

Nebula Library

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CATEGORY

Genomic

Favorites ★

SEARCH

e.g. Trait, SNP, Gene

TAGS

Addiction Aging Alcoholism Allergy Appearance Autoimmunity Behavior

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CLEAR

344 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

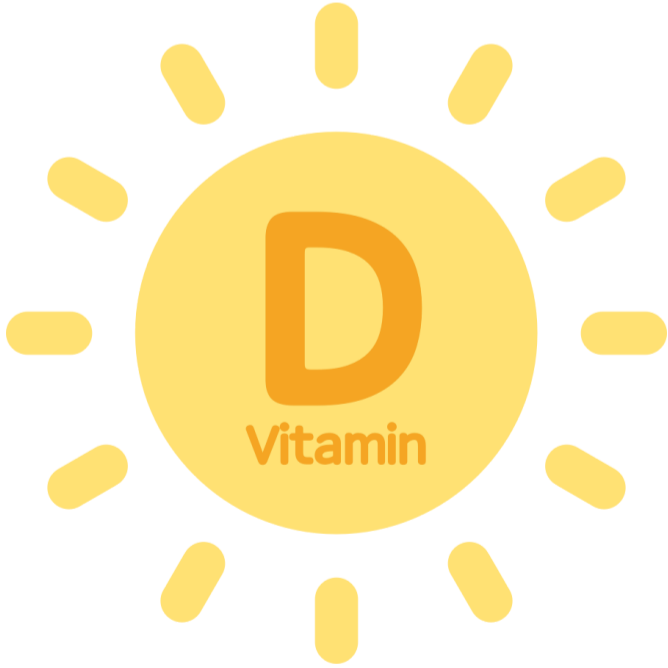
100th PERCENTILE

Very high score to higher vitamin D level

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.

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

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.

↑

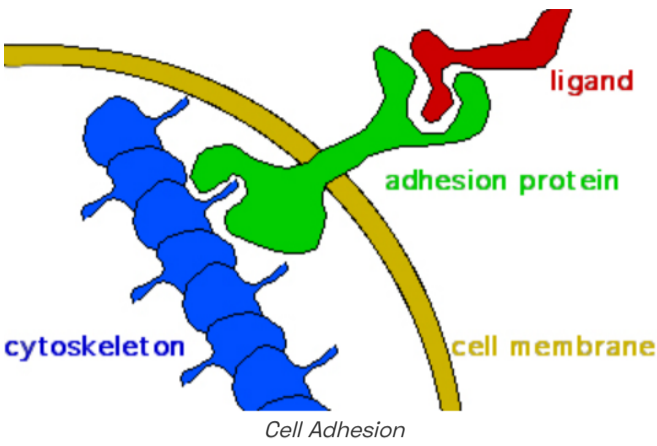
YOUR RESULT



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.

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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

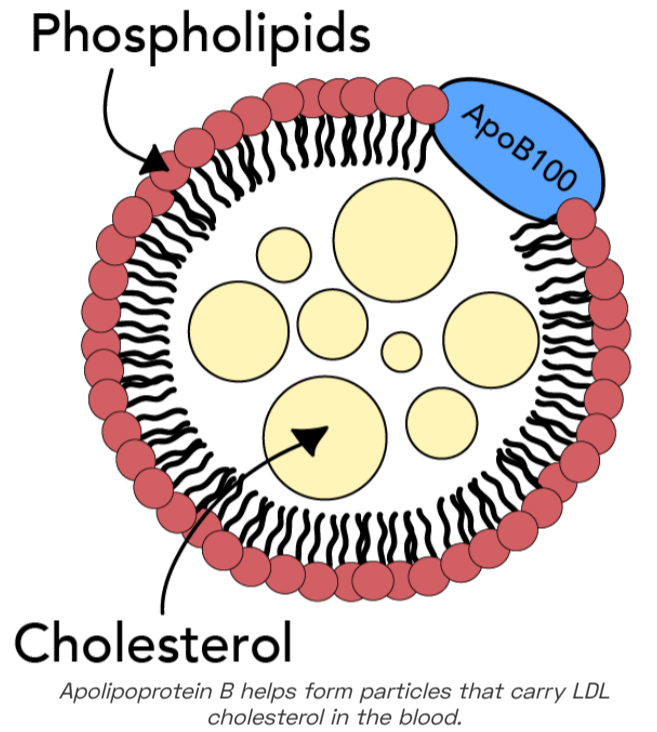


STUDY DESCRIPTION

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).

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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.

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A typical example of systemizing observed in a young child.

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.

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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.

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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.

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11/2015

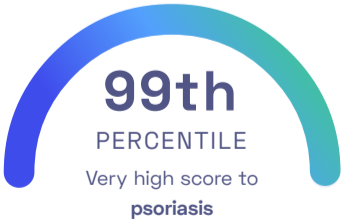
★ [Psoriasis \(Tsoi, 2015\)](#)

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.

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11/2020

★ [Brain volume \(Jansen, 2020\)](#)

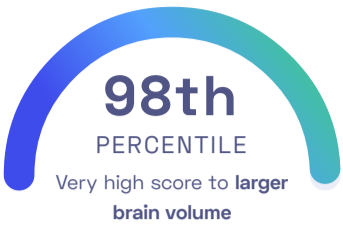
Brain



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.

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5/2020

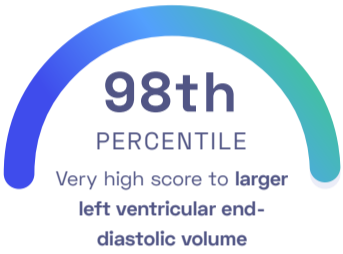
★ [Left ventricular end-diastolic volume \(Pirruccello, 2020\)](#)

Heart

STUDY SUMMARY

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

YOUR RESULT

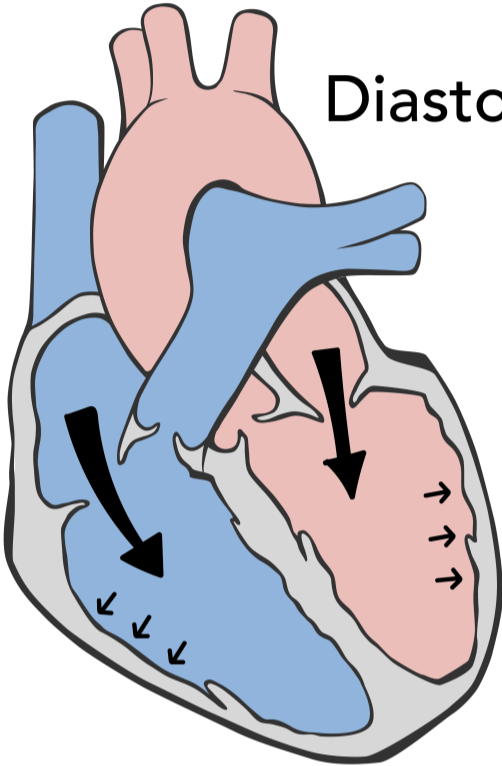


STUDY DESCRIPTION

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.

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

2/2021

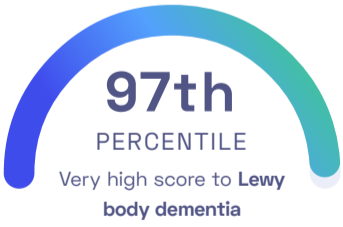
★ [Lewy body dementia \(Chia, 2021\)](#)

Dementia Brain

STUDY SUMMARY

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

YOUR RESULT

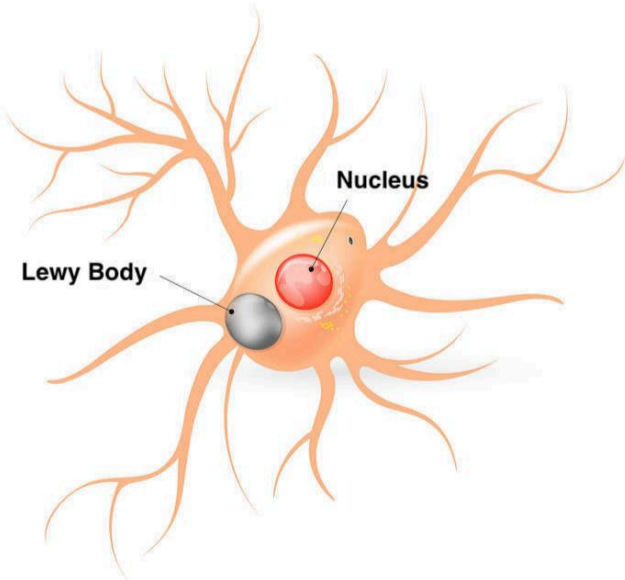


STUDY DESCRIPTION

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.

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

9/2020

★ [Ebbinghaus illusion overestimation \(Zhu, 2020\)](#)

Brain Mind

STUDY SUMMARY



YOUR RESULT

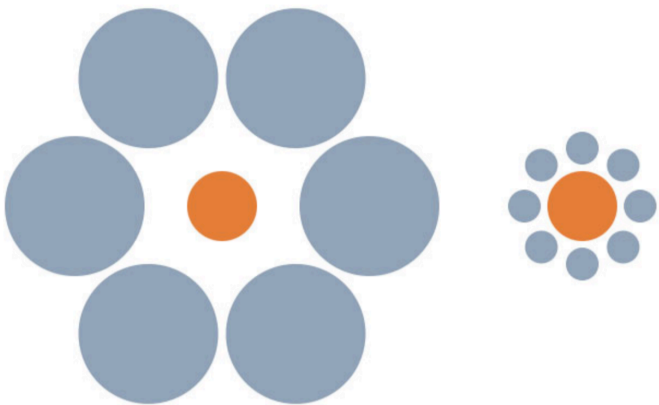


STUDY DESCRIPTION

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.

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

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

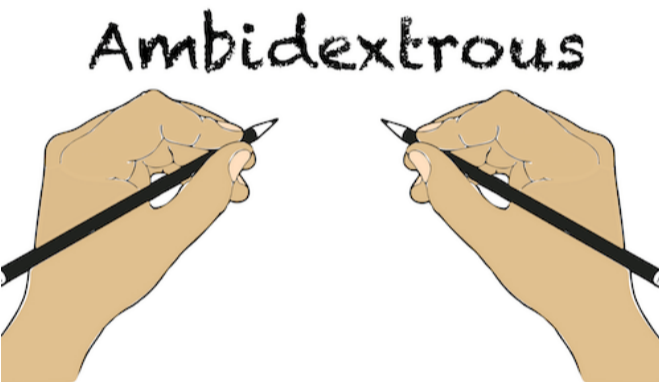


STUDY DESCRIPTION

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.

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

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

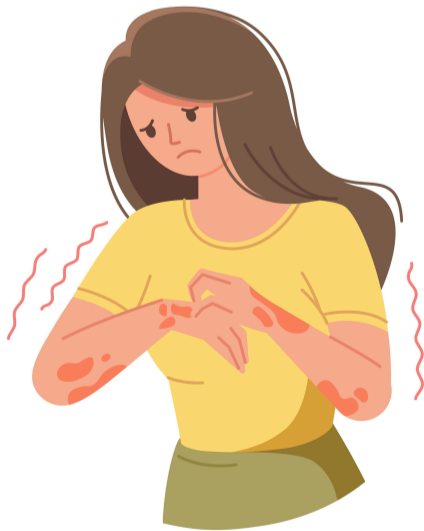


STUDY DESCRIPTION

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.

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Atopic dermatitis can be extremely itchy.

3/2020

★ [HDL cholesterol level \(Richardson, 2020\)](#)

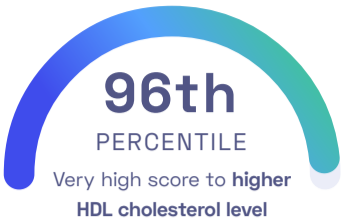
Heart Blood



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.

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01/2015

★ [Brain volume \(Hilbar, 2015\)](#)

Brain

STUDY SUMMARY

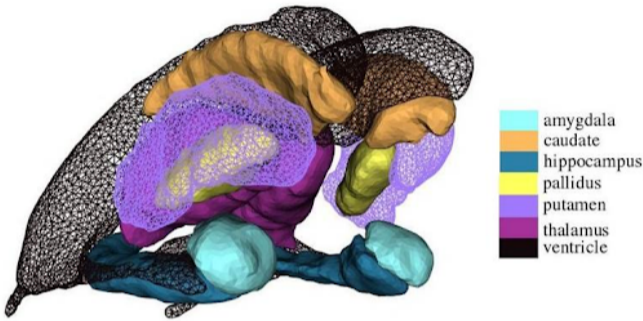
This study identified novel genetic variants that may influence the subcortical brain structures which are involved in complex activities including movement, emotions, and learning.

YOUR RESULT



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).



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11/2020

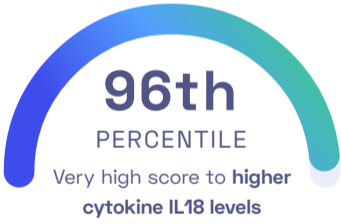
★ [Cytokine IL18 levels \(Wang, 2020\)](#)

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.

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3/2021

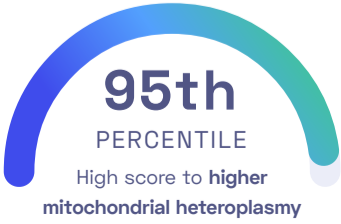
★ [Mitochondrial heteroplasmy \(Nandakumar, 2021\)](#)

Metabolism Mitochondria

STUDY SUMMARY

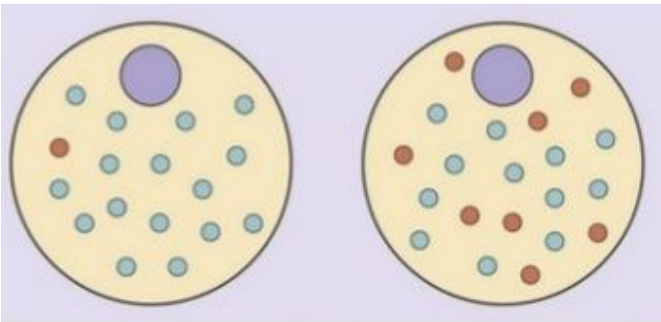
This report is based on a study that discovered 20 genetic variants associated with mitochondrial heteroplasmy.

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.



Low Heteroplasmy

High Heteroplasmy

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



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.



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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.

YOUR RESULT



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 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.



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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.

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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.

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04/2018

☆ [Depression \(Wray, 2018\)](#)

Mind

STUDY SUMMARY

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

YOUR RESULT



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.

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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.

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8/2020

☆ [Male breast cancer \(Maguire, 2020\)](#)

Breasts Cancer

STUDY SUMMARY

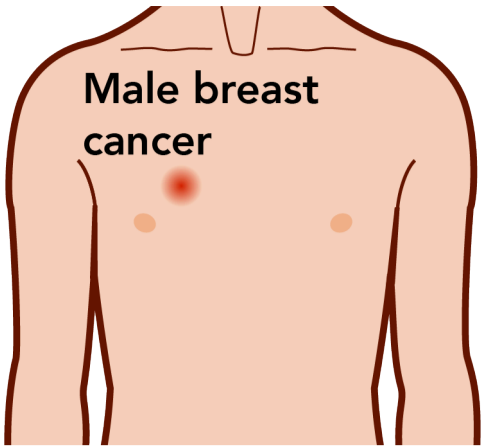
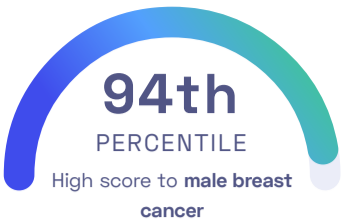
Discovery of 3 novel regions of the genome associated with male breast cancer.

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.



YOUR RESULT



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

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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.

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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.

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5/2020

★ [Thinness \(Orthofer, 2020\)](#)

Obesity Metabolism

STUDY SUMMARY

Discovery of 5 genetic variants associated with thinness.

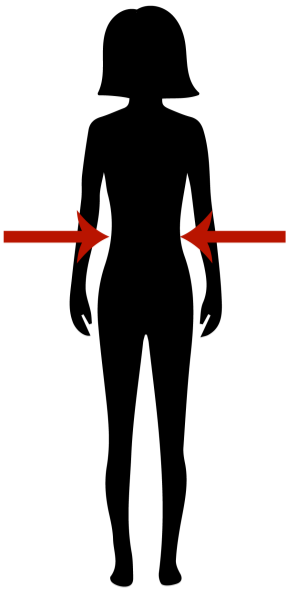


YOUR RESULT



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.



Thinness

This study examined genetic predisposition to thinness rather than obesity.

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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.

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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.

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09/2023

★ [Coronary artery calcification \(Kavousi, 2023\)](#)

[Vasculature](#)

STUDY SUMMARY

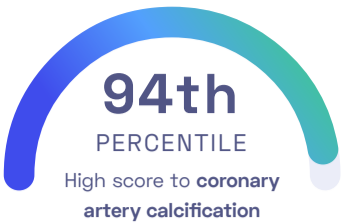
This report is based on a study that discovered 11 genetic variants associated with coronary artery calcification.

STUDY DESCRIPTION

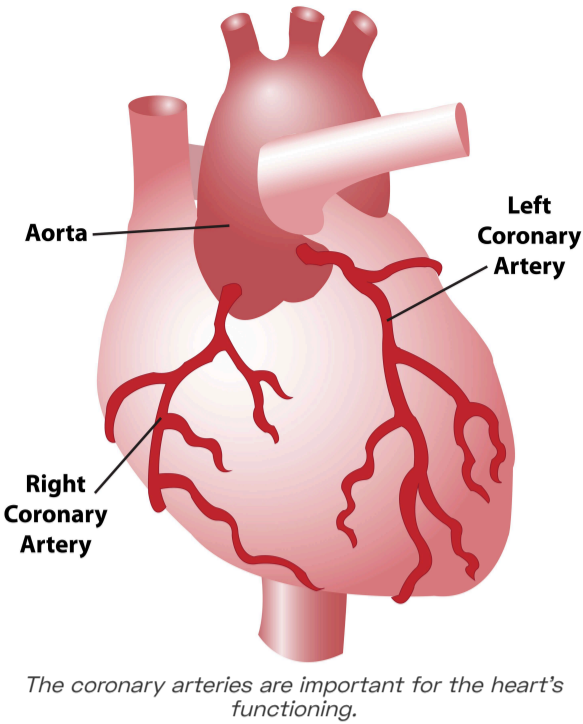
The coronary arteries are vital blood vessels responsible for delivering oxygen-rich blood to the heart. Over time, these arteries can undergo a process called coronary artery calcification, where calcium deposits form, leading to the hardening of the arteries. Various factors, such as aging, high cholesterol 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



YOUR RESULT



individuals are more prone to this calcification because of their genetic makeup, unhealthy lifestyle habits, or having specific medical conditions like diabetes.



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11/2019

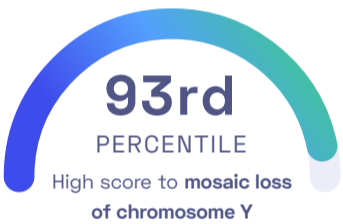
★ [Mosaic loss of chromosome Y \(Thompson, 2019\)](#)

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 *chromosomes* including two 'sex *chromosomes*'. Females have two X *chromosomes*, 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.

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06/2020

★ [Chronic musculoskeletal pain \(Yakov A. Tsepilov, 2020\)](#)

Muscles

STUDY SUMMARY

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

YOUR RESULT



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 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.



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Aging

STUDY SUMMARY

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

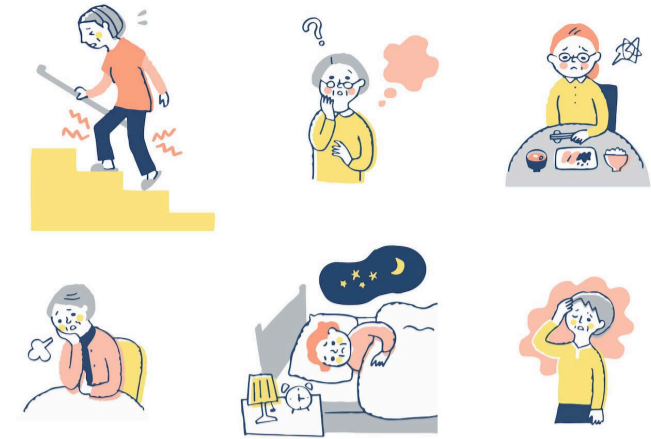
YOUR RESULT



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.

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

1/2021

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”.

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Individuals suffering from PTSD are often easily startled.

7/2012

Behavior

STUDY SUMMARY

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

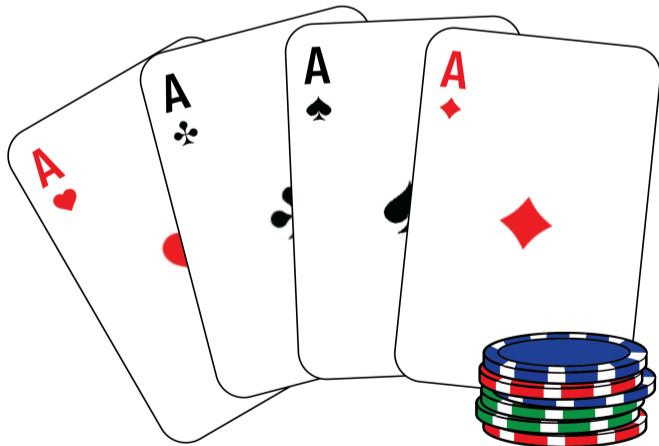
YOUR RESULT



STUDY DESCRIPTION

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.

[View Full Report](#)



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

1/2020



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%.

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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.

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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.

YOUR RESULT

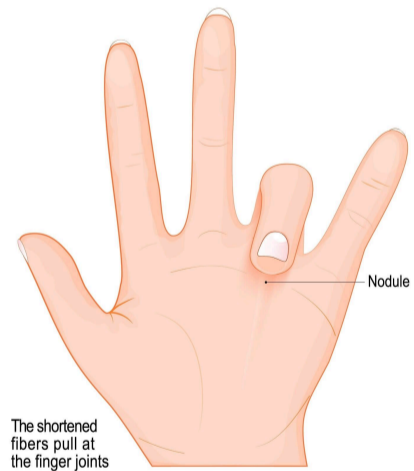


STUDY DESCRIPTION

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.

[View Full Report](#)

Dupuytren's contracture



Contracture can impair hand movements.

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.



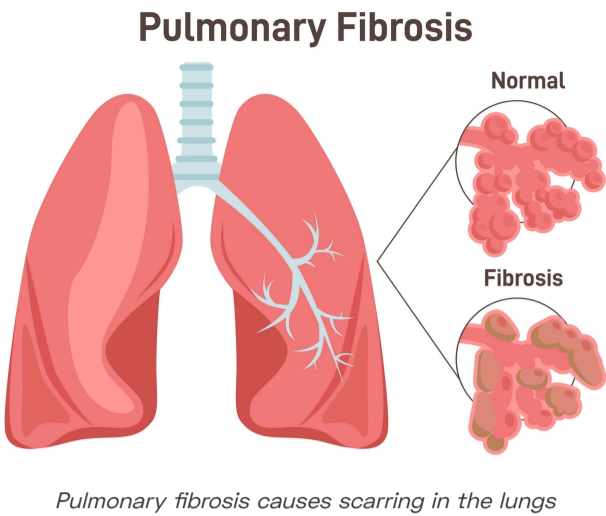
YOUR RESULT



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.’



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10/2020

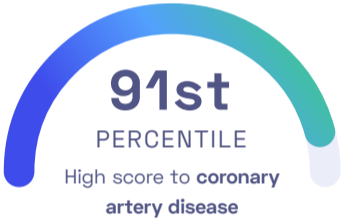
★ [Coronary artery disease \(Koyama, 2020\)](#)

Heart Vasculature

STUDY SUMMARY

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

YOUR RESULT



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.

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5/2020

★ [Protein consumption \(Meddens, 2020\)](#)

Diet

STUDY SUMMARY

Identification of 7 genetic variants associated with protein consumption.

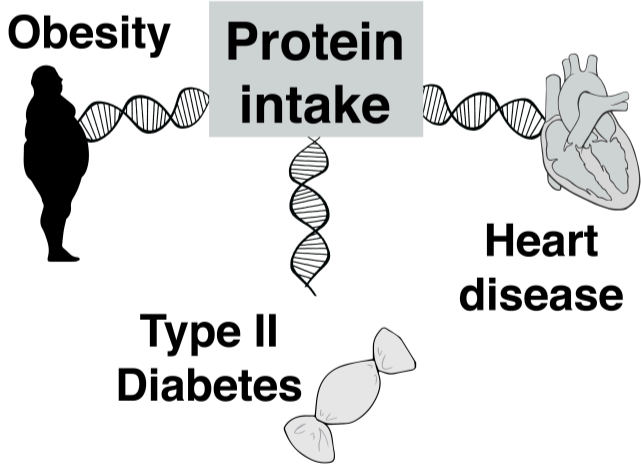
YOUR RESULT



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.

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6/2016

★ [Squamous cell lung carcinoma \(McKay, 2017\)](#)

Lung Cancer

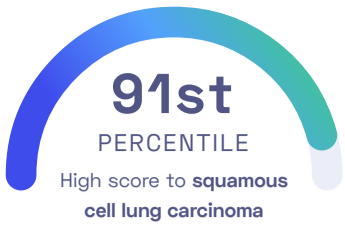
STUDY SUMMARY

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](#)

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.

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11/2019

☆ [Idiopathic pulmonary fibrosis \(Allen, 2019\)](#)

[Lungs](#)

STUDY SUMMARY

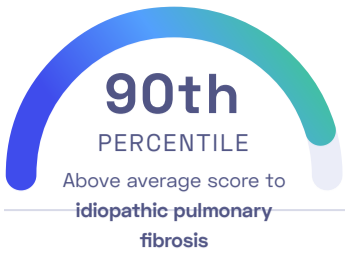
Identification of 5 novel variants associated with *idiopathic pulmonary fibrosis*.

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.

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11/2019

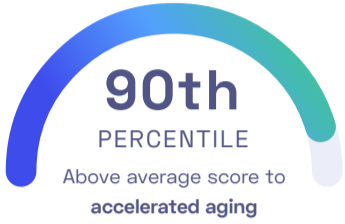
★ [Aging \(Gibson, 2019\)](#)

Aging

STUDY SUMMARY

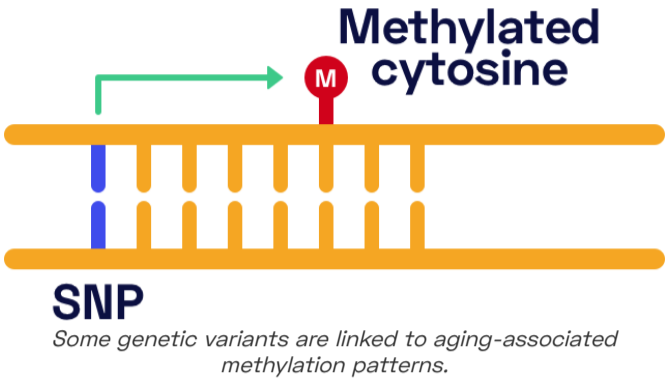
Discovery of 10 genetic variants associated with accelerated aging.

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.



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4/2021

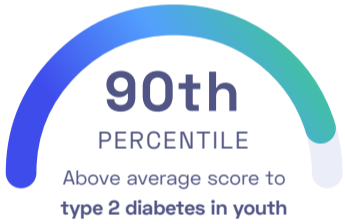
★ [Type 2 diabetes in youth \(Srinivasan, 2021\)](#)

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.



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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.

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.



YOUR RESULT



Music is an important part of many cultures.

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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).

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5/2020

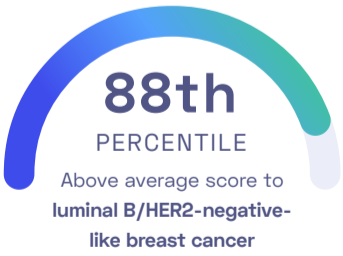
★ [Luminal B/HER2-negative-like breast cancer \(Zhang, 2020\)](#)

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*.

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3/2020

★ [Triglyceride level \(Richardson, 2020\)](#)

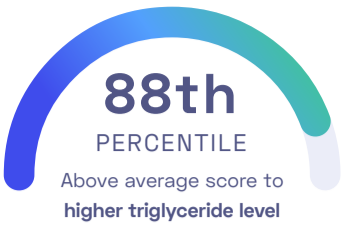
Blood Heart

STUDY SUMMARY

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



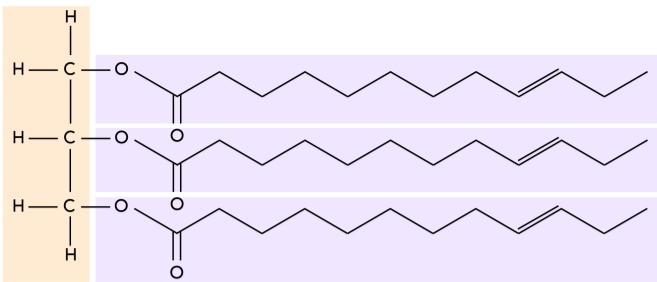
YOUR RESULT



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 *triglyceride*.



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

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5/2020

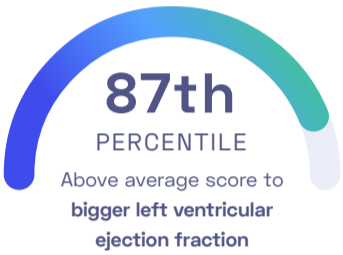
★ [Left ventricular ejection fraction \(Pirruccello, 2020\)](#)

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.

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2/2020

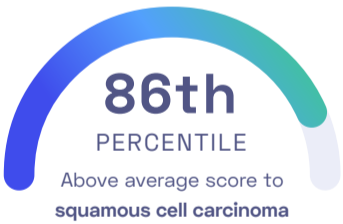
★ [Squamous cell carcinoma \(Sarin, 2020\)](#)

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.

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03/2014

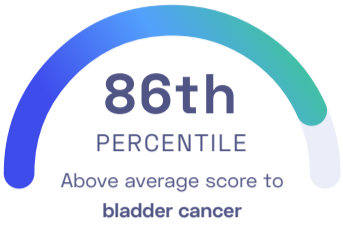
★ [Bladder cancer \(Figueroa, 2014\)](#)

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.

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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.

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10/2011

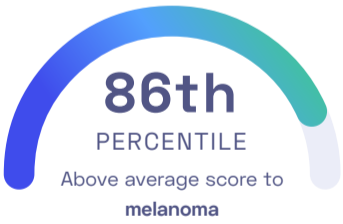
★ [Melanoma \(Barrett, 2011\)](#)

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.

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03/2014

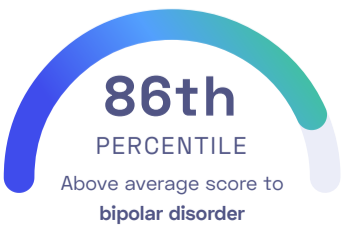
★ [Bipolar disorder \(Mühleisen, 2014\)](#)

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.



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

02/2017

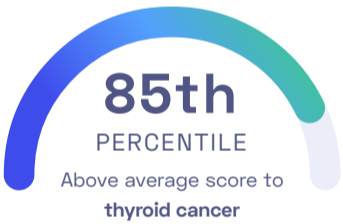
★ [Thyroid cancer \(Gudmundsson, 2017\)](#)

Cancer Thyroid

STUDY SUMMARY

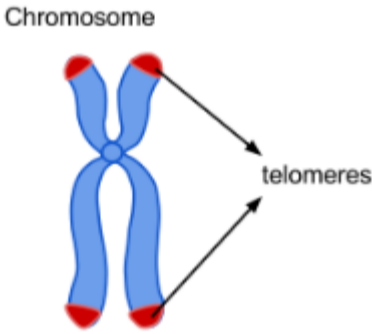
Thyroid cancer is associated with genetic variants linked to the regulation of telomere length.

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.



5/2020

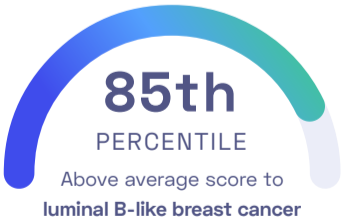
★ [Luminal B-like breast cancer \(Zhang, 2020\)](#)

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.

10/2019

★ [Mosaic loss of chromosome Y \(Terao, 2019\)](#)

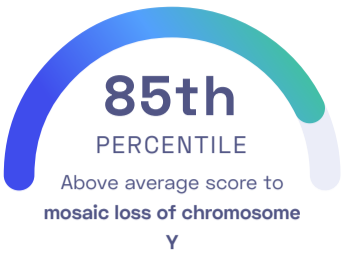
Blood Sex



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.



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03/2019

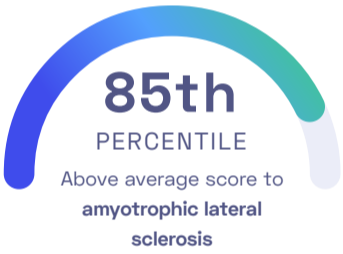
★ [Amyotrophic lateral sclerosis \(Nicolas, 2019\)](#)

Muscles Spine Brain

STUDY SUMMARY

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

YOUR RESULT



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.



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

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05/2023

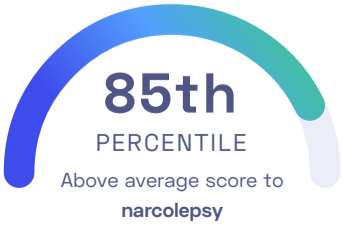
★ [Narcolepsy \(Ollila, 2023\)](#)

Sleep

STUDY SUMMARY

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

YOUR RESULT



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



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



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.

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5/2020

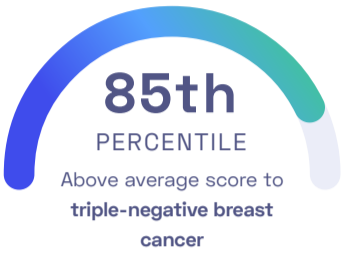
★ [Triple-negative breast cancer \(Zhang, 2020\)](#)

Cancer Breasts

STUDY SUMMARY

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

YOUR RESULT



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.

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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.

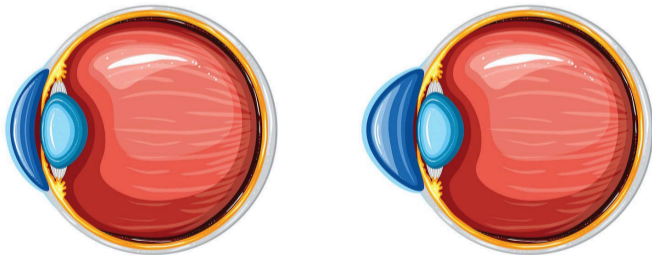
YOUR RESULT



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.

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

11/2019

★ [Eosinophilic granulomatosis with polyangiitis \(Lyons, 2019\)](#)

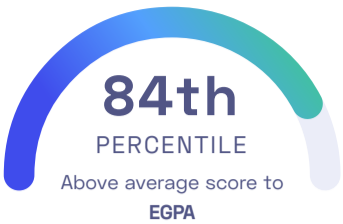
Lungs Inflammation Blood



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.

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8/2019

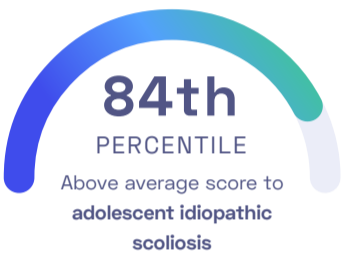
★ [Adolescent idiopathic scoliosis \(Kou, 2019\)](#)

Spine Development

STUDY SUMMARY

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

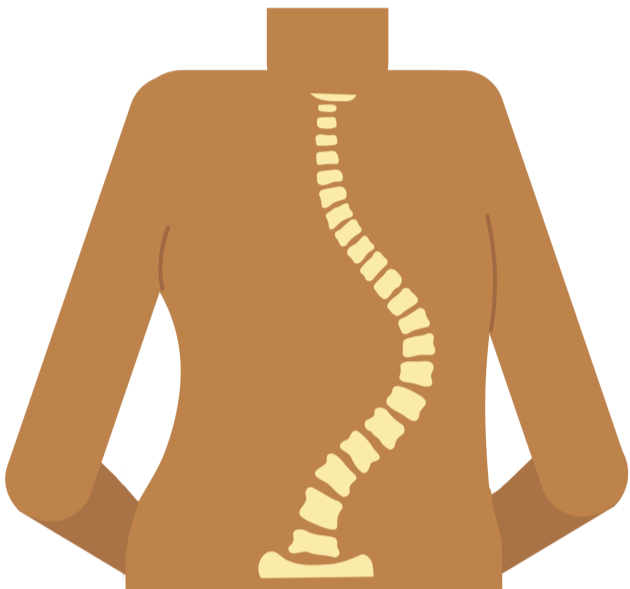
YOUR RESULT



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

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Scoliosis is a sideways curvature of the spine.

12/2022

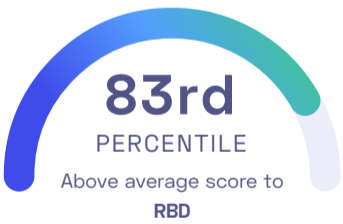
★ [REM sleep behavior disorder \(Krohn, 2022\)](#)

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

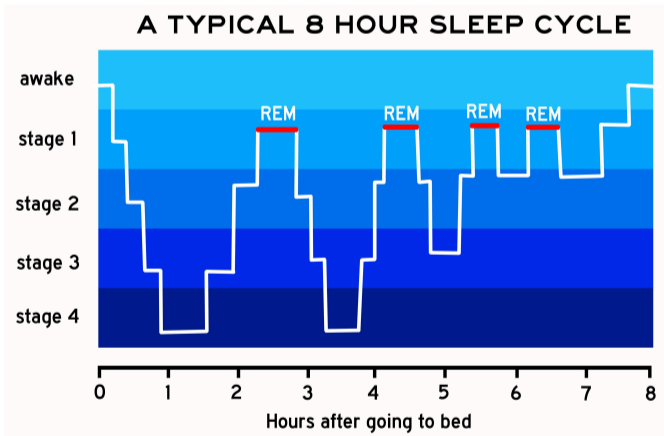


STUDY DESCRIPTION

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.

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Individuals usually enter REM sleep multiple times a night.

2/2020

★ [Plant and fish-based diet \(Niarchou, 2020\)](#)

Brain Behavior

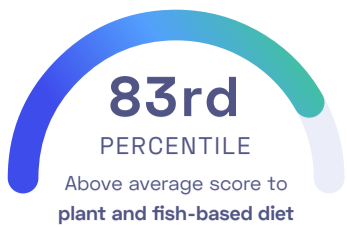
STUDY SUMMARY

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

YOUR RESULT

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.

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03/2018

★ [Stroke \(Malik, 2018\)](#)

Vasculature Brain

STUDY SUMMARY

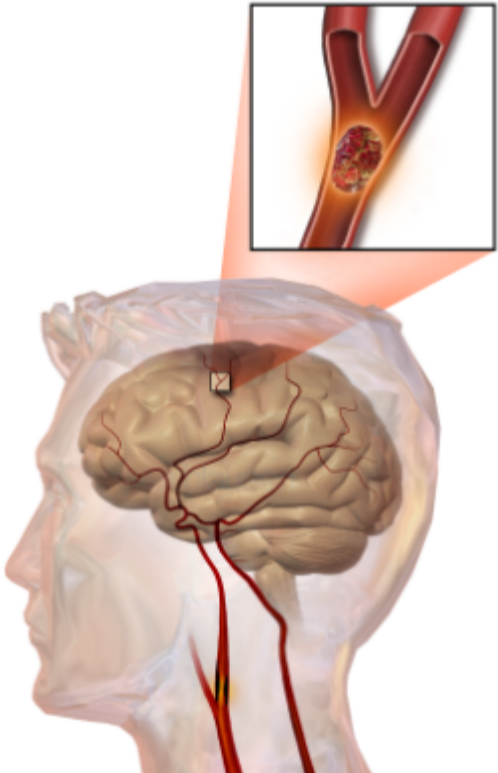
The risk of strokes is associated with genetic variants that are also linked to various cardiovascular traits.

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.



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3/2011

★ [Ulcerative colitis \(Anderson, 2011\)](#)

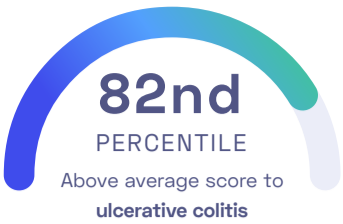
Inflammation Intestines

STUDY SUMMARY

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

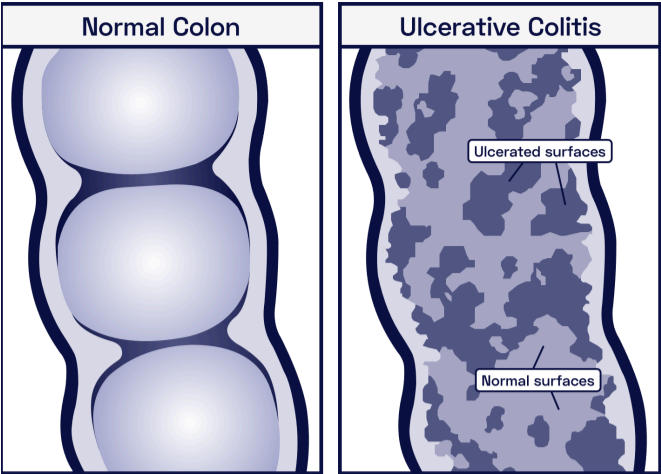


YOUR RESULT



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.



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09/2021

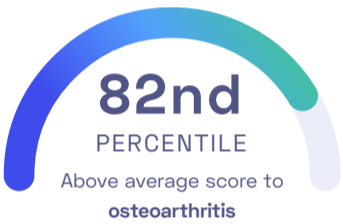
★ [Osteoarthritis \(Boer, 2021\)](#)

Bones Joints

STUDY SUMMARY

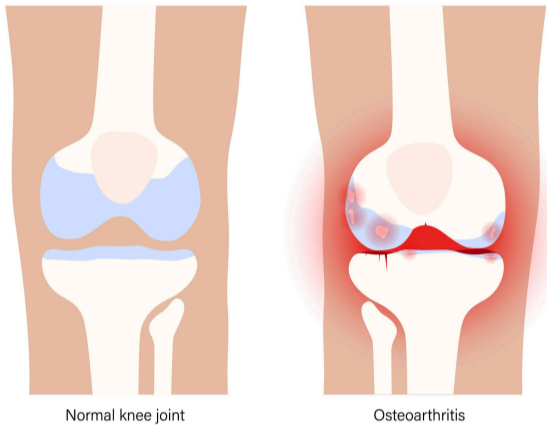
This report is based on a study that discovered 21 genetic variants associated with osteoarthritis.

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.



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12/2015

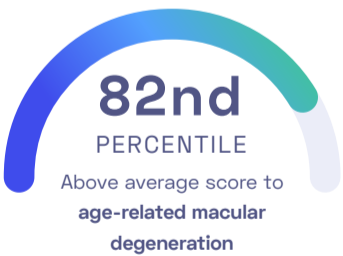
★ [Age-related macular degeneration \(Fritsche, 2015\)](#)

Aging Eyes

STUDY SUMMARY

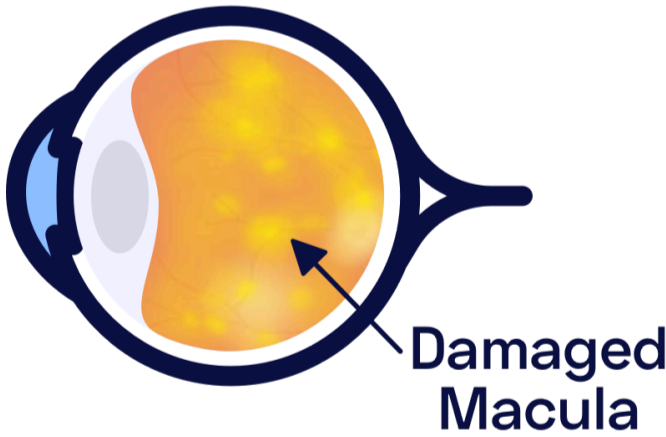
Discovery of 16 novel risk loci for age-related macular degeneration.

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.



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07/2013

★ [Brugada syndrome \(Bezzina, 2013\)](#)

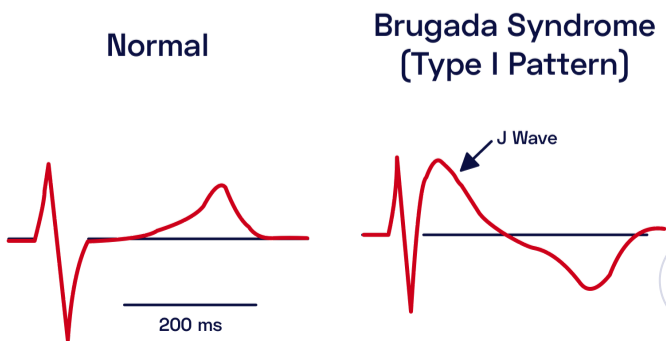
Heart

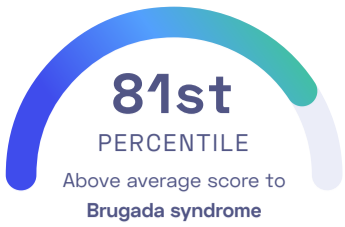
STUDY SUMMARY

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

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.

The characteristic electrocardiogram pattern of the Brugada syndrome.

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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.

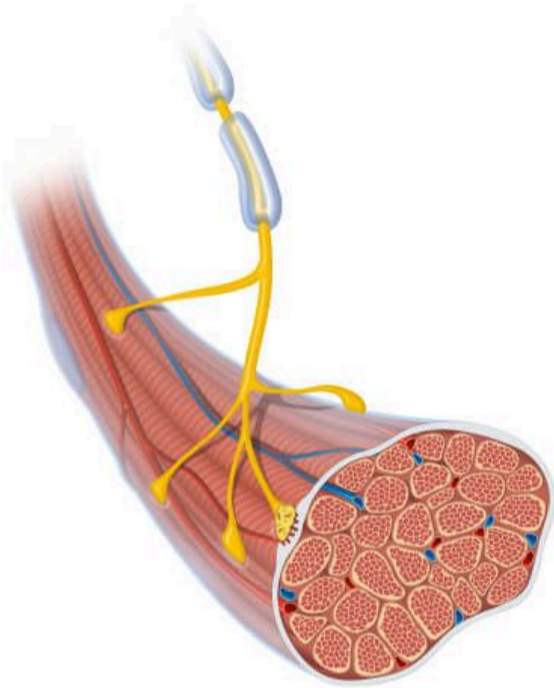
YOUR RESULT



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.

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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.

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11/2020

★ [Brain aneurysms \(Bakker, 2020\)](#)

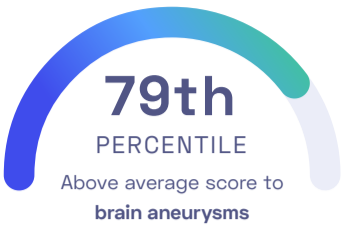
[Brain](#) [Vasculature](#)



STUDY SUMMARY

Discovery of 17 genetic variants associated with brain aneurysms.

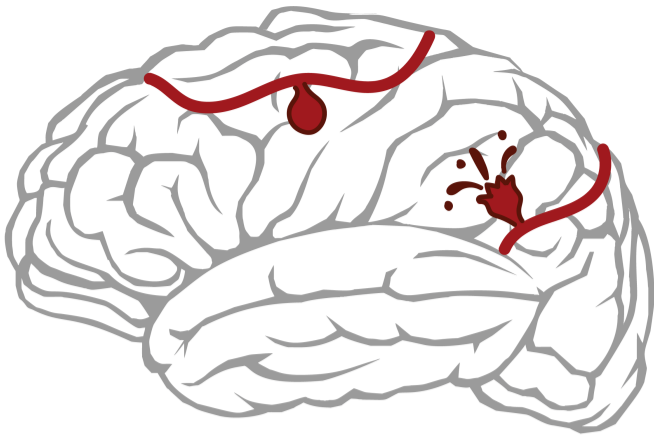
YOUR RESULT



of about 50%.

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



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.

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8/2019

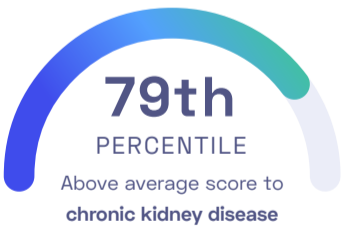
★ [Chronic kidney disease \(Hellwege, 2019\)](#)

[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.

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09/2016

★ [High blood pressure \(Surendran, 2016\)](#)

[Vasculature](#) [Blood](#)

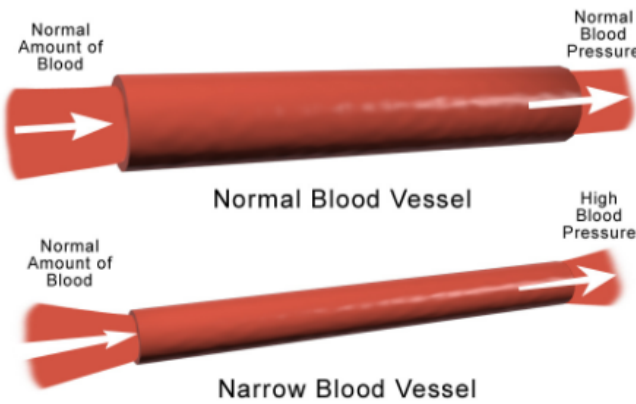
STUDY SUMMARY

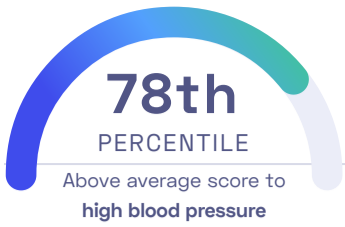
This study links several cell signaling pathways to the risk of developing high blood pressure.

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.

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3/2020

★ [Refractive errors \(Hysi, 2020\)](#)

Eyes

STUDY SUMMARY

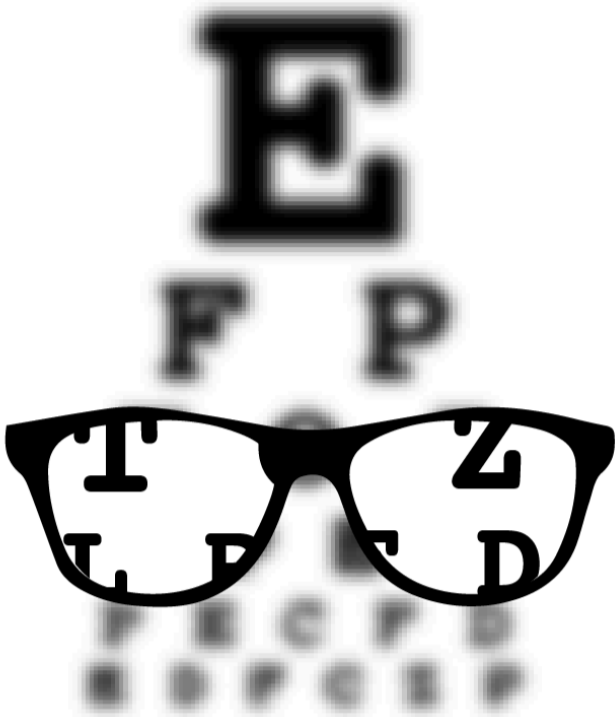
Discovery of 336 new genomic regions associated with refractive errors, including nearsightedness.

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.

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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.

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02/2019

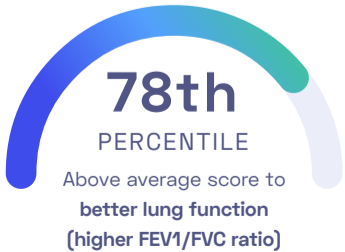
★ [Lung function \(Shrine, 2019\)](#)

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).

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12/2019

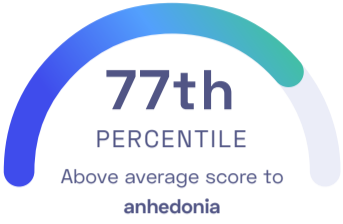
☆ [Anhedonia \(Ward, 2019\)](#)

Brain Mind

STUDY SUMMARY

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

YOUR RESULT



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.

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8/2019

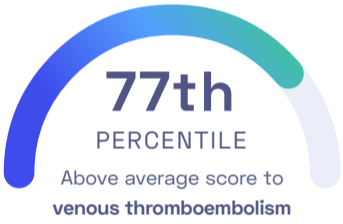
☆ [Venous thromboembolism \(Lindstrom, 2019\)](#)

Vasculature

STUDY SUMMARY

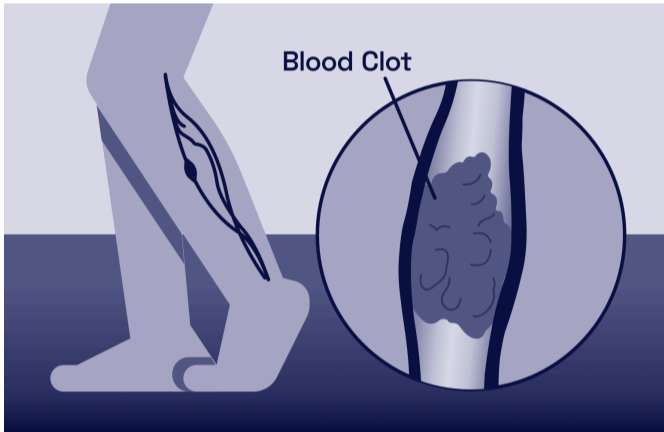
Identification of novel genetic variants associated with venous thromboembolism.

YOUR RESULT



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.



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2/2021

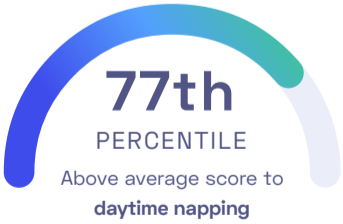
☆ [Daytime napping \(Dashti, 2021\)](#)

Behavior Sleep

STUDY SUMMARY

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

YOUR RESULT



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.

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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.

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4/2020

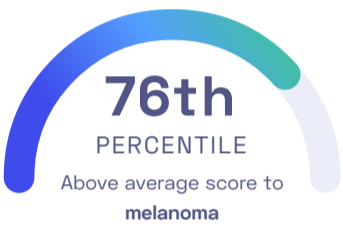
★ [Melanoma \(Landi, 2020\)](#)

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.

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07/2019

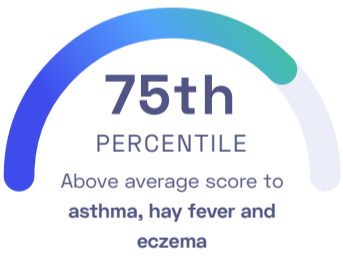
★ [Asthma, hay fever and eczema \(Johansson, 2019\)](#)

Allergy

STUDY SUMMARY

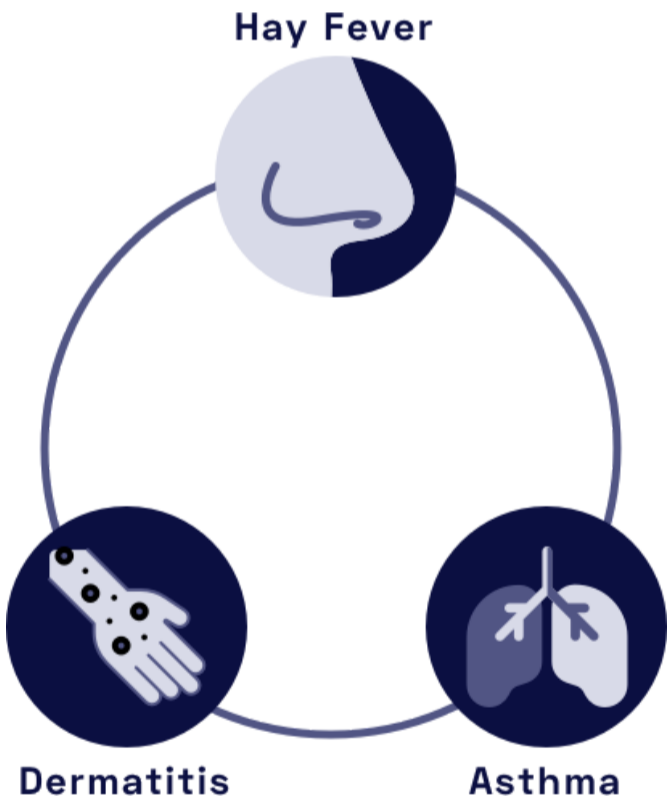
This study discovered 41 new genetic variants that are associated with asthma, hay fever, *eczema* or a combination of the three.

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.



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07/2009

★ [Glioma \(Shete, 2009\)](#)

Cancer Brain

STUDY SUMMARY

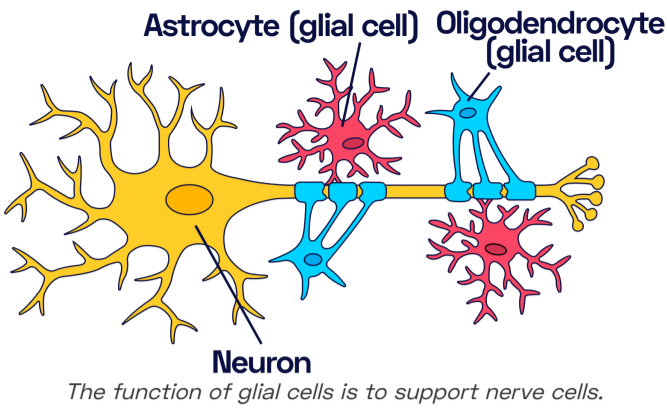
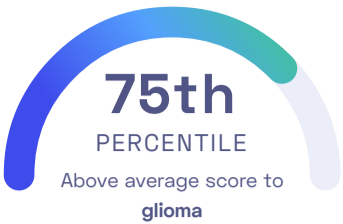
Identification of 5 risk variants associated with the development of gliomas.

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.



YOUR RESULT



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1/2021

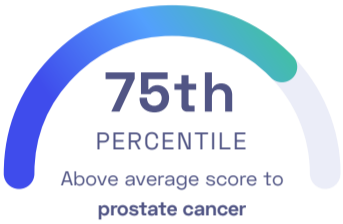
★ [Prostate cancer \(Conti, 2021\)](#)

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.

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03/2023

★ [Acne \(Teder-Laving, 2023\)](#)

Skin Infection

STUDY SUMMARY

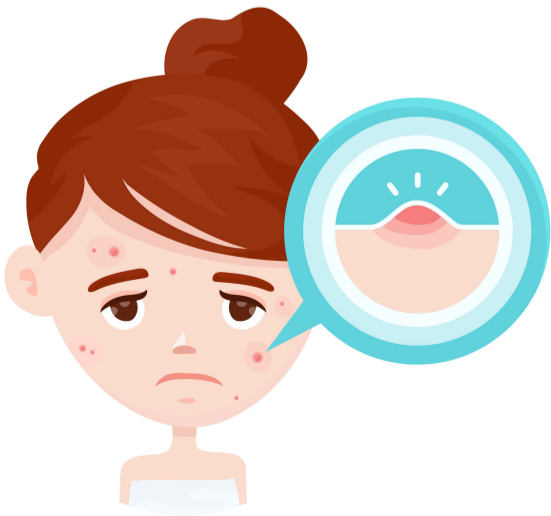
This report is based on a study that discovered 23 genetic variants associated with acne.

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



Over 80% of the world population is affected by acne



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.

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5/2021

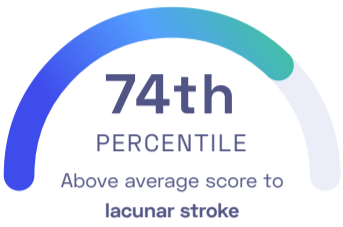
★ [Lacunar stroke \(Traylor, 2021\)](#)

Brain Vasculature

STUDY SUMMARY

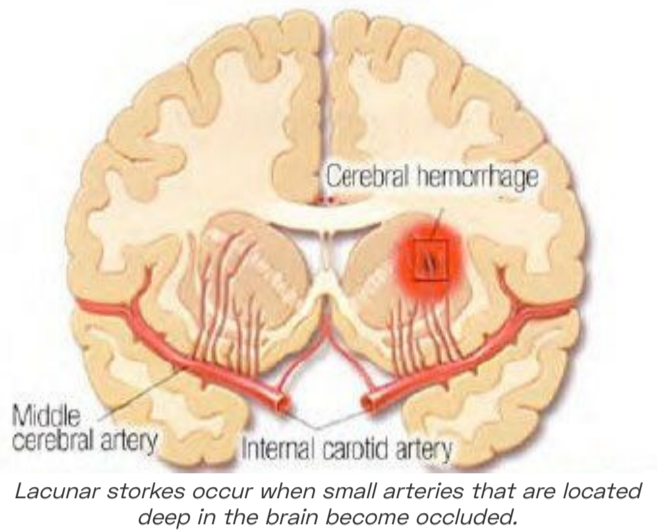
This report is based on a study that discovered 11 novel genetic variants associated with lacunar stroke.

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.



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3/2020

★ [LDL cholesterol level \(Richardson, 2020\)](#)

Heart Blood

STUDY SUMMARY

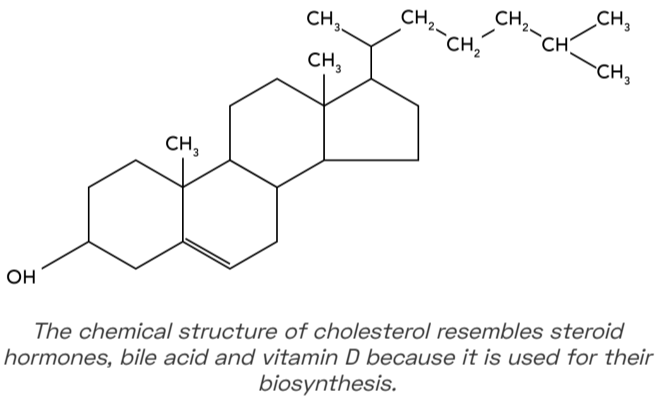
Identification of 220 genetic variants associated with the LDL *cholesterol* level in blood and analysis of its contribution to the risk of coronary heart disease.

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*.



[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.



Roller coaster junkies may be sensation seekers

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.



02/2016

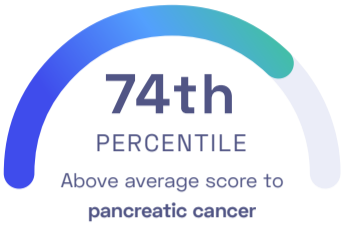
☆ [Pancreatic cancer \(Childs, 2016\)](#)

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.

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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.

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01/2019

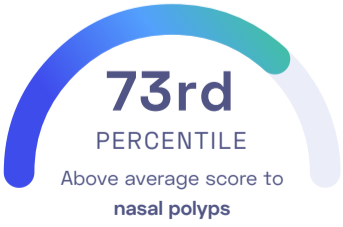
☆ [Nasal polyps \(Kristjansson, 2019\)](#)

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.

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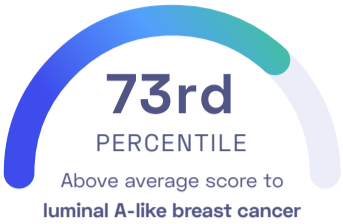
☆ [Luminal A-like breast cancer \(Zhang, 2020\)](#)

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*.

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Worse
prognosis

Triple negative

HER2+

Luminal B

Better
prognosis

Luminal A

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

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

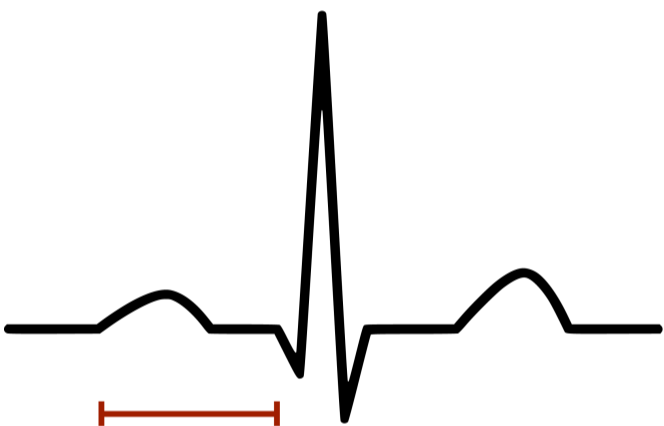


STUDY DESCRIPTION

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.

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PR interval

The PR interval in an electrocardiogram.

10/2021

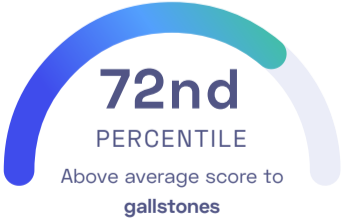
☆ [Gallstones \(Fairfield, 2021\)](#)

Stomach Diet Liver

STUDY SUMMARY

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

YOUR RESULT

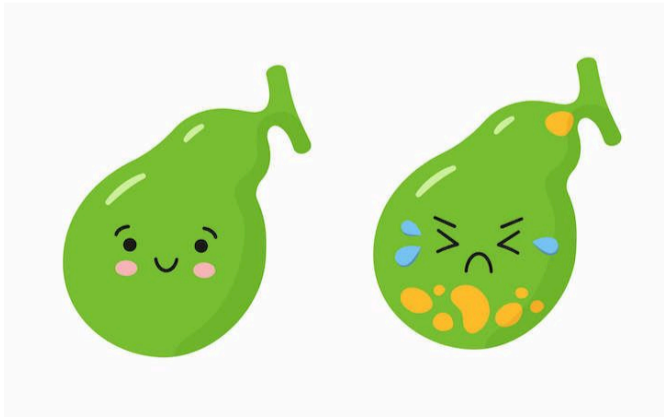


STUDY DESCRIPTION

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.

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Gallstones form from the accumulation of bile.

12/2018



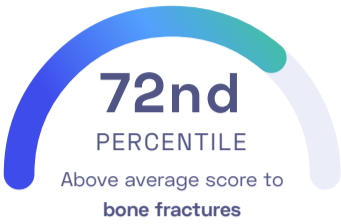
☆ [Bone fractures \(Morris, 2018\)](#)

Bones

STUDY SUMMARY

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

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.

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Fractures often heal within weeks or months.

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.

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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

11/2010

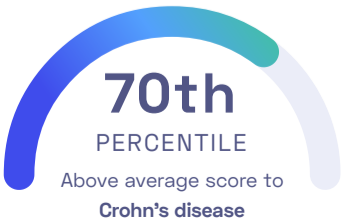
☆ [Crohn's disease \(Franke, 2010\)](#)

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.



4/2020

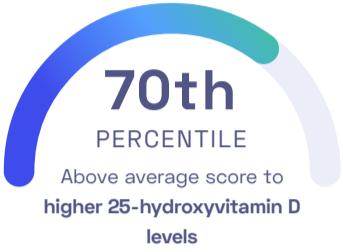
★ [25-hydroxyvitamin D level \(Revez, 2020\)](#)

Metabolism Bones

STUDY SUMMARY

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

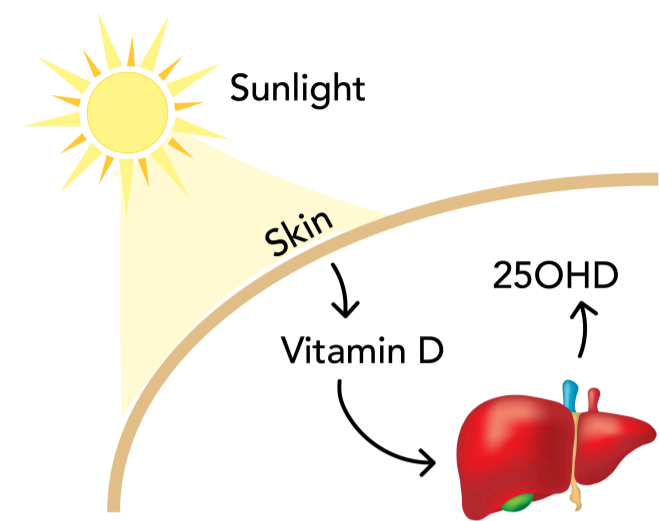
YOUR RESULT



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 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.



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

5/2020

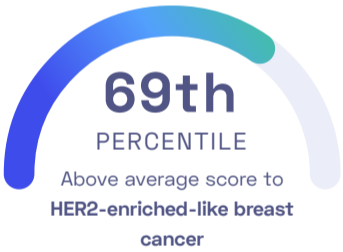
★ [HER2-enriched-like breast cancer \(Zhang, 2020\)](#)

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.

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.



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.

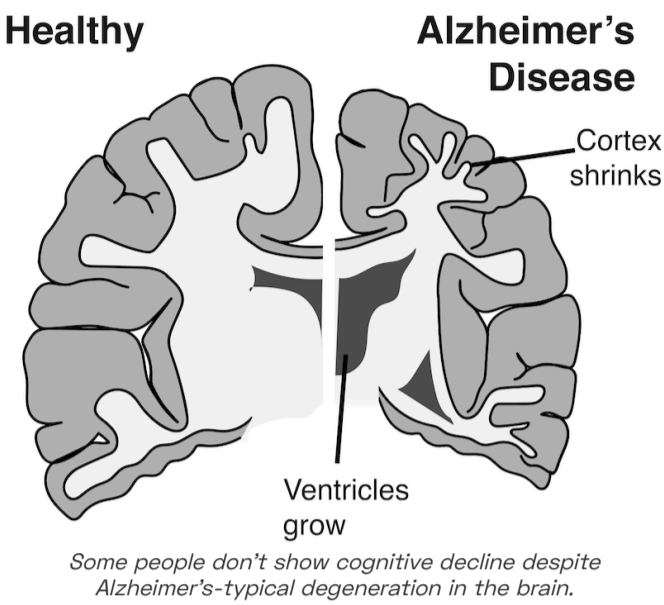
YOUR RESULT



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.



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.

10/2015

★ [Atopic dermatitis \(Paternoster, 2015\)](#)

Skin Inflammation

STUDY SUMMARY

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

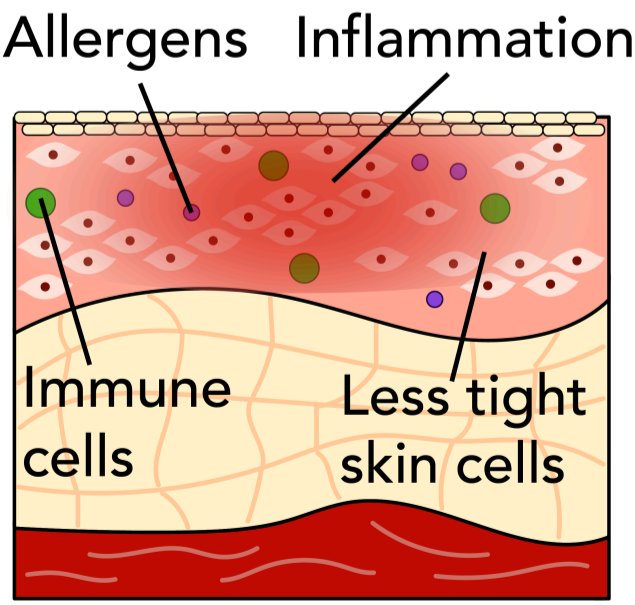
YOUR RESULT



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.

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.

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09/2019

★ [Left-handedness \(Wiberg, 2019\)](#)

Brain

STUDY SUMMARY

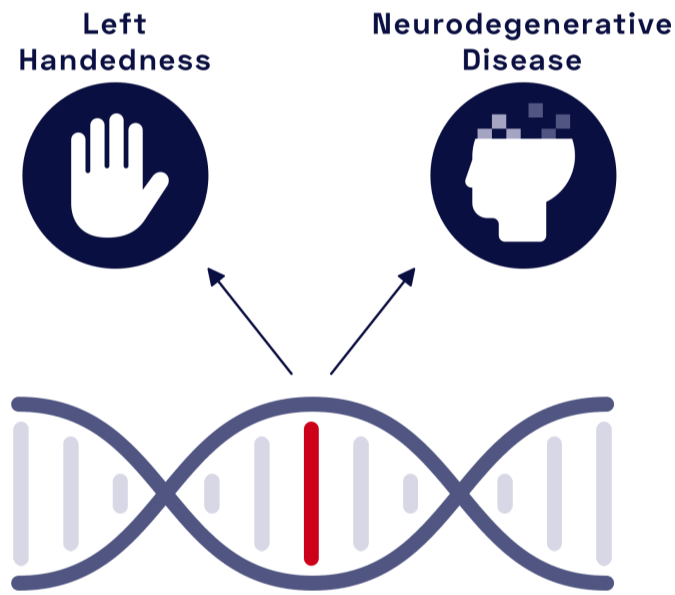
Identification of 4 novel genetic variants correlated with handedness.

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.



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3/2021

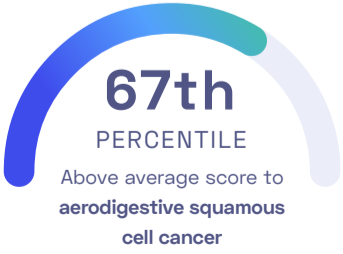
★ [Aerodigestive squamous cell cancer \(Lesseur, 2021\)](#)

Cancer Lungs Mouth Throat

STUDY SUMMARY

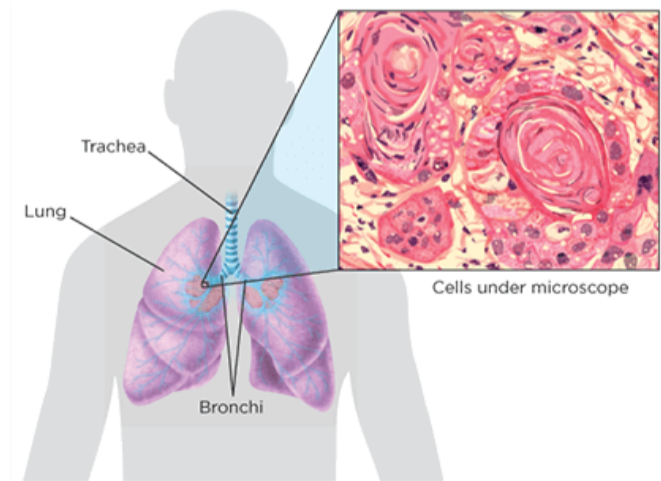
This report is based on a study that discovered 9 genetic variants associated with squamous cell carcinomas in the aerodigestive tract.

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.



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



3/2013

★ [Telomere length \(Codd, 2013\)](#)

Aging

STUDY SUMMARY

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

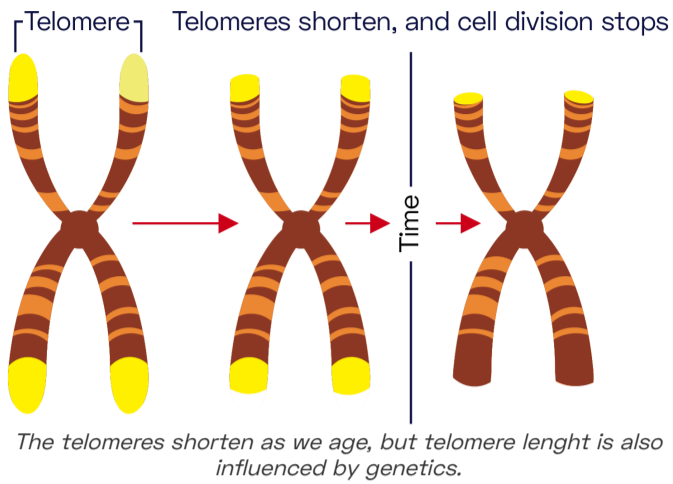
YOUR RESULT



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.



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.

09/2021

★ [Eosinophilic esophagitis \(Chang, 2021\)](#)

Allergy Intestines Inflammation

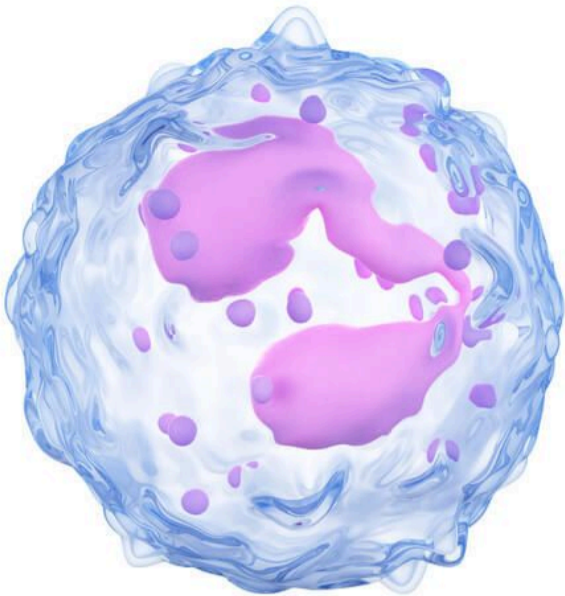
STUDY SUMMARY

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

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.

YOUR RESULT



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

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6/2016

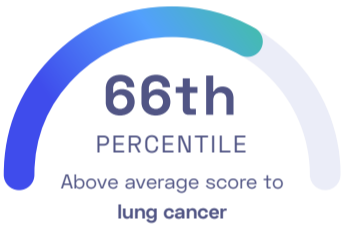
★ [Lung cancer \(McKay, 2017\)](#)

Lung Cancer

STUDY SUMMARY

Identification of 4 novel genomic regions associated with lung cancer.

YOUR RESULT

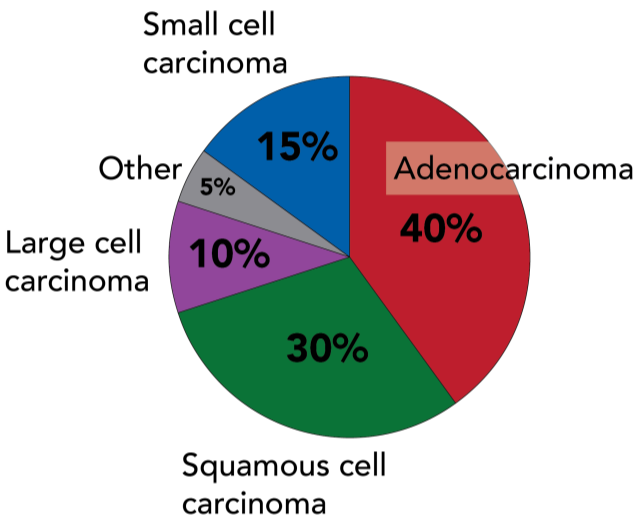


STUDY DESCRIPTION

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.

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

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.

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10/2013

★ [Sjögren's syndrome \(Lessard, 2013\)](#)

Mouth Autoimmunity Eyes



STUDY SUMMARY

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

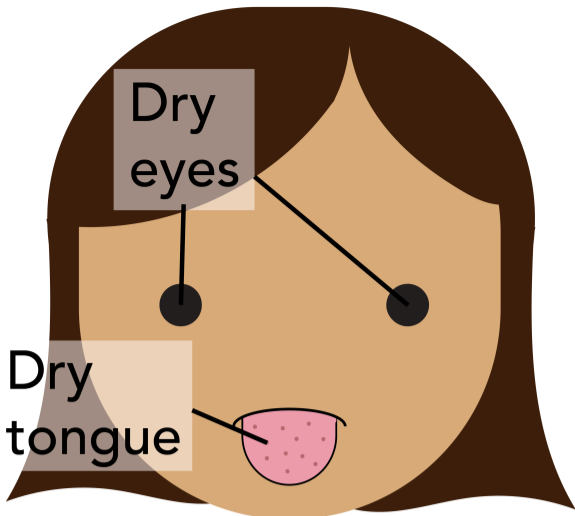
YOUR RESULT



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.

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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.

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07/2018

★ [Glaucoma \(MacGregor, 2018\)](#)

Eyes

STUDY SUMMARY

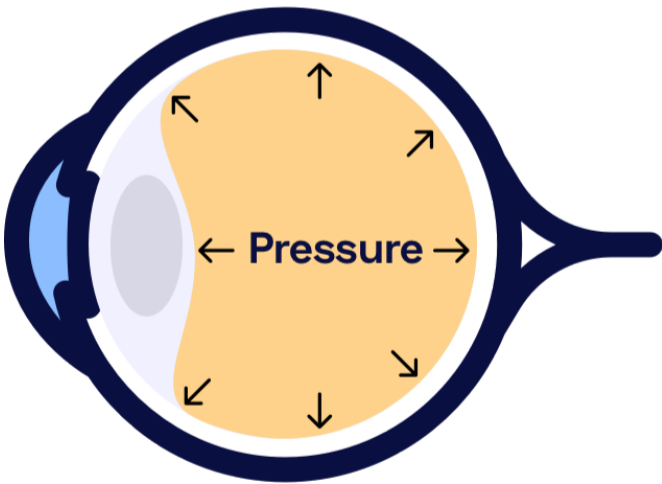
Identification of over 24 genetic variants that correlate with the development of glaucoma.

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.



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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.





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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.



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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.



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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.



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).

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.



IURDs can be caused by allergens or viruses

5/2020

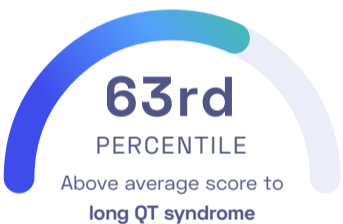
★ [Long QT syndrome \(Lahrouchi, 2020\)](#)

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.

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.

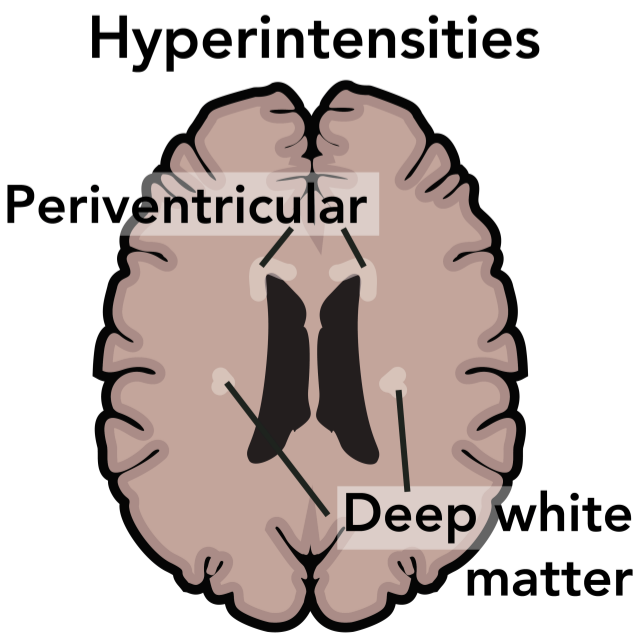
YOUR RESULT



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.



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.

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.

3/2021

★ [Eye color \(Simcoe, 2021\)](#)

Eyes Appearance

STUDY SUMMARY

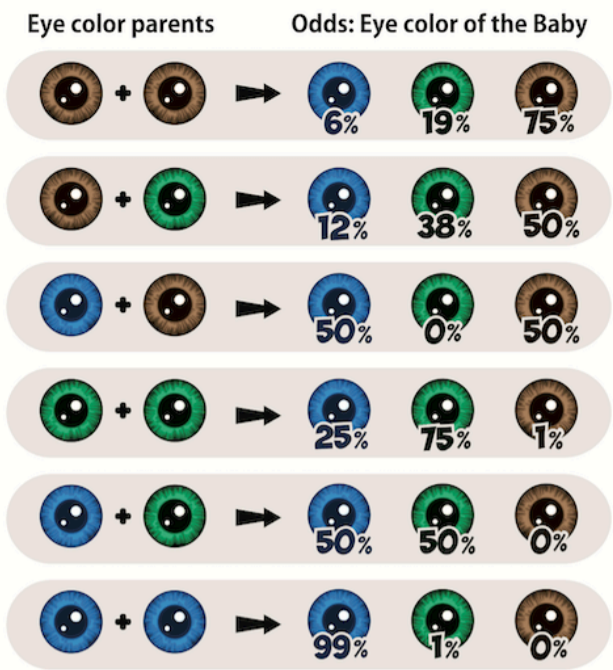
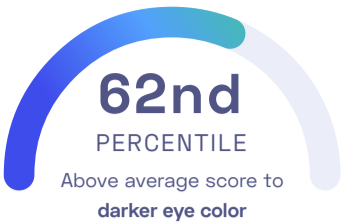
This report is based on a study that identified 115 genetic variants associated with eye color.

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.



YOUR RESULT



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

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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.

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8/2020

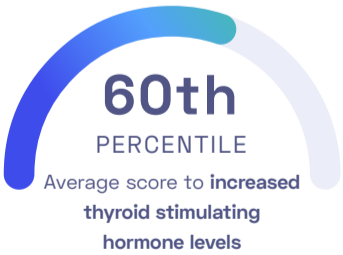
★ [Thyroid stimulating hormone levels \(Zhou, 2020\)](#)

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.

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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.

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09/2019

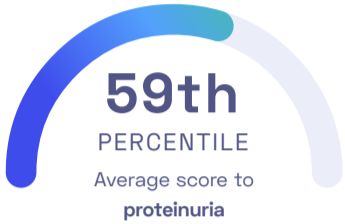
★ [Proteinuria \(Teumer, 2019\)](#)

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.

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