influence how long an individual may live, genetics also plays a role. Overall, genetics may account for between 10-30% of the variation in lifespan. As a result, examining the lifespans of an individual's parents may help predict the offspring's expected lifespan.

View Full Report

9/2020

Falling (Trajanoska, 2020)

Aging

Study Summary

Discovery of 3 genomic regions associated with an increased risk of falling.

Your Result

Study Description

Falls are the leading cause of injury among older adults, with more than one-third of all Americans over 65 suffering a fall each year. For some injuries, such as hip fractures, up to 90% occur as the result of falls. Because many factors that lead to falling, such as cognition and muscle function, have a genetic component, this study sought to find genetic factors directly associated with an increased risk of falling.

View Full Report

11/2019

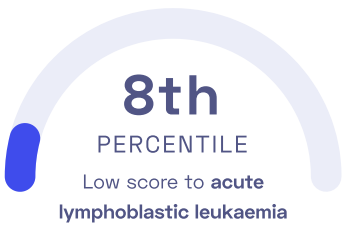
Acute lymphoblastic leukaemia (Vijayakrishnan, 2019)

Cancer Blood

Study Summary

Discovery of 4 novel genetic variants associated with acute lymphoblastic leukaemia (ALL).

Your Result



Study Description

Acute lymphoblastic leukaemia (ALL) is a type of blood cancer that leads to a debilitating overproduction of lymphocytes, a type white blood cells. ALL is the most common cancer for young children, accounting for around 85% of all cases.

View Full Report

10/2020

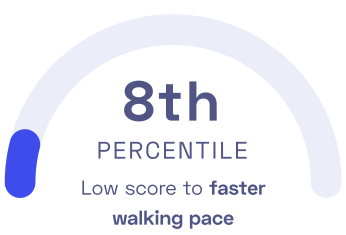
Walking pace (Timmins, 2020)

Behavior

Study Summary

Identification of 70 regions of the genome associated with walking pace.

Your Result



Study Description

Walking is an excellent leisure activity that is associated with benefits to overall health and fitness. For example, previous studies found that an increased pace of walking is associated with a decreased risk of death from cardiovascular diseases and various forms of cancer. To identify the genetic factors that influence walking pace, this study enrolled over 450,000 individuals of European descent.

View Full Report

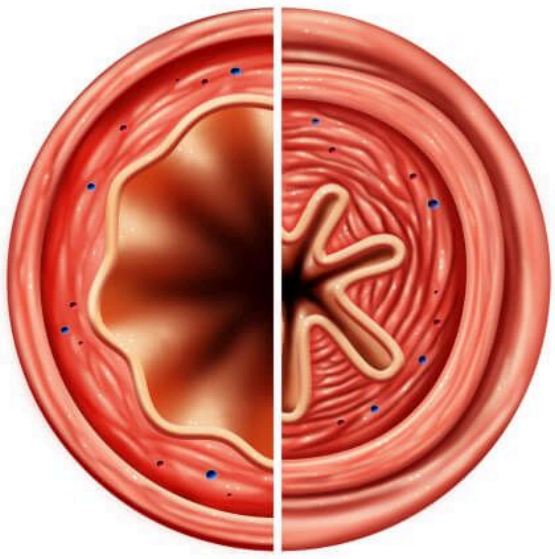
12/2021

Asthma-COPD overlap syndrome (John, 2021)

Inflammation Lungs

Study Summary

This report is based on a study that discovered 8 novel genetic variants associated with asthma-COPD overlap syndrome.



The bronchial tubes becomes constricted during asthma.

Your Result

8th
PERCENTILE
Low score to **asthma-COPD overlap syndrome**

Study Description

Asthma is a long-term disease of the lungs. It causes the airways to get inflamed and narrow, which makes it hard to breathe. Chronic obstructive pulmonary disease (COPD) describes a collection of lung diseases that cause breathing problems due to an obstructed airflow. Most people with asthma will not develop COPD, and many people with COPD don't experience asthma. However, some people are susceptible to developing both diseases at once. This condition, known as asthma-COPD overlap syndrome, can seriously affect an individual's ability to breathe, with symptoms worse than either asthma or COPD alone.

View Full Report

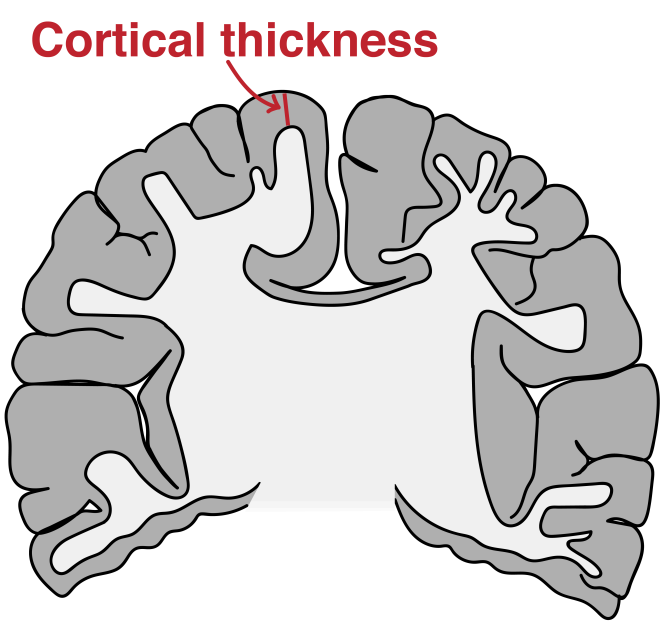
3/2020

Cerebral cortex thickness (Grasby, 2020)

Brain

Study Summary

Identification of 27 genetic regions associated with cortical thickness.



The thick cortex of human brain enables a dense packing of many nerve cells.

Your Result

8th
PERCENTILE
Low score to **thicker cerebral cortex**

Study Description

The *cerebral cortex* is the outer layer of the brain that is responsible for cognitive tasks such as perception, thought, and memory. The thick cortex of the human brain is believed to have evolved to fulfill these functions. To identify genetic variants associated with cortical thickness, this study combined genetic data with brain imaging data from over 50,000 individuals.

View Full Report

07/2019

Emphysema (Parker, 2019)

Lungs

Study Summary

Genetic variants near the TGFβ2 gene may increase the risk of emphysema by elevating TGFβ2 expression in lung *fibroblasts*.

Your Result

8th
PERCENTILE
Low score to **emphysema**

Study Description

Emphysema is one of the main types of chronic obstructive pulmonary disease (COPD) that occurs when the air sacs in the lungs are damaged. This makes it difficult to breath and most individuals with emphysema develop a chronic cough. Although smoking is the most common cause of emphysema, air pollution, certain chemical fumes, and genetics are also risk factors.

View Full Report

7/2020

Longevity (Timmers, 2020)

Aging

Study Summary

Identification of 10 genetic variants associated with longevity.

Your Result

7th
PERCENTILE
Low score to **longevity**

Study Description

Longevity is a trait that is defined as having a longer lifespan than most people. This study specifically defined longevity as living longer than 90% of people. Though factors such as diet and access to health care influence how long an individual may live, genetics also plays a role in longevity.

View Full Report

4/2020

Neck or shoulder pain (Meng, 2020)

Joints Muscles

Study Summary

Identification of 4 genetic regions associated with neck or shoulder pain.

Your Result

7th
PERCENTILE
Low score to **neck or shoulder pain**

Study Description

Neck and shoulder pain are very common and have a significant heritable component.

Pain in the neck and shoulder area is incredibly common, particularly among older adults. Because injury in the neck can lead to shoulder pain and vice versa, neck and shoulder pain are typically discussed together. This study aimed to discover the genetic basis of neck or shoulder pain. Using the genomes of ~200,000 individuals of European descent, the study identified 4 genetic regions significantly associated with neck or shoulder pain.

View Full Report

10/2016

Resting heart rate (Eppinga, 2016)

Heart

Study Summary

Identification of 64 genetic loci that are associated with resting heart rate, a key predictor of cardiovascular health.

Your Result

6th
PERCENTILE
Low score to **faster resting heart rate**

Study Description

The heart rate is the number of times that the heart beats per minute. In adults, the resting heart rate is typically 60 to 100 beats per minute. A lower resting heart rate indicates a more efficient function of the heart and better health. People who are physically very fit, for example professional runners, may have a resting heart rate as low as 40 beats per minute! Conversely, an elevated resting heart rate can be a predictor of high blood pressure, heart disease, and heart failure.

View Full Report

9/2021

Alzheimer's disease (Wightman, 2021)

Brain Aging Dementia

Study Summary

This report is based on a study that discovered 7 novel genetic variants associated with predisposition to Alzheimer's disease.

Your Result

6th
PERCENTILE
Low score to **Alzheimer's disease**

Study Description

The brain is made up of billions of nerve cells that work to connect and communicate to one another. In Alzheimer's disease, these connections are progressively lost and can seriously affect a person's ability to carry out daily activities. Alzheimer's disease usually begins after the age of 60, and the risk of developing the condition goes up as an individual gets older. Though age is associated with Alzheimer's disease, genetics also contribute to an individual's predisposition to the condition.

An individual's risk of developing Alzheimer's increases with age.

View Full Report

10/2023

☆ Thyroid-stimulating hormone levels (Williams, 2023)

Metabolism

Study Summary

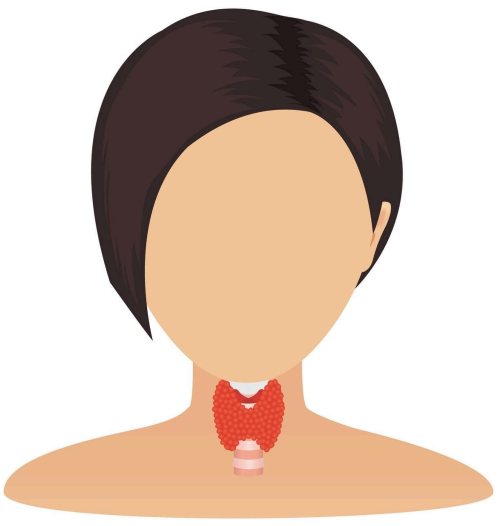
This report is based on a study that discovered 156 genetic variants associated with thyroid-stimulating hormone (TSH) levels.

Your Result

6th
PERCENTILE
Low score to **higher TSH levels**

Study Description

The thyroid is a small, butterfly-shaped gland in the neck that plays a huge role in the body's metabolism, growth, and development. It does this by producing hormones that control the speed of many activities in the body, such as how quickly the heart beats or how fast one burns calories. One of the main hormones that regulates the thyroid is called thyroid stimulating hormone (TSH), which is released by the pituitary gland in the brain. TSH acts as a messenger to tell the thyroid how much hormone to produce, and the level of TSH in the blood is a key indicator of how well the thyroid is functioning. If there is too little TSH, the thyroid doesn't get enough signals to make hormones, leading to a condition known as hypothyroidism. Symptoms can include tiredness, weight gain, and feeling cold. On the other hand, if there's too much TSH, the thyroid becomes overactive, a condition known as hyperthyroidism, causing symptoms like weight loss, rapid heartbeat, and nervousness.



The thyroid is a butterfly-shaped gland in the neck.

View Full Report

11/2019

☆ Venous thromboembolism (Klarin, 2019)

Vasculature

Study Summary

Identification of 22 new genetic variants associated with venous thromboembolism.

Your Result

6th
PERCENTILE
Low score to **venous thromboembolism**

Study Description

Venous thromboembolism is characterized by the formation of blood clots, typically in veins of the legs. Such blood clots can block the blood flow, resulting in painful swelling of the limbs. The blood clots can also travel to the lungs, resulting in pulmonary embolism, a dangerous condition associated with high mortality.

View Full Report

09/2019

☆ Visceral adiposity (Karlsson, 2019)

Obesity

Study Summary

Identification of over 100 novel genetic variants correlated with fat build-up around the body's internal organs.

Your Result

Study Description

Visceral adipose tissue is a particularly harmful type of fat typically stored around the body's internal organs. It acts as a source of inflammation for the organs, and it can lead to an increased risk of developing cardiovascular and metabolic diseases, like coronary artery disease and diabetes.

View Full Report

07/2023

☆ Diverticular disease (Wu, 2023)

Intestines Inflammation

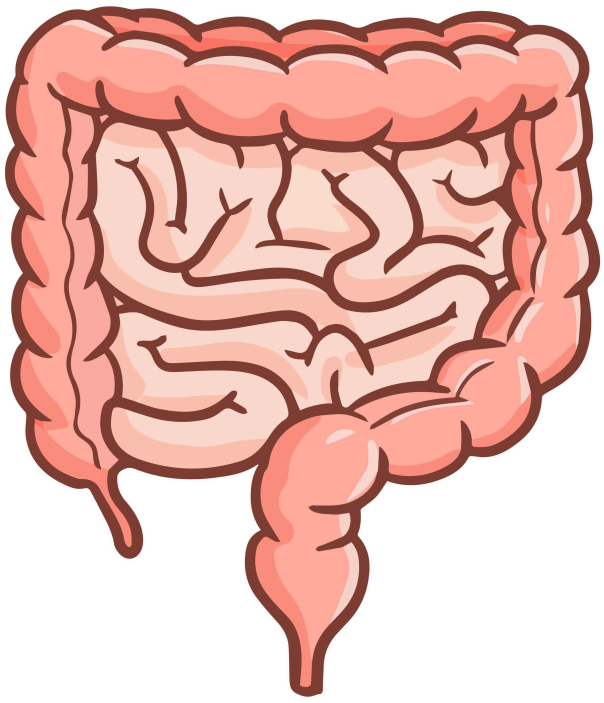
Study Summary

This report is based on a study that discovered 150 genetic variants associated with diverticular disease.

Your Result

Study Description

The intestines play a vital role in our digestive system. They consist of two parts: the small intestine, which absorbs nutrients from food, and the large intestine, which mainly absorbs water and stores waste before elimination. Diverticular disease is a condition that affects the large intestine. It is caused by the formation of small pouches called diverticula, which can develop in weakened areas of the large intestine wall. Diverticula pouches are not typically harmful, but if they become inflamed or infected, it can lead to diverticular disease. Symptoms of diverticular disease can include abdominal pain, bloating, gas, and sometimes fever. The precise causes of diverticular disease are not entirely understood, but low-fiber diets, a sedentary lifestyle, and age all appear to increase an individual's risk of developing the disease.



Divericular disease can cause a lot of abdominal pain

View Full Report

10/2022

☆ Dyslexia (Doust, 2022)

Mind

Study Summary

This report is based on a study that discovered 42 genetic variants associated with dyslexia.

Your Result

Study Description

Dyslexia is a type of learning disorder that affects how the brain processes words and numbers, resulting in difficulty reading or spelling. As a result, many children with dyslexia read at lower difficulty levels compared to their peers, though the condition has no effect on intelligence. The disorder was found to be inherited in some families, suggesting that genetics likely contributes to an individual's susceptibility to developing dyslexia. This genome-wide association study sought to identify genetic factors associated with dyslexia by examining nearly 1,140,000 individuals of European or Chinese ancestry.

Dyslexia can jumble up words, leading to difficulty reading.

View Full Report

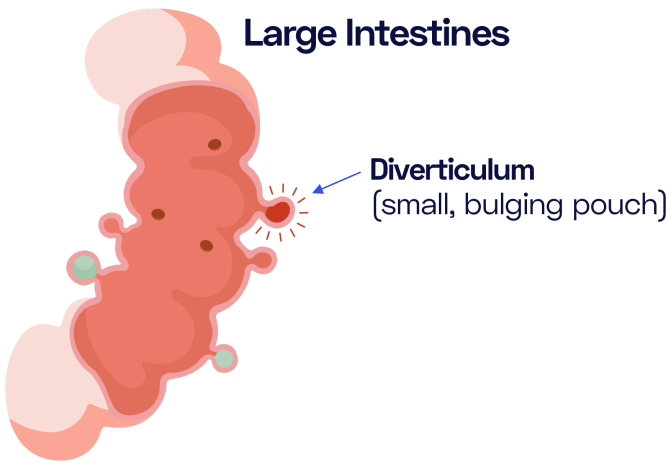
11/2018

Diverticular disease (Maguire, 2018)

Intestines

Study Summary

Identification of 42 genetic regions associated with diverticular disease.



The pouches can get inflammed and cause pain.

Your Result

Study Description

The colon, also known as the large intestine, squeezes water and nutrients out of the food we eat. Diverticular disease occurs when pressure causes small pouches to form in the colon, which can result in abdominal pain, intestinal bleeding, and diarrhea. Diverticular disease is very common, affecting around 35% of those under 50 and nearly 60% of individuals over 60, though not everyone experiences symptoms. Genetics is thought to explain over 50% of an individual's risk of developing diverticular disease.

View Full Report

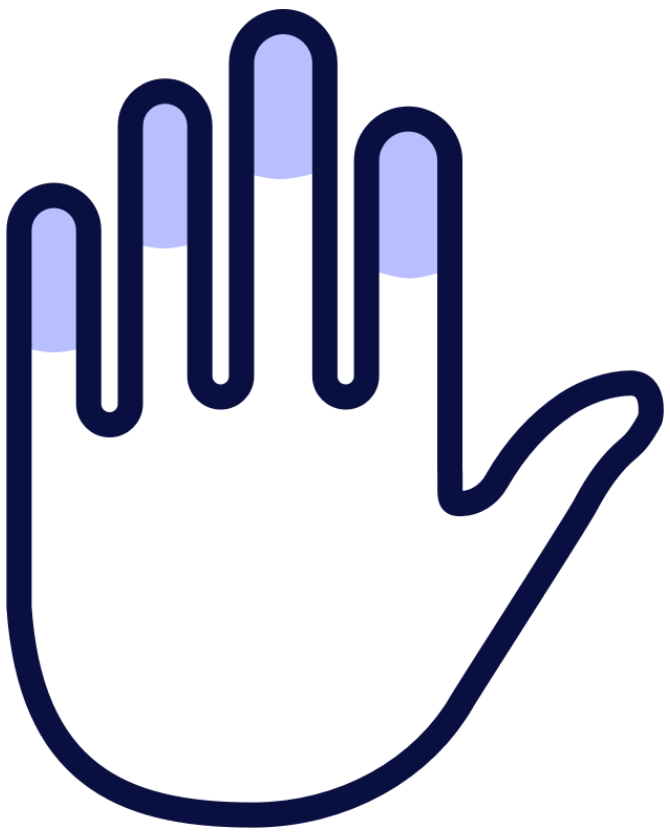
10/2019

Systemic sclerosis (López-Isac, 2019)

Vasculature Skin Autoimmunity

Study Summary

Discovery of 13 novel genetic variants associated with the development of systemic sclerosis.



Your Result

Study Description

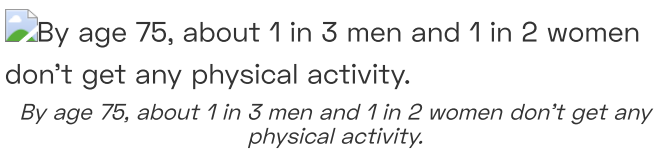
Normally, the immune system works to protect the body against foreign invaders such as bacteria and viruses. Autoimmune diseases occur when the immune system mistakenly attacks the body's own cells and organs. One of the most debilitating autoimmune diseases is systemic sclerosis, which causes scarring of the skin and internal organs. Over time, this scarring slowly limits the organs' ability to function, and is particularly detrimental to the lungs and the blood vessels.

View Full Report

08/2023

Healthy aging (Daniel B. Rosoff, 2023)

Aging


By age 75, about 1 in 3 men and 1 in 2 women don't get any physical activity.
By age 75, about 1 in 3 men and 1 in 2 women don't get any physical activity.

Study Summary

This report is based on a study that discovered 20 variants associated with healthy aging.

Your Result

Study Description

Aging is a natural process where our bodies gradually change and become less able to handle stress over time. This happens in our cells, organs, and the whole body as we get older. Aging affects all living things throughout their adult lives. The study of aging, known as gerontology, aims to understand and manage all aspects that limit our lifespan. It's not just about dealing with weakness or illness, but covers a wide range of aging-related topics. Researchers are finding specific genetic factors related to aging by looking at things like long life, overall health and how long our parents lived. However, focusing on just one of these aspects misses the common genetic

links between them and other aging-related factors like frailty. The goal is to promote healthy aging, which means staying well and happy in old age, free from disease, and feeling satisfied and fulfilled.

View Full Report

5/2020

Type 2 diabetes (Spracklen, 2020)

Metabolism

Study Summary

Identification of 301 genetic variants associated with type 2 diabetes in East Asian populations.

Your Result

3rd
PERCENTILE
Very low score to **type 2 diabetes**

Study Description

Blood sugar, or glucose, is the body's main source of energy. Its concentration in the blood is controlled by the hormone insulin which is produced in the *pancreas*. Insulin promotes the intake of blood sugar by the cells in the body which reduces its concentration in the blood. Type 2 diabetes occurs when cells don't respond to insulin and/or the *pancreas* does not produce enough insulin. This results in increased blood glucose concentration which damages organs, nerves, and blood vessels.

View Full Report

07/2022

Barrett's esophagus (Schroder, 2022)

Mouth Stomach

Study Summary

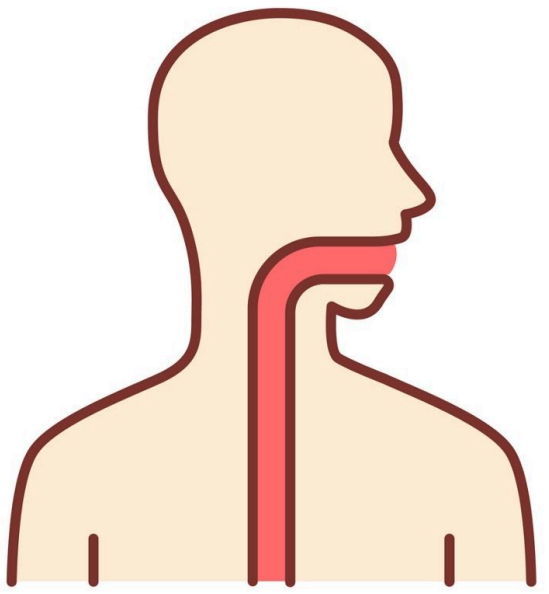
This report is based on a study that discovered 18 genetic variants associated with Barrett's esophagus.

Your Result

2nd
PERCENTILE
Very low score to **Barrett's esophagus**

Study Description

The esophagus is a muscular tube that transports saliva, liquids, and food from the mouth to the stomach. Barrett's esophagus is a condition that can develop in which the lining of the esophagus becomes damaged by stomach acid, causing it to thicken and become inflamed. Because of this tissue damage, individuals with Barrett's Esophagus have a 30-125 times greater risk of developing esophageal cancer. This genome-wide association study examined over 49,000 individuals of European ancestry and identified 18 genetic variants associated with Barrett's esophagus.



The esophagus connects the mouth to the stomach.

View Full Report

07/2019

Alcohol consumption (Evangelou, 2019)

Mind Addiction

Study Summary

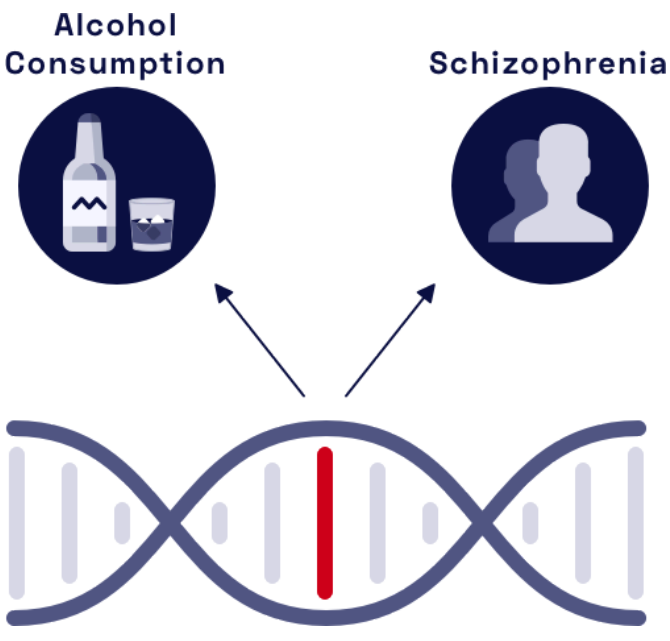
Discovery of 46 new loci associated with alcohol consumption and links to neuropsychiatric disorders like schizophrenia.

Your Result

1st
PERCENTILE
Very low score to **higher alcohol consumption**

Study Description

Excessive alcohol consumption is one of the main causes of death and disability worldwide with a mortality rate of up to 2.2% and 6.8% for women and men, respectively. Alcohol consumption is a heritable complex trait, but only a few associated genetic variants have been identified to date.



View Full Report

09/2019

Psychosis (Legge, 2019)

Behavior Mind

Study Summary

Identification of 4 genetic variants associated with psychotic experiences.

Your Result

1st
PERCENTILE
Very low score to **psychotic experiences**

Study Description

Psychosis, or psychotic experiences, typically describes a condition where an individual has an impaired relationship with reality. The most common experiences include hallucinations and *delusions*. Though these psychotic experiences can occur alongside trauma, stress, or substance abuse, they can also be a symptom of an underlying psychiatric illness.

View Full Report

5/2010

Rheumatoid arthritis (Stahl, 2010)

Autoimmunity Joints

Study Summary

Identification of 7 novel genetic variants that may confer an increased risk of developing rheumatoid arthritis.

Your Result

1st
PERCENTILE
Very low score to **rheumatoid arthritis**

Study Description

Rheumatoid arthritis is caused by the body's own immune system mistakenly attacking joints which causes damage and swelling. This restricts and makes movement painful. To better understand genetic risk factors for developing rheumatoid arthritis, this genome-wide association study examined over 25,000 individuals of European ancestry.

View Full Report

8/2019

Daytime sleepiness (Wang, 2019)

Sleep

Study Summary

Identification of 42 novel genetic variants related to excessive daytime sleepiness and other sleep-related disorders.

Your Result

1st
PERCENTILE
Very low score to **daytime sleepiness**

Study Description

For some, being sleepy during the day is not because they stayed up too late binge-watching the latest TV show. More than 1 in 10 people are affected by excessive daytime sleepiness, which can be a broader symptom of many sleep-related disorders like sleep apnea and narcolepsy. This study examined the genetic data of over 450,000 individuals of European ancestry who reported how sleepy they feel during the day.

View Full Report

09/2017

Bone mineral density (Kemp, 2017)

Bones

Study Summary

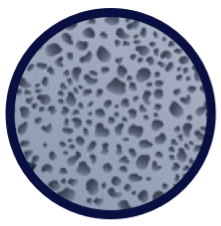
Identification of 153 new genetic variants associated with bone mineral density.

Study Description

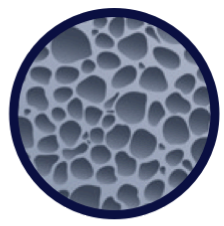
Your Result

0th
PERCENTILE
Very low score to **higher bone mineral density**

Bone mineral density is the amount of bone mineral in bone tissue. High bone mineral density means stronger bones and a lower risk of fractures and osteoporosis.



Normal Bone Density



Reduced Bone Density

View Full Report

5/2020

Sugar consumption (Meddens, 2020)

Diet

Study Summary

Discovery of 10 variants associated with sugar consumption.

Your Result

0th
PERCENTILE
Very low score to **higher sugar consumption**

Study Description

Sugar can be found in many foods and drinks we consume every day. Some foods, like fruits, contain natural sugars. On the other hand, sugars are also commonly added to foods such as pastries and soft drinks. The average American consumes 22 teaspoons (88 grams) of added sugar per day, while nutritionists recommend no more than 9 teaspoons (36 grams) per day. Too much sugar in the diet can lead to an increased risk of diabetes, tooth decay, and other diseases. To identify genetic variants that may affect the amount of sugar an individual consumes, this study examined the genomes of over 260,000 individuals of European ancestry.

View Full Report

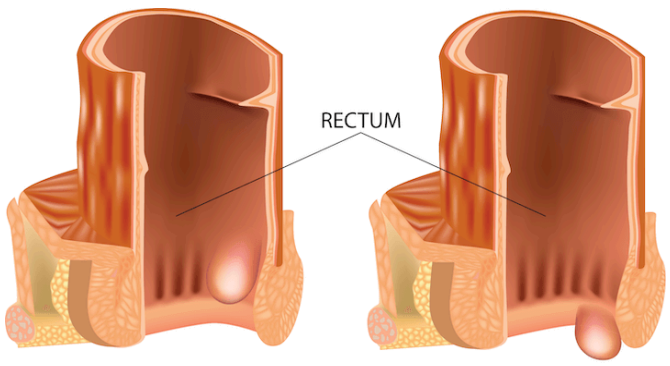
03/2021

Hemorrhoids (Zheng, 2021)

Intestines

Study Summary

This report is based on a study that discovered more than 100 genetic variants associated with hemorrhoids.



Hemorrhoids can be internal or external.

Your Result

0th
PERCENTILE
Very low score to **hemorrhoids**

Study Description

Hemorrhoids occur when veins in and around the anus become swollen and inflamed which can lead to pain and bleeding. Hemorrhoids are extremely common, potentially affecting up to 1 in every 20 individuals, and the likelihood of developing the condition increases with age. This genome-wide association included 944,000 individuals of European ancestry and discovered 102 genetic variants associated with the development of hemorrhoids.

View Full Report

08/2023

Binge eating disorder (Burstein, 2023)

Behavior Metabolism

Study Summary

This report is based on a study that discovered 4 genetic variants associated with binge eating disorder.

Study Description

Practically everyone overeats occasionally, such as opting for seconds or even thirds during a holiday dinner. For some, excessive overeating can feel out of control, leading to a condition known as binge eating disorder. Binge eating disorder is the most common form of eating disorder, and involves regularly consuming large amounts of food in a short period, and can lead to several negative effects on the body. These can include physical effects, such as weight gain, heart disease, and diabetes, as well as mental impacts including anxiety and depression. The causes of binge eating disorders are numerous and can involve a combination of genetic, psychological, and environmental factors.

Your Result

0th
PERCENTILE
Very low score to **binge eating disorder**

Binge eating disorders can lead to obesity and heart disease

View Full Report

12/2019

Resistance to severe malaria (Malaria Genomic Epidemiology Network, 2019)

Infection

Study Summary

Identification of 5 genomic loci associated with resistance to severe malaria.

Your Result

0th
PERCENTILE
Very low score to **resistance to severe malaria**

Study Description

Malaria is a disease caused by parasites transmitted via mosquito bites. Typical symptoms are chills, high fever and, in severe cases, organ failure. The World Health Organization estimated 219 million malaria cases in 2017, with the estimated number of deaths totaling 435,000. This study sought to identify genomic regions associated with resistance to severe malaria.

View Full Report

10/2023

Pain susceptibility

Brain Joints Muscles Bones Stomach

Study Summary

This report is based on a study that discovered 34 variants associated with pain.

Your Result

0th
PERCENTILE
Very low score to **Pain**

Study Description

Pain encompasses a complex blend of sensory elements, acting as a crucial alert system for the body, signaling potential dangers, and eliciting adaptive reactions for survival and overall health.

If you suffer from migraines, there's a chance you inherited them from a relative.

View Full Report

4/2005

SARS coronavirus infection (Hamano, 2005)

Infection Lungs

Study Summary

Discovery of a genetic variant in the OAS-1 gene associated with increased risk of severe acute respiratory syndrome (SARS) *coronavirus* infection.

Study Description

In 2003, severe acute respiratory syndrome (SARS) *coronavirus* emerged in China and spread to countries in Asia, Europe, and North America, leading to a total of ~ 8,000 cases. SARS is an infectious disease that can cause flu-like symptoms, including fever, coughing, and shortness of breath. While multiple clinical risk factors for developing SARS, such as being over the age of 60 or having diabetes, have been identified, little is known about how genetics affects the susceptibility to SARS *coronavirus* infection.

View Full Report

10/2020

Recognition of cinnamon smell (Gisladottir, 2020)

Nose Senses

Study Summary

Identification of a region of the genome associated with the ability to recognize the smell of cinnamon.

Study Description

The perception of smell is enabled by olfactory receptors, which are proteins that bind odor molecules. Humans have about 350 olfactory receptor genes that each can detect a number of different odor compounds that together can create a vast number of different scents. However, when presented with the same smell, different individuals vary in their ability to identify the smell. This genome-wide association study looked at the genomes of over 11,000 Icelandic people to identify the genetics underlying differences in the detection of the scent of cinnamon.

View Full Report

12/2019

Extranodal natural killer T-cell lymphoma (Lin, 2019)

Cancer Nose Infection Blood

Study Summary

Identification of 2 novel genetic variants associated with lymphoma found in the nose.

Study Description

Extranodal natural killer T-cell lymphoma (NKTCL) is an aggressive blood cancer that grows outside of the lymphatic system, usually in the nose. While NKTCL is rare in European populations, it is common in individuals of Asian and South American ancestry. Infection with Epstein-Barr virus, has been previously linked to the development of NKTCL. Other evidence suggests that genetic variants within a gene responsible for immune system regulation also contribute to the development of NKTCL. Researchers that conducted this study sought to identify novel genetic variants associated with NKTCL.

View Full Report

1/2020

Sepsis-associated acute respiratory distress syndrome (Guillen-Guio, 2020)

Lungs Infection Inflammation

Study Summary

Discovery of a variant in the FTL1 gene associated with susceptibility to sepsis-induced acute respiratory distress syndrome.

Study Description

Sepsis occurs when chemicals that are released in the bloodstream to fight an infection trigger inflammation throughout the body. Sepsis can be life-threatening and lead to long-term damage of many organs. If the lungs are affected, it can result in acute respiratory distress syndrome (ARDS), whereby fluids enter the lungs, making it extremely difficult to breathe.

View Full Report

02/2014

Post-traumatic stress disorder (Logue, 2014)

Mind

Study Summary

Variants in the RORA gene are linked to posttraumatic stress disorder (PTSD).

Study Description

Post-traumatic stress disorder (PTSD) is defined by disturbances in cognitive, emotional, and behavioral functioning that occurs in response to a traumatic event. To identify genetic variants significantly associated with PTSD, this study examined the genetic data of 761 Caucasian and African-American veterans.

View Full Report

8/1996

HIV resistance (Samson, 1996)

Infection

Study Summary

Identification of a common genetic variant that confers HIV resistance.

Study Description

The human immunodeficiency virus (HIV) destroys the immune system by killing white blood cells that are needed to fight infection. This disease is called acquired immunodeficiency syndrome (AIDS). CCR5 is a protein on the surface of white blood cells, that is bound by HIV and used to enter the cells.

View Full Report

10/2020

Cannabis use disorder (Johnson, 2020)

Addiction

Study Summary

Identification of 2 genomic regions associated with cannabis use disorder.

Study Description

In the United States, over 20 million people consume cannabis every month. About 1 in 10 users of cannabis will become dependent, leading to a condition known as cannabis use disorder. Individuals afflicted by cannabis use disorder may develop irritability, memory problems, and depression. It is estimated that over 50% of an individual's risk of developing cannabis use disorder can be explained by genetic factors.

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01/2009

Resistance to transmissible Creutzfeldt-Jakob disease (Mead, 2009)

Brain

Study Summary

Identification of a genetic variant that confers resistance to transmissible Creutzfeldt-Jakob disease.

Study Description

Prion diseases are brain disorders caused by misfolded proteins that form aggregates leading to progressive, fatal dementia. Some prion diseases are transmissible. For example, consuming meat infected with misfolded prion proteins can induce the body's own prion proteins to misfold and aggregate.

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07/2009

Moles (Falchi, 2009)

Skin Cancer

Study Summary

Identification of 2 genomic regions associated with the number of moles on the body.

Study Description

Moles are pigmented skin lesions, usually developing during adulthood in sun-exposed areas of the skin. In most cases, moles are benign and don't require treatment. However, sometimes they turn into skin cancer. The count of moles on the body is the strongest known risk factor for melanoma, a type of cancer that develops from pigment-producing cells.

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10/2019

Diffuse large B-cell lymphoma (Kleinstern, 2019)

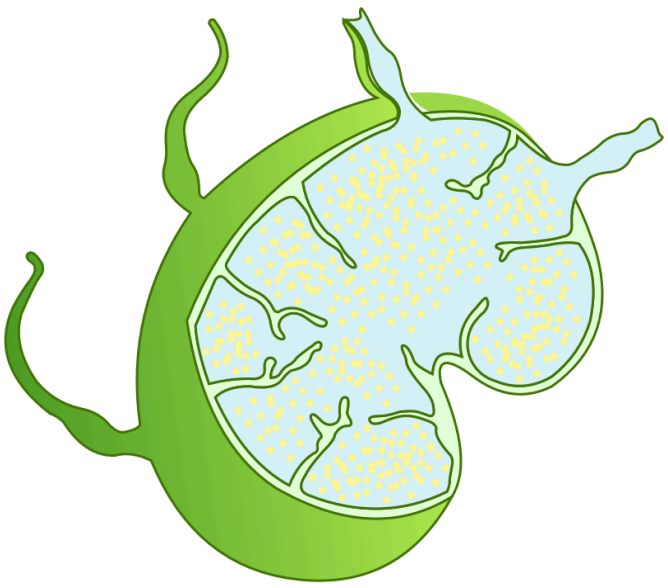
Blood Cancer

Study Summary

Identification of 2 novel genetic variants associated with an increased risk of developing diffuse large B-cell lymphoma.

Study Description

B-cells are a type of white blood cell that plays an important role in our immune system by producing antibodies that help detect and destroy germs. However, abnormal B-cell growth has the potential to form diffuse large B-cell lymphoma (DLBCL), an aggressive form of cancer. A family history of lymphoma has previously been associated with an increased risk of developing the disease.



A lymph node containing lymphocytes

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4/2019

Facial attractiveness (Hu, 2019)

Appearance

Study Summary

Identification of 2 novel genetic variants that are associated with facial attractiveness.

Study Description

Facial attractiveness is a complex human trait. Though commonly attributed to sociological factors, there are genetic influences on facial beauty in males and females. This genome-wide association study identified 2 sex-specific genetic variants associated with facial attractiveness by examining over 4,000 individuals of European ancestry.

Facial attractiveness might be linked to the hormone system.

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1/2020

Dietary habits (Matoba, 2020)

Diet

Study Summary

Identification of genetic regions associated with dietary habits.

Study Description

Eating and drinking habits can influence one's risk for, or protection from, certain diseases. This study sought to identify genetic variants that are linked to different dietary habits by examining genetic information and diet of over 165,000 Japanese individuals enrolled in the

BioBank Japan Project.

The variant rs671 is linked to the consumption of many foods and beverages.

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6/2017

Insomnia (Hammerschlag, 2017)

Sleep Mind

Study Summary

Identification of multiple novel genetic variants that are associated with an increased risk of experiencing insomnia.

Study Description

Sleep plays a critical role in maintaining physical and mental health. Insomnia, characterized by difficulty falling asleep or staying asleep, is one of the most common sleeping disorders. Insomnia is also one of the most common mental disorders and a major risk factor for depression.

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