UGENOME

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Skin & Beauty

Summary Report

REPORT CATEGORY

SKIN & BEAUTY

Sample Client

Report date: 30 April 2026

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Viewing this medical test requires a medical doctor or use one of our contracted genetic counselors. By accessing these results, you acknowledge and agree that you will consult with a licensed physician or one of our contracted genetic counselors to review and interpret the results, and you agree not to rely on this information as a substitute for professional medical advice, diagnosis, or treatment.

Personal information

NAME

Sample Client

SEX AT BIRTH

Male

HEIGHT

5ft 10" 178cm

WEIGHT

215lb 97.5kg

REPORT PROVIDED BY

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Summary

As we age, our skin starts to sag and develop wrinkles, our hair begins to gray and thin, and we long for the looks of our younger days. However, even those younger days can have issues like acne or eczema. Our skin is our biggest organ and exposed to the environment more than any other. Thus, it has its own unique set of issues.

Your genetic predispositions can affect everything from collagen production to the ability to handle UV light or the likelihood of various skin conditions. Being aware of these can help you make smarter decisions about your skin health and minimize the risk factors.

This comprehensive report covers various topics related to skin health, divided in two major groups: **skin features and skin conditions**.

This summary report contains:

- **52** Genetic Results
- **15** Recommendations
- **4** Lifestyle Assessments

Overview of Your Results

Beauty

TYPICAL LIKELIHOOD

Dry Skin

Typical likelihood of dry skin

TYPICAL

Glycation

Predisposed to typical glycation

TYPICAL LIKELIHOOD

Adverse Reactions to Dermal Fillers

Less likely to experience adverse reactions to dermal fillers

TYPICAL LIKELIHOOD

Dark Eye Circles

Typical likelihood of dark eye circles

TYPICAL

Skin Hydration

Predisposed to typical skin hydration

TYPICAL

Facial Wrinkles

Predisposed to a typical amount of facial wrinkles

TYPICAL

Skin Elasticity

Predisposed to typical skin elasticity

LESS LIKELY

Droopy Eyelids

Less likely to have droopy eyelids

FEWER

Age Spots

Predisposed to fewer age spots

LESS LIKELY

Stretch Marks

Less likely to have stretch marks

Skin Problems

MORE LIKELY

Melanoma

More likely to get melanoma

MORE LIKELY

Psoriasis

More likely to have psoriasis

MORE LIKELY

Eczema

More likely to have eczema

MORE LIKELY

Heavy Sweating

More likely to have hyperhidrosis

TYPICAL LIKELIHOOD

Skin Rash (Irritant)

Typical likelihood of contact dermatitis

TYPICAL LIKELIHOOD

Itch

Typical likelihood of itch

TYPICAL LIKELIHOOD

Hives

Typical likelihood of hives

TYPICAL LIKELIHOOD

Rosacea

Typical likelihood of rosacea

TYPICAL LIKELIHOOD

Basal Cell Carcinoma

Typical likelihood of basal cell carcinoma

TYPICAL LIKELIHOOD

Actinic Keratosis

Typical likelihood of an actinic keratosis

TYPICAL LIKELIHOOD

Pemphigus Vulgaris

Typical likelihood of pemphigus vulgaris

TYPICAL LIKELIHOOD

Vitiligo

Typical likelihood of vitiligo

LESS LIKELY

Skin Rash (Allergic)

Less likely to have allergic contact dermatitis

LESS LIKELY

Acne

Less likely to have acne

LESS LIKELY

Squamous Cell Carcinoma

Less likely to have squamous cell carcinoma

LESS LIKELY

Lichen Planus

Less likely to get lichen planus

Skin Damage

TYPICAL LIKELIHOOD

Radiation-Induced Dermatitis

Typical likelihood of radiation-induced dermatitis

TYPICAL LIKELIHOOD

Sunburn

Typical likelihood of sunburns

TYPICAL

Sun Sensitivity

Likely typical sun sensitivity

TYPICAL LIKELIHOOD

Burns

Typical likelihood of burns

LESS LIKELY

Blisters

Less likely to have blisters

Skin Infections

TYPICAL LIKELIHOOD

Ringworm

Typical likelihood of getting ringworm

TYPICAL LIKELIHOOD

Impetigo (School Sores)

Typical likelihood of impetigo

TYPICAL LIKELIHOOD

Warts

Typical likelihood of warts

TYPICAL LIKELIHOOD

Pink Eye

Typical likelihood of getting pink eye

TYPICAL LIKELIHOOD

Leg Cellulitis

Typical likelihood of leg cellulitis

LESS LIKELY

Athlete’s Foot

Less likely to have athlete's foot

LESS LIKELY

Staph Infection

Less likely to have a staph infection

Hair Health

WORSE RESPONSE

Response to Blood Flow Boosters (Hair Loss)

Predisposed to a worse response to blood flow boosters

TYPICAL

Hair Thickness

Typical

TYPICAL RESPONSE

Dutasteride Response (Hair Loss)

Predisposed to a typical dutasteride response

TYPICAL LIKELIHOOD

Hair Loss

Typical

TYPICAL

Hair Graying

Typical

TYPICAL LIKELIHOOD

Alopecia Areata

Typical

TYPICAL RESPONSE

Response to Retinoids (Hair Loss)

Predisposed to a typical response to retinoids

TYPICAL LIKELIHOOD

Dandruff

Typical

BETTER

Minoxidil Response (Hair Loss)

Predisposed to a better minoxidil response

BETTER RESPONSE

Finasteride Response (Hair Loss)

Predisposed to a better finasteride response

Skin Health Genes

HIGHER ACTIVITY

MMP1 (Collagen)

Predisposed to higher MMP1 activity

HIGHER ACTIVITY

CYP1B1 (Detox/ Skin Health)

Predisposed to higher CYP1B1 activity

TYPICAL ACTIVITY

MC1R (Pigmentation & Skin Damage)

Likely typical MC1R activity

TYPICAL ACTIVITY

COL5A1 (Collagen)

Likely typical COL5A1 activity

Recommendations Overview

Your recommendations are prioritized according to the likelihood of it having an impact for you based on your genetics, along with the amount of scientific evidence supporting the recommendation.

You'll likely find common healthy recommendations at the top of the list because they are often the most impactful and most researched.

		DOSAGE
1	Maintain Optimal Vitamin D Levels	1000 iu
2	Avoid Secondhand Smoke	
3	Omega-3 (Fish Oil)	2000 mg
4	Maintain a Healthy Weight	30 minutes
5	Methylfolate	400 mcg
6	Relaxation Techniques	30 minutes
7	Aerobic Exercise (Cardio)	1 hour
8	Mediterranean Diet	
9	Avoid Excess Sunlight Exposure	
10	Light Therapy for Skin	30 minutes
11	Avoid Sugary Foods & Drinks	
12	Moisturize the Skin	
13	Topical Licorice Root	
14	Topical Retinoids	
15	Infrared Light Therapy	

Your Results in Details

Beauty

Your skin serves as a protective barrier, helps regulate body temperature, and maintains hydration. As we age, various factors - from skin elasticity and hydration to the appearance of wrinkles and age spots - can affect how our skin looks and functions. Our genetics, environment, lifestyle, and age influence these changes.

Your genetic predispositions can affect many aspects of skin aging and appearance, such as your skin's natural hydration levels and elasticity. Understanding these factors can help you make informed choices about skincare products and treatments to maintain healthy, resilient skin.

TYPICAL LIKELIHOOD

Dry Skin

Typical likelihood of dry skin

TYPICAL

Glycation

Predisposed to typical glycation

TYPICAL LIKELIHOOD

Adverse Reactions to Dermal Fillers

Less likely to experience adverse reactions to dermal fillers

TYPICAL LIKELIHOOD

Dark Eye Circles

Typical likelihood of dark eye circles

TYPICAL

Skin Hydration

Predisposed to typical skin hydration

TYPICAL

Facial Wrinkles

Predisposed to a typical amount of facial wrinkles

TYPICAL

Skin Elasticity

Predisposed to typical skin elasticity

LESS LIKELY

Droopy Eyelids

Less likely to have droopy eyelids

FEWER

Age Spots

Predisposed to fewer age spots

LESS LIKELY

Stretch Marks

Less likely to have stretch marks

Dry Skin

Managing xerosis involves a multi-faceted approach, primarily focused on restoring the skin's moisture balance and protecting it from further dehydration. This often includes using emollients and moisturizers that lock in moisture and applying them immediately after a bath or a shower when the skin is still damp. Humidifiers can also be beneficial, especially in dry climates or during winter months when indoor heating can exacerbate skin dryness.

Moreover, lifestyle adjustments such as reducing the frequency of baths, using gentle, fragrance-free soaps, and avoiding the use of hot water can help alleviate symptoms. In persistent or particularly discomforting cases, dermatologists may prescribe topical treatments or recommend specialized skincare regimens to address the underlying causes and prevent complications associated with xerosis.

TYPICAL LIKELIHOOD

Typical likelihood of dry skin based on 1,672 genetic variants we looked at

33rd

PERCENTILE

Your risk is **greater than 33% of the population** and **lower than 67% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
CDK10	rs75687828	GG
NUP35	rs62195431	CC
FLG	rs61816761	GG
SLC35G4	rs144079954	GG
LINGO4	rs12123821	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Glycation

A genetic study identified five variants (SNPs) associated with skin autofluorescence in non-diabetic individuals. These SNPs are located in or near genes such as ***FANCA***, ***MMP27***, ***CYP1A1/2***, ***ZNF276***, and ***NAT2***, each with distinct potential roles in glycation mechanisms [R].

1. **rs12931267 (*FANCA*, Chr16)**: This SNP lies in an intronic region of the *FANCA* gene, which is involved in DNA repair. The G allele is associated with higher SAF. This locus also includes the ***MC1R*** gene, known for its role in skin pigmentation. This suggests a potential interplay between pigmentation and glycation levels.
2. **rs2846707 (*MMP27*, Chr11)**: Located in the *MMP27* gene, this SNP encodes a missense variant (Met30Val) affecting matrix metalloproteinase activity. The T allele correlates with lower SAF, suggesting a protective role potentially linked to extracellular matrix remodeling.
3. **rs2470893 (*CYP1A1/2*, Chr15)**: This SNP lies between *CYP1A1* and *CYP1A2*, genes involved in xenobiotic metabolism. The T allele is linked to higher SAF, with attenuation of the SNP effect when adjusted for **coffee consumption**, indicating environmental interactions.
4. **rs3764257 (*ZNF276*, Chr16)**: Found upstream of *FANCA*, this SNP is associated with lower *SAF*. *ZNF276* encodes a zinc finger protein that may influence gene regulation in response to glycation stress.
5. **rs576201050 (*NAT2*, Chr8)**: Located near *NAT2*, a gene encoding N-acetyltransferase, this SNP affects acetylator status (detox ability). The minor allele A is associated with lower SAF, highlighting its role in metabolic processing of AGEs.

Overall, the authors estimated about **20%** of the differences in glycation may be due to genetics. These findings demonstrate that SAF levels are influenced by complex genetic and environmental interactions [R].

TYPICAL

Predisposed to typical glycation based on 5 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
NAT2	rs576201050	GG
ZNF276	rs3764257	CC
MMP27	rs2846707	TC
CSK	rs2470893	TC
FANCA	rs12931267	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Adverse Reactions To Dermal Fillers

In a study of 211 patients who received dermal fillers, 129 experienced late-onset inflammatory events. A genetic analysis of *HLA* polymorphisms found that the combination of the *HLA-B*08* and *HLA-DRB1*03* haplotypes was almost 4 times more common in patients experiencing these adverse reactions than in controls [R].

Two polymorphisms in *HLA* genes have been identified as proxy variants for these haplotypes:

- The 'T' allele of rs2187668 as a proxy for *HLA-DRB*03* [R]
- The 'A' allele of rs9266669 as a proxy for *HLA-B*08* [R]

People with these two polymorphisms likely carry the *HLA-B*08* and *HLA-DRB1*03* haplotypes and are thus at increased risk of adverse reactions to dermal fillers.

TYPICAL LIKELIHOOD

Less likely to experience adverse reactions to dermal fillers based on the genetic variants we looked at

OF USERS SHARE THE SAME SCORE

You have the same genetic predisposition as **92% of our users.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
MICB	rs9266669	GG
HLA-DQA1	rs2187668	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Dark Eye Circles

Besides aesthetic concerns, dark eye circles can also be a signal of underlying health issues, although in most cases, they are not a cause for alarm. Allergies, eczema, anemia, or medications that cause blood vessels to dilate can also lead to darkening of the under-eye area.

Environmental exposure such as sun damage can increase melanin production and aggravate the condition. Treatments range from home remedies, such as the application of cold compresses to reduce swelling and constrict blood vessels, to medical treatments like topical creams containing Vitamin C or K, retinoids, or procedures including chemical peels, laser therapy, and fillers when shadows are due to volume loss.

TYPICAL LIKELIHOOD

Typical likelihood of dark eye circles based on 2 genetic variants we looked at

39th

PERCENTILE

Your risk is **greater than 39% of the population** and **lower than 61% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
VEGFA	rs699947	AC
VEGFA	rs3025039	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Skin Hydration

Key Takeaways:

- Genes involved in skin hydration may influence skin barrier function and the transport of water in the skin.
- Other factors include being over 40, cold and windy or low-humidity climates, certain occupations, swimming frequently in chlorinated pools, and certain diseases or conditions.
- If you have high genetic risk, you may lower your overall risk by taking action on those factors that you can change.
- Click the **Recommendations** tab for potential dietary and lifestyle changes.

The skin acts as a barrier to protect you from your surroundings. One of the main functions of the *epidermis* (the outermost layer of the skin) is to keep your skin hydrated by retaining water. If the epidermis is not able to retain enough water, the skin will start to feel dry, rough, and saggy. This tends to happen naturally as you age [R,R,R].

Genetic factors may play a role in skin hydration. Genes involved may influence skin barrier function and the transport of water in the skin [R, R, R].

TYPICAL

Predisposed to typical skin hydration based on 13 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
CRIPT	rs79885808	TT
ARAP2	rs7654356	AA
MKNK2	rs887932	TG
IL34	rs8061854	TC
TNKS	rs138684226	CC
ARHGAP21	rs34485271	TT
ABLIM1	rs77962058	AA
TASP1	rs149092789	AA
UPP1	rs75043305	TT
MCPH1	rs141074203	AA
FZD10	rs7953082	AA
HAPLN1	rs9293356	TT
PLEKHG1	rs9398017	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Facial Wrinkles

Wrinkles are small but visible folds in the skin. Wrinkles appear with age and develop over several decades. They are more evident in areas of the body that are usually exposed, such as the face, neck, forearms, and hands. **The most noticeable wrinkles are facial** [R, R, R].

Up to **55%** of differences in people's facial wrinkling may be due to genetics. Involved genes may influence **skin color and health** [R, R, R].

UV radiation also contributes to facial wrinkling. Excessive sunbathing or use of tanning beds exposes the skin to unhealthy levels of UV radiation and leads to premature aging. Hence, experts recommend wearing sunscreen [R, R, R].

Make sure to find the right balance. Sunlight or bright light during the day can benefit your body (by increasing vitamin D levels) and mind (by boosting mood) [R, R].

The color of your skin also influences facial wrinkling. Wrinkles appear more rapidly in people sensitive to UV radiation. Hence, white skin may wrinkle earlier than other skin types [R, R].

Others factors that may also contribute to facial wrinkling include [R, R, R]:

- Aging
- Smoking
- Very low weight
- Health conditions (e.g., depression)

TYPICAL

Predisposed to a typical amount of facial wrinkles based on 20 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SIK2	rs11213999	CC
TPGS2	rs78569750	GG
LRRC3B	rs116248825	CC
NUDT12	rs113322056	AA
HACD4	rs116873518	GG
SYNDIG1	rs184605088	CC
NUDT12	rs112608607	TT
LINGO2	rs117828793	CC
BBX	rs1283106	AC
BMP6	rs1225927	GT
/	rs11711327	AG
BMP6	rs382029	AT
MON1B	rs62047859	TT
DCSTAMP	rs147672305	TT
GLIS1	rs702491	CC
RESF1	rs1150997	AA
CA3	rs184880542	GG
/	rs72811030	GG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Skin Elasticity

Key Takeaways:

- Up to **60%** of differences in people's skin aging may be due to **genetics**.
- Other risk factors include age, excessive sun exposure, smoking, and pollution.
- If you have high genetic risk, you may lower overall risk by taking action on those factors that you can change.
- Click the **Recommendations** tab for potential dietary and lifestyle changes.

Skin elasticity is the ability of it to stretch and then return to its original form. Losing elasticity is a natural part of the aging process, creating **loose skin and wrinkles**.

Risk factors for reduced skin elasticity and wrinkles include [R]:

- Older age
- Excessive sun exposure
- Smoking
- Pollution

Up to **60%** of differences in people's skin aging may be due to **genetics**. Involved genes affect the **metabolism of collagen, elastin**, and other proteins involved in skin elasticity [R].

TYPICAL

Predisposed to typical skin elasticity based on 15 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SGMS1	rs182035024	CC
/	rs61218791	AA
STXBP5	rs117444935	GG
FAM171A1	rs112251095	AA
ANAPC4	rs34293498	TT
CD96	rs9876163	CT
RNF32	rs73499013	GG
IL16	rs8027891	GG
GRAMD2B	rs170580	TG
KIF2B	rs12601165	AG
TFRC	rs146095627	AA
CEBPA	rs6510372	TT
MYO18A	rs8067915	CC
GAD2	rs3847380	TT
DIAPH3	rs1592108	TT

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Droopy Eyelids

Eyelid drooping is excess sagging of the upper eyelid. The eyelid may be sitting lower than it should (*ptosis)* or drooping due to loose or excess skin (*dermatochalasis).*

About **60%** of the differences in people's eyelid drooping may be due to genetics. Involved genes may play a role in skin aging [R].

Eyelid sagging can occur due to a variety of other factors, including [R, R]:

- Weakness of the eyelid muscle
- Nerve damage to the eyelid muscle
- Loose skin of the upper eyelids
- Swelling in the eyelid
- Aging
- Injury, surgery, or disease
- Diabetes
- Rare health conditions

LESS LIKELY

Less likely to have droopy eyelids based on 240,468 genetic variants we looked at

9th

PERCENTILE

Your risk is **greater than 9% of the population** and **lower than 91% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SERP1	rs1520818	TT
ARSB	rs4704521	CC
ATP8A1	rs6447160	TT
DLGAP1	rs11876749	TT
ATP8A1	rs16854624	CC
DLGAP1	rs7239297	GG
/	rs17465658	TT
FZD4	rs674017	AC
COX10	rs12451218	TT
ZNF385D	rs1515451	GC
MAGEF1	rs4074869	AG
ZNF385D	rs1356100	GA
KCNQ5	rs4706522	GA
CCL15	rs7217473	CC
SFRP4	rs10499596	TT
PJA2	rs10077083	TT
YWHAQ	rs7602784	GG
TTC27	rs3769560	TT
TSPAN8	rs2270588	CC
ROCK2	rs6432188	CC
HOXD1	rs6714226	GG

GENE	SNP	GENOTYPE
SMYD3	rs11808632	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Age Spots

Solar lentigines, **also known as age spots**, sun spots, or liver spots, are dark, harmless spots on the skin. They are caused by increased production of melanin, the skin pigment. Age spots tend to appear more frequently on visible parts of the body, as they are usually a sign of *photoaging*—skin aging due to excessive exposure to UV radiation [R, R, R, R].

Genetics may influence age spots. Genes involved may contribute to the production of melanin, the skin pigment [R].

The main factor leading to age spots is excessive exposure to UV radiation. Hence, people who sunburn easily and those who have a history of sunburns are more likely to get age spots [R, R].

Hence, experts recommend wearing sunscreen. **Make sure to find the right balance**. Sunlight or bright light during the day can benefit your body (by increasing vitamin D levels) and mind (by boosting mood) [R, R, R, R, R].

As we age, the likelihood of age spots also increases. More than 90% of white people older than 50 years of age may have age spots [R, R]

Diabetes may also increase the risk of age spots, especially in women [R].

FEWER

Predisposed to fewer age spots based on 3 genetic variants we looked at

1st

PERCENTILE

Your risk is **greater than 1% of the population** and **lower than 99% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
RAB11FIP2	rs61866017	GT
RAB11FIP2	rs35563099	CT
PPARGC1B	rs251468	TT

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Stretch Marks

Key Takeaways:

- Gene variants involved in stretch marks formation may affect elastin and other skin proteins.
- Other factors include being female, pregnancy, rapid growth or gaining/losing weight, steroid use, breast enlargement surgery, and African ancestry.
- Stretch marks are a common condition starting in adolescence.
- If you have high genetic risk, you may lower overall risk by taking action on those factors that you can change.

Stretch marks are a type of scarring typically caused by our skin stretching or shrinking too quickly.

They are typically caused by:

- Growth spurts in puberty
- Pregnancy
- Rapid weight loss or gain
- Rapid muscle gain due to weight training
- Breast enlargement surgery
- Extended corticosteroid use
- Some medical conditions such as Cushing's syndrome

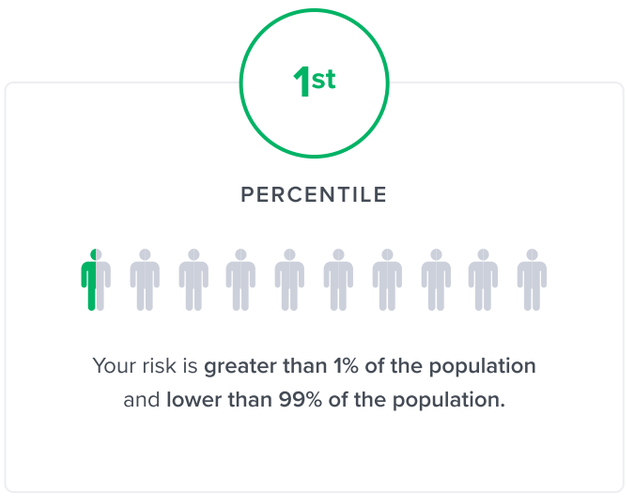
The following factors may further increase the risk of stretch marks [R]:

- Being female
- African ancestry
- **Genetics**

Research has found different gene variants involved in stretch marks formation. Involved genes may affect **elastin** and other skin proteins [R].

LESS LIKELY

Less likely to have stretch marks based on 1,519 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
/	rs6673165	TT
/	rs7421449	AA
TAFA1	rs9809500	GG
TAFA1	rs9848233	CC
TENM4	rs548541	GG
SRSF6	rs6093816	GG
SRSF6	rs6093813	CC
SRSF6	rs58314244	GG
SRSF6	rs2010809	CC
L3MBTL1	rs57083567	CC
SRSF6	rs6103260	GG
SCFD1	rs9707389	AT
CHRNB2	rs12143679	CC
GADL1	rs4955369	TT
ATXN1	rs59302766	AA
TJP1	rs41280060	GG
SLC26A8	rs11969921	AA
BNIP5	rs16887986	CC
BNIP5	rs11968573	TT
BNIP5	rs11965968	CC
PFDN2	rs1556258	CC

GENE	SNP	GENOTYPE
/	rs11088770	CC
MDGA1	rs35787789	CC
MDGA1	rs11963879	AA
MDGA1	rs61749283	AA
OBI1	rs9574326	AA
CES5A	rs57161061	AA
USP13	rs61760203	CC
NR2F2	rs62009489	CC
/	rs1976600	GG
NR2F2	rs62009523	GG
NR2F2	rs16976042	TT
NR2F2	rs62009485	GG
NR2F2	rs62009522	TT
NR2F2	rs62009521	TT
NR2F2	rs62009520	GG
/	rs10513579	TT
/	rs1397220	TT
NR2F2	rs62009519	TT
NR2F2	rs8030797	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Skin Problems

From common concerns like acne and rashes to chronic conditions like psoriasis and vitiligo, skin issues can significantly impact both your health and well-being at any age.

Your genetic predisposition can affect your chances of developing various skin conditions - from inflammatory disorders and autoimmune responses to pigmentation changes and potential skin cancers. Understanding these risks can help you recognize early warning signs and take proactive steps to protect your skin health.

MORE LIKELY
Melanoma

More likely to get melanoma

MORE LIKELY
Psoriasis

More likely to have psoriasis

MORE LIKELY
Eczema

More likely to have eczema

MORE LIKELY
Heavy Sweating

More likely to have hyperhidrosis

TYPICAL LIKELIHOOD
Skin Rash (Irritant)

Typical likelihood of contact dermatitis

TYPICAL LIKELIHOOD
Itch

Typical likelihood of itch

TYPICAL LIKELIHOOD
Hives

Typical likelihood of hives

TYPICAL LIKELIHOOD
Rosacea

Typical likelihood of rosacea

TYPICAL LIKELIHOOD
Basal Cell Carcinoma

Typical likelihood of basal cell carcinoma

TYPICAL LIKELIHOOD
Actinic Keratosis

Typical likelihood of an actinic keratosis

TYPICAL LIKELIHOOD
Pemphigus Vulgaris

Typical likelihood of pemphigus vulgaris

TYPICAL LIKELIHOOD
Vitiligo

Typical likelihood of vitiligo

LESS LIKELY
Skin Rash (Allergic)

Less likely to have allergic contact dermatitis

LESS LIKELY
Acne

Less likely to have acne

LESS LIKELY
Squamous Cell Carcinoma

Less likely to have squamous cell carcinoma

LESS LIKELY

Lichen Planus

Less likely to get lichen planus

Melanoma

Factors that may increase the risk of melanoma include [R]:

- High exposure to UV radiation: Exposure to UV radiation from the sun or tanning beds is the primary risk factor for melanoma.
- Fair skin: melanoma is most common in people with fair skin, hair, and eyes.
- History of sunburns: Severe, blistering sunburns, particularly in childhood, increase the risk.
- Multiple atypical moles: Having a large number of moles or atypical (dysplastic) moles increases the risk.
- Weakened immune system: Individuals with weakened immune systems, such as those who have had organ transplants, are at higher risk.
- Living closer to the Earth's equator or at high elevation
- Family history

Treatment options vary depending on the stage and may include [R]:

- Surgery: The primary treatment for early-stage melanoma, which involves removing the tumor along with a margin of healthy tissue.
- Lymph node dissection: If the melanoma has spread to nearby lymph nodes, these may be surgically removed.
- Immunotherapy: Drugs like pembrolizumab (Keytruda) or nivolumab (Opdivo) boost the body's immune system to fight the cancer.
- Targeted therapy: For melanomas with specific genetic mutations, drugs that target those mutations (e.g., BRAF inhibitors like vemurafenib) can be effective.
- Radiation therapy: May be used in cases where surgery is not possible or if the melanoma has spread.
- Chemotherapy: Less commonly used for melanoma, but may be considered in certain advanced cases.

The prognosis for melanoma depends on the stage at diagnosis. Early-stage melanomas that are detected and treated before they spread have a very high cure rate. However, once melanoma has spread to other parts of the body, it becomes more challenging to treat. Advances in immunotherapy and targeted therapy have improved outcomes for many patients with advanced melanoma.

Please note: This report is not diagnostic and can't be used to make any medical decisions. Most cancers are uncommon and have a strong environmental component. Even if your genetic predisposition is high, you will most likely not develop the disease. This report doesn't test for hereditary cancer syndromes or 'cancer genes'. These are usually caused by rare mutations that can't be analyzed by our test. If you're concerned about your risk of hereditary cancer, consider getting a specialized test at a reference laboratory.

MORE LIKELY

More likely to get melanoma based on 1,049,396 genetic variants we looked at

92nd

PERCENTILE

Your risk is **greater than 92% of the population** and **lower than 8% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SLC45A2	rs35407	GG
TERT	rs139996880	AG
TYR	rs1393350	AG
FLACC1	rs13016963	GA
MX2	rs45430	TC
CCND1	rs498136	AC
AGR2	rs1636744	CT
SOX4	rs6914598	CT
LINC02218	rs187843643	CC
ASIP	rs910873	GG
SPATA2L	rs258322	GG
ASIP	rs1885120	GG
MC1R	rs1805007	CC
ASIP	rs6059655	GG
DBNDD1	rs4785763	CC
IRF4	rs62389423	GG
SLK	rs2995264	AA
IRX3	rs16953002	GG
CTSS	rs7412746	CC
/	rs10739221	CC
CYP1B1	rs6750047	GG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Psoriasis

Key Takeaways:

- Up to **90%** of differences in people's odds of developing psoriasis may be due to genetics.
- Psoriasis triggers include: infections, weather, skin injuries, stress, cigarette smoke, alcohol abuse, steroid withdrawal.
- About **2%** of Americans have psoriasis, mostly appearing in younger and older adults.
- Even though the condition is rare, people with high genetic risk should understand and be wary of potential triggers.
- Click the **Recommendations** tab for potential dietary and lifestyle changes.

Psoriasis is an autoimmune skin disease in which the body attacks its own skin cells. In response, skin cells begin to grow too quickly. New cells then begin to pile up on the skin's surface, forming plaques. The result is itchy, inflamed, scaly skin - the hallmark of psoriasis [R, R, R].

About 2% of Americans have psoriasis. It can appear at any age, but most cases develop between the ages of 15-20 or 55-60 [R].

People predisposed to psoriasis don't always have symptoms. In fact, **symptoms may only appear after contact with a "trigger"** [R].

Some common triggers include [R]:

- Throat and skin infections
- Dry and cold weather
- Skin injuries (like bug bites and sunburns)
- Stress
- Cigarette smoke
- Alcohol abuse
- Topical steroid withdrawal

Signs and symptoms of psoriasis include [R]:

- White scales covering patches of inflamed, itchy skin (often on the elbows, knees, scalp, and back)
- Joint stiffness
- Thickened or discolored nails

People with psoriasis also tend to have problems with their kidneys, heart, and joints. In fact, about 30% of patients have *psoriatic arthritis*. This painful condition mainly affects the fingers and toes [R].

As there is no cure for psoriasis, treatment aims to manage symptoms. Your doctor may suggest [R, R, R]:

- Light therapy
- Coal tar
- Medications that block the immune response
- Topical vitamin D
- Retinoids

Between 60-90% of differences in psoriasis may be attributed to genetics. Genes involved in psoriasis may influence [R, R, R]:

- Inflammation (*IL12B*, *IL23A*, *IL23R*, *NFKBIZ*)
- Immune response (*IFNLR1*, *NOS2*, *IFIH1*, *HLA-C*)

Genetically high neutrophil levels may be causally associated with a higher risk of psoriasis [R].

MORE LIKELY

More likely to have psoriasis based on 1,049,035 genetic variants we looked at

65th

PERCENTILE

Your risk is **greater than 65% of the population** and **lower than 35% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
TYK2	rs34536443	GG
IL23R	rs9988642	TT
STAT2	rs2066819	CC
RNF145	rs2082412	GG
IL12B	rs7709212	TT
GCA	rs17716942	TT
LCE3C	rs4845459	AA
IFNLR1	rs10794648	CC
SLC22A5	rs1295685	GG
PPP2R3C	rs8016947	GG
ZNF816	rs9304742	TT
DDX58	rs11795343	TT
IL13	rs20541	GG
TSC22D1	rs9533962	CC
POLI	rs545979	TT
ELMO1	rs2700987	AA
TNFAIP3	rs643177	CT
COG6	rs34394770	TT
TP63	rs28512356	CC
LYRM9	rs28998802	GA
STX1B	rs13708	AG

GENE	SNP	GENOTYPE
CCDC88B	rs645078	AA
IFIH1	rs1990760	CT
PUS10	rs62149416	TC
POLI	rs3730682	AG
SLC44A2	rs892085	GA
REL	rs842625	GA
STX1B	rs12445568	TC
EXOC2	rs9504361	AG
TNFAIP3	rs582757	TC
RUNX1	rs8128234	TC
TNFSF8	rs6478109	GA
CARD11	rs4722404	TC
CLIC6	rs9305556	AG
ZMIZ1	rs1250546	GA
EXOC2	rs3799296	TA
AK8	rs1076160	CT
STAT3	rs744166	AA
ANXA6	rs2233278	GG
TNIP1	rs17728338	GG
TRAF3IP2	rs33980500	CC
STAT2	rs2066807	CC
RNF145	rs3213094	CC
LGALS9	rs4795067	AA
PARK7	rs417065	CC
CAVIN1	rs56364076	TT
SPATA2	rs1056198	TT
SPATA2	rs7352944	CC
MFSD4B	rs240993	CC
POU2F3	rs2847500	GG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Eczema

Key Takeaways:

- Up to **75%** of differences in people's chances of developing eczema may be due to genetics.
- Eczema triggers include: allergens, cold, dry air, infections, skin irritants, and stress.
- It can affect your appearance and quality of life.
- If you have a high genetic risk, take special care to avoid potential triggers.
- Click the **Recommendations** tab for potential dietary and lifestyle changes.

Eczema is an inflammatory skin condition. It causes dry skin and itchy red rashes, usually on the elbow creases, neck, and back of the knees [R, R].

Up to 1 in 3 children experience eczema, usually in the first year of life. The condition is less common (2-10%) in adults [R].

Factors that tend to worsen eczema include [R, R]:

- Contact with allergens (pollen, mold, dust mites, or animals)
- Cold, dry air
- Infections like the flu
- Contact with skin irritants (chemicals or fabrics)
- Stress

People with eczema may be more prone to skin infections. Normally, the skin has a protective barrier that keeps out germs. Eczema can compromise this barrier, making it easier for infections to arise [R, R].

The symptoms of eczema can usually be managed at home with the help of [R]:

- Moisturizers
- Humidifiers
- Topical medications
- Trimming or covering fingernails (to limit scratching)
- Avoiding skin irritants

While the causes of eczema aren't completely clear, **genetics seems to play a major role**. What's more, the genetics of eczema, asthma, hay fever, and food allergies are very similar. This means that if you have one, you're more likely to have the others [R, R].

Up to 75% of differences in people's chances of developing eczema may be attributed to genetics. Genes involved in eczema may influence [R, R, R, R, R, R]:

- Skin barrier function (*FLG*, *OVOL1*, *KIF3A*)
- Inflammation (*IL13*, *IL4*)
- Immune response (*HLA-DQA1*, *EMSY*)

MORE LIKELY

More likely to have eczema based on 6,952 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
STMN3	rs3848669	TT
IL6R	rs61812598	AA
ADO	rs4372325	CC
PPP2R3C	rs2415269	GG
SATB1	rs4395418	CC
ID2	rs891058	GG
D2HGDH	rs34290285	GG
ARHGAP27	rs9895436	AA
LRRC32	rs7936434	GC
ACTL9	rs2918299	CT
TREH	rs10790275	CG
TRIB1	rs12334935	GA
PRR5L	rs10836538	TG
MDM1	rs2227491	CT
NCF4	rs4821564	CT
RUNX3	rs6672420	AT
TRAF3	rs12888955	GA
FLG	rs61816761	GG
FLG	rs138726443	GG
LINGO4	rs12123821	CC
ARRDC1	rs117137535	GG

GENE	SNP	GENOTYPE
CCR7	rs112401631	TT
LRRC32	rs55646091	GG
SLC22A5	rs60153262	CC
IL2RA	rs62626322	TT
OVOL1	rs10791824	AA
HLA-C	rs2844594	GG
TBKBP1	rs72833417	AA
KIAA1109	rs62323874	GG
SLC25A46	rs3853750	TT
PRR5L	rs6484847	CC
KIAA1109	rs1904522	GG
GNGT2	rs28406364	CC
TNFSF18	rs6691738	TT
ZBTB25	rs11625265	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Heavy Sweating

Key Takeaways:

- Genes that affect excessive sweating may influence nerve function and chemical messengers.
- Excessive sweating can impact quality of life and cause undue stress and anxiety. If you are at high genetic risk, take action on your risk factors to help lower overall risk.
- Up to 5% of people in the U.S. may have hyperhidrosis. If you have symptoms, you may want to consult your doctor to rule out other conditions.
- Click the **next steps** tab for relevant lab tests.

Hyperhidrosis is the scientific term for heavy sweating [R].

It's normal to sweat a lot because of exercise, heat, or stress. In the absence of these conditions, a lot of sweat might be a sign that something is wrong [R].

Sweating turns from normal to worrisome if it [R]:

- Changes the way you live your daily life
- Causes anxiety or social problems
- Suddenly gets much worse for no apparent reason
- Suddenly starts while sleeping (night sweats) for no apparent reason

Up to 5% of people in the United States may have hyperhidrosis. Many people do not realize it is a treatable medical condition. For this reason, they often do not bring up symptoms with their doctors. **Only about 1 in 2 people who have it will be diagnosed** [R, R].

Most cases of heavy sweating are caused by a nerve problem. Simply put, the nerves that control the sweat glands are too active. This condition is called *primary focal hyperhidrosis*. It may be treated with [R, R, R, R]:

- Topical medication
- Antiperspirants
- Surgery
- Botulinum toxin therapy

Heavy sweating can also be caused by another health condition. This is called *secondary hyperhidrosis*. Underlying conditions that may cause this include [R]:

- Diabetes
- Menopause
- Thyroid problems
- Low blood sugar
- Infection

Researchers suggest that genetics plays a role in the development of heavy sweating. Genes involved in heavy sweating may influence [R]:

- Chemical messenger activity (*BCHE*, *PSEN2*, *DARS*)
- Nerve function (*PPP3R1*, *PPP1CB*, *ITPR2*)

MORE LIKELY

More likely to have hyperhidrosis based on 103 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
LONP2	rs6500380	GG
SLC6A16	rs149876322	GC
PPP1CB	rs56089836	CC
PPP1CB	rs1534480	CC
DLG2	rs12280544	CC
TLN2	rs139024759	AA
TUSC1	rs117093392	AA
UBLCP1	rs143772159	CC
CADM1	rs144975908	GG
FZD8	rs190252627	CC
/	rs75470475	CC
LRRC7	rs113867145	GG
SETD7	rs183414800	TT
LRRC7	rs113992293	GG
KRT72	rs61740873	GG
/	rs74837903	TT
LRRC7	rs111398942	CC
LRRC7	rs113434595	CC
HNRNPA1P48	rs117324726	CC
UBLCP1	rs77247779	TT
GATA3	rs80243082	GG

GENE	SNP	GENOTYPE
FBXO10	rs142695379	GG
CPNE2	rs7184935	CC
/	rs143053510	TT
ANKH	rs150150334	AA
PITPNM1	rs144939807	CC
GATA2	rs56099243	CC
QSOX1	rs142528261	CC
ADAMTS12	rs140640237	TT
EGFLAM	rs77788652	CC
TMC2	rs147782137	AA
CENPF	rs147733826	CC
/	rs115295459	CC
TBCA	rs140260005	CC
SRRM4	rs113353314	AA
GP2	rs145309364	AA
LYPD6B	rs7586963	GG
ITGA1	rs77066279	GG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Skin Rash (Irritant)

Management of contact dermatitis primarily involves identifying and avoiding the substance responsible for the reaction. Patch testing can help determine the specific allergens that a person is reacting to in cases of allergic contact dermatitis. Treatment typically includes topical creams, such as steroids to reduce inflammation, and emollients to repair the skin barrier.

It is also essential to practice good skin care by keeping the skin clean and moisturized to prevent further irritation or infection. When avoidance of the irritant or allergen and topical treatments are insufficient, physicians may prescribe systemic medications to manage severe cases.

TYPICAL LIKELIHOOD

Typical likelihood of contact dermatitis based on 766,585 genetic variants we looked at

77th

PERCENTILE

Your risk is **greater than 77% of the population** and **lower than 23% of the population.**

Itch

The mechanisms behind itch can vary. Some itches are caused by histamines released during an immune response and can be relieved by antihistamines, while others are related to more complex pathways, involving neuropeptides and other neurotransmitters.

Chronic itching can significantly diminish quality of life, leading to sleep disturbances, impaired daily functioning, and psychological distress. Addressing the underlying cause of the itch is crucial for long-term relief, and treatments may range from moisturizing skin creams to phototherapy or systemic medications, depending on the etiology of the itch.

TYPICAL LIKELIHOOD

Typical likelihood of itch based on 1,674 genetic variants we looked at

41st

PERCENTILE

Your risk is **greater than 41% of the population** and **lower than 59% of the population.**

Hives

Key Takeaways:

- Your genetics plays a factor in developing hives through inflammation signaling and histamine levels. Chronic hives are more common in women.
- Risk factors include previous allergic reactions and your genetics.
- Common triggers are foods or food additives, medications, airborne allergens, insect bites, infection, stress, cold/heat.

Click the **next steps** tab for relevant lifestyle factors.

Hives are red, swollen, and itchy bumps that appear on the skin. While hives usually do not last very long, some people can develop chronic hives. In these cases, outbreaks can happen frequently and last for six weeks or more [R, R, R, R].

While occasional hives are common, less than 1% of American adults have chronic hives. Chronic hives are slightly more common in women than in men [R].

Hives occur when immune cells release chemicals like histamine into the blood. This can be triggered by [R, R, R]:

- Certain foods or food additives (e.g., seafood, nuts, eggs)
- Certain medications (e.g., NSAIDs)
- Airborne allergens (e.g., pollen, animal dander)
- Insect bites
- Infection
- Stress
- Cold or heat

Some people are more likely to develop hives than others. Risk factors include [R]:

- Previous allergic reactions
- **Genetics**

Hives can be a symptom of an underlying problem. For example, some cases of chronic hives are caused by autoimmune disease. However, most cases of chronic hives have no known cause. Work with your doctor to find and manage any underlying conditions [R].

Treatment for hives usually includes [R, R]:

- Avoiding allergens
- Medication

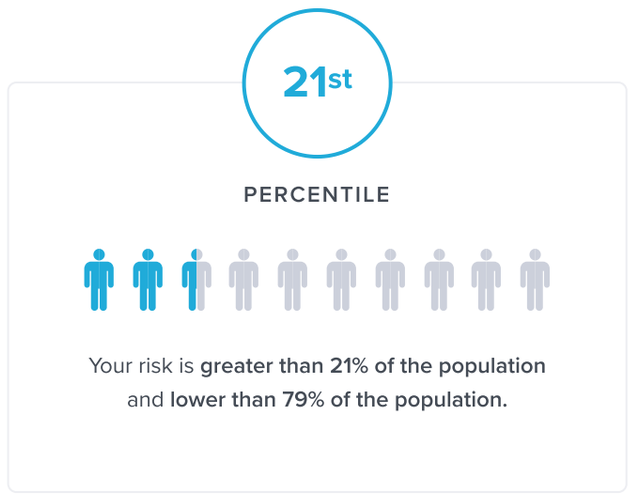
Genetics plays a significant role in the development of hives. Genes involved in hives may influence [R, R, R]:

- Histamine levels (*HNMT*, *FCER1A*)
- Other inflammation signals (*ALOX5*, *PTGER4*, *PLCG2*)

Genetically high levels of omega-3s may be causally associated with a lower risk of allergic urticaria [R].

TYPICAL LIKELIHOOD

Typical likelihood of hives based on 12,302 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
TPSB2	rs143547788	CG
GCSAML	rs56043070	GG
BRAF	rs117325894	TT
NDRG2	rs1998847	AA
CSGALNACT1	rs2958556	GG
STIM1	rs3750996	AA
CBLB	rs6787175	GG
OR7A5	rs144323407	TT
ADGRG6	rs78973304	TT
AEBP2	rs141804487	TT
PDE3A	rs139395703	TT
OR7A17	rs116999541	GG
TC2N	rs117777291	CC
ADGRG6	rs76767175	GG
ADGRG6	rs118139202	TT
THNSL2	rs12478124	CC
THNSL2	rs114910076	AA
PCDH20	rs118082163	AA
ADAMTSL3	rs76543944	CC
GRB10	rs77158702	GG
PDXK	rs138505989	GG

GENE	SNP	GENOTYPE
PACC1	rs147461762	GG
C6ORF118	rs76717479	GG
FTMT	rs77171303	AA
CPNE8	rs11169914	TT
POP1	rs2514318	AA
CNTN5	rs149335843	GG
MLIP	rs146859989	CC
THNSL2	rs34841493	GG
MTRNR2L13	rs150832922	GG
AEBP2	rs80078467	TT
C1ORF100	rs72765831	AA
FAM114A2	rs149878927	TT
/	rs74829936	GG
HIVEP2	rs79535357	TT
TGFBR2	rs35625958	CC
SMAP2	rs139180430	CC
/	rs56249490	GG
CHST2	rs111727236	AA
NXPH2	rs114423597	TT

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Rosacea

Key Takeaways:

- Genes involved in rosacea may influence skin pigments and/or inflammation.
- Risk factors include UV-sensitive skin, being female, over age 45, and your genetics.
- A high genetic risk may be affected by limiting sun exposure and being aware of potential triggers.
- Rosacea affects about **1 in 20** people worldwide, and is triggered by things like sun exposure, stress, and makeup.

Rosacea is a common skin condition that causes face redness. It mostly affects the forehead, nose, cheeks, and chin. It can look a lot like acne or other skin conditions [R, R].

Other rosacea symptoms may include [R, R]:

- Small broken veins in the nose and cheeks (spider veins)
- Pimple-like bumps
- Heat and tenderness
- Thickened skin on the nose

About 1 out of 20 people worldwide have rosacea. It most commonly affects people over the age of 45. Although rosacea can affect anyone, it is usually reported in women with lighter skin [R, R].

Other risk factors for rosacea include [R, R]:

- UV-sensitive skin
- **Genetics**

Many things may trigger or worsen rosacea. These include [R]:

- Sun exposure
- Heat
- Wind
- Intense exercise
- Alcohol
- Stress
- Makeup
- Medication
- Some foods

Rosacea itself is not usually dangerous. However, one form of the condition can affect the eye. This is called *ocular rosacea*, and it can cause dry, irritated eyes and eyelids. It can also lead to complications like blurred vision and sensitivity to light [R, R, R].

To manage rosacea, doctors may recommend [R, R, R]:

- Avoiding triggers
- Sunscreen (at least SPF 30)
- Moisturizers
- Medication
- Laser therapy

People with ocular rosacea are more prone to eye infections. These are treated with antibiotics. Contact lenses may worsen this condition, so they should be avoided [R].

Genetics seem to play a significant role in rosacea. Genes involved in rosacea may influence [R, R, R, R]:

- Inflammation (*HLA-DRB1*, *HLA-DQA1*, *BTNL2*, *IL13*)

TYPICAL LIKELIHOOD

Typical likelihood of rosacea based on 113,087 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SLC45A2	rs16891982	GG
HLA-DMA	rs56934772	TT
HES6	rs55775132	GG
HLA-DMA	rs41317102	CC
HLA-DQA2	rs2894254	TT
HLA-DQA1	rs9272729	GG
MICB	rs519417	GG
KCNJ3	rs75561433	GG
MICB	rs3130614	TT
MICB	rs1144710	TT
KCNJ3	rs10191743	TT
HERC2	rs1129038	CT
HERC2	rs12912427	AG
MMP15	rs191291131	CC
ALG13	rs201820102	A
CAMK1G	rs193183075	CC
KIAA1109	rs77937677	GG
SEMA3C	rs80105877	GG
SGIP1	rs180826669	CC
TCERG1L	rs12243257	GG
CSTF2T	rs118006792	AA

- Skin pigments (*SLC45A2*)
- Both of the above (*IRF4*, *MC1R*)

GENE	SNP	GENOTYPE
DGKB	rs142431388	CC
RNF217	rs476080	CC
DCLK2	rs190788988	CC
/	rs185236232	AA
KCNV1	rs144882124	AA
SYBU	rs147863159	CC
NCAM2	rs117322572	CC
KYAT3	rs191805855	CC
/	rs75853901	CC
/	rs146167956	CC
PDCD6IP	rs78529895	AA
SEMA5A	rs16882975	CC
WNT7B	rs59614521	AA
IRF4	rs12203592	CC
DCAF4	rs11628905	AA
CDK10	rs118174802	CC
MC1R	rs1805007	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Basal Cell Carcinoma

Unlike other forms of skin cancer, basal cell carcinoma rarely spreads (metastasizes) beyond the original tumor site. However, it can be disfiguring if not treated promptly and can cause considerable destruction and disfigurement by invading surrounding tissues.

It's important to monitor changes in the skin and seek medical advice if any suspicious growths or new lesions appear, especially in areas that receive a lot of sun exposure. Treatment options vary depending on the severity and can include surgical excision, topical medications, cryotherapy, laser therapy, or radiation, with the aim to remove or destroy the cancerous cells.

TYPICAL LIKELIHOOD

Typical likelihood of basal cell carcinoma based on 33,751 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SLC45A2	rs16891982	GG
RHOU	rs61824911	GA
LPP	rs2049218	TT
PADI6	rs12122129	AG
EDN2	rs2781249	CC
TYR	rs1126809	AG
FOXP1	rs35768603	CT
BNC2	rs10810657	TA
CTLA4	rs1427676	CT
RNASET2	rs4710154	TA
KANK1	rs1323262	CG
IRF4	rs62389423	GG
FANCA	rs12931267	CC
ASIP	rs56238684	GG
KRT5	rs11170164	CC
ASIP	rs17401449	AA
HLA-F	rs29243	GG
NDRG3	rs55804368	CC
EXO1	rs4149909	AA
CTSS	rs41271951	AA
NEK9	rs7145468	AA
OCA2	rs1800407	CC
NCR3	rs61447909	GG
HLA-DQB1	rs9268847	AA
/	rs2572140	GG
SOX4	rs55775505	CC
TICAM1	rs10425559	AA
CTSH	rs2289702	CC
CCDC88B	rs663743	GG

GENE	SNP	GENOTYPE
GRHL1	rs6741117	GG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Actinic Keratosis

Frequent or intense exposure to ultraviolet (UV) rays is usually the cause of actinic keratoses. People who frequently lay in the sun or on tanning beds, live in a sunny place, or work outdoors may be at increased risk.

The following factors may further increase your likelihood of developing actinic keratoses [R]:

- Having red or blond hair and blue or light-colored eyes
- Tending to freckle or burn when exposed to sunlight
- Age older than 40
- Having a weakened immune system

While sun exposure is the primary cause of actinic keratoses, genetic factors may influence an individual's susceptibility. People with certain genetic traits, like fair skin and light hair, are more predisposed to developing actinic keratoses due to reduced melanin, which offers less protection from UV radiation.

An actinic keratosis sometimes disappears on its own but might return after more sun exposure. It's hard to tell which actinic keratoses will develop into skin cancer, so they're usually removed as a precaution. Treatment options include [R]:

- Cryotherapy (freezing the lesion with liquid nitrogen).
- Topical removal treatments such as fluorouracil, imiquimod, or diclofenac.
- Photodynamic therapy, which uses a combination of light and a special chemical to destroy cancer cells.
- Curettage, where the lesion is scraped off.

If treated early, actinic keratoses can be cleared up or removed. If left untreated, some of these spots might progress to squamous cell carcinoma. This is a type of cancer that usually isn't life-threatening if detected and treated early.

TYPICAL LIKELIHOOD

Typical likelihood of an actinic keratosis based on 1,675 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
TYR	rs1126809	AG
BNC2	rs12350739	GA
HERC2	rs12916300	CT
FOXP1	rs7638354	AT
SLC45A2	rs16891982	GG
IRF4	rs12203592	CC
SPATA2L	rs35063026	CC
ASIP	rs6059655	GG
TRPC4AP	rs2425025	AA
DEF8	rs4268748	TT
HLA-DQA2	rs4455710	CC
TRPS1	rs7832568	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Pemphigus Vulgaris

The management of pemphigus vulgaris typically involves the use of immunosuppressive agents to reduce the activity of the immune system to stop the formation of new blisters. Corticosteroids are commonly prescribed, often in combination with other drugs such as azathioprine or mycophenolate mofetil, to achieve better control of the condition with lower doses of steroids. The goal of treatment is to induce a long-term remission while minimizing side effects of the medication.

Despite treatment, people with pemphigus vulgaris may experience periods of flares and remission. Close monitoring by a team of medical professionals, including dermatologists, dental care providers, and other specialists is crucial for managing the disease effectively.

TYPICAL LIKELIHOOD

Typical likelihood of pemphigus vulgaris based on 36 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
EPHA5	rs1074532	AA
ANK2	rs362492	CC
UCN3	rs9423602	GG
SOX9	rs17246777	CC
CDH4	rs6093035	AA
ANKFN1	rs9899680	TT
PADI6	rs10888028	TT
STK32A	rs62377684	TT
CNTN4	rs67645795	AA
NRIP1	rs2823004	GG
DLC1	rs56061315	AA
PARD3	rs1545214	CA
SMAD3	rs12907183	AG
NRSN1	rs543017	GT
CADPS	rs6772352	AG
PELI2	rs4901619	AG
GPR63	rs4839863	GA
CETN3	rs117814792	GG
IPO7	rs12574246	GG
FHIT	rs17339157	AA
LAPTM4B	rs2512413	CC
RACGAP1	rs56232366	AA
THSD7B	rs16837853	AA
MED13L	rs11068077	TT
CSMD1	rs10104910	CC
MCPH1	rs17075940	GG
RABAC1	rs11878287	AA
B4GALT4	rs74280516	CC
KCNAB2	rs2235791	CC

GENE	SNP	GENOTYPE
LMNTD1	rs16928923	TT
COMMD10	rs77499388	TT
TTC13	rs12040904	AA
DNAJC15	rs61950435	CC
ITGBL1	rs11069452	GG
/	rs12460063	AA
/	rs11660027	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Vitiligo

Key Takeaways:

- Up to **80%** of differences in people's chances of developing vitiligo may be due to genetics, and many will see it develop before adulthood.
- About **1%** of the world's population has vitiligo, so even if you have a high genetic risk, the actual risk is still low.
- A high genetic risk may make vitiligo triggers such as an autoimmune response or a sunburn, more likely to trigger the condition.
- Click the **Recommendations** tab for potential dietary and lifestyle changes, and **next steps** for relevant labs.

Vitiligo is a condition in which the skin loses pigment. Normally, special skin cells called melanocytes produce a pigment called *melanin*. This pigment helps give the skin, hair, and eyes their color. In vitiligo, these skin cells are damaged or die off [R, R].

In the skin, pigment is often lost in patches. In 90% of cases, these patches appear on both sides of the body, in a symmetrical pattern. For example, if a white patch appears around the left eye, it will also appear around the right eye [R, R].

Vitiligo mostly affects the skin. However, it can also make hair go gray prematurely [R].

About 1% of people worldwide develop vitiligo. Anyone can get it, but it is more noticeable in people with darker skin [R, R].

The cause of vitiligo is unclear. It may happen due to [R, R, R]:

- An autoimmune condition
- A trigger event (e.g., stress, skin injury, severe sunburn, chemical contact)
- **Genetics**

Possible complications of this condition include [R, R]:

- Stress
- Sunburn
- Eye problems
- Hearing loss

Treatment options for vitiligo include [R]:

- Medication
- Light therapy
- Surgery

Up to 80% of differences in people's chances of developing vitiligo may be attributed to genetics. Genes involved in vitiligo may influence [R, R]:

- The immune response (*HLA-DQB1*, *HLA-DQA1*, *PTPN22*)
- Skin pigmentation (*FGFR1OP*, *ZMIZ1*, *OCA2*)
- Cell death (*GZMB*, *SLC29A3*, *CASP7*)

TYPICAL LIKELIHOOD

Typical likelihood of vitiligo based on 509,196 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
ASIP	rs6059655	GG
HLA-A	rs60131261	GG
DEF8	rs4268748	TT
/	rs148136154	CC
TEF	rs9611565	TT
IRF4	rs12203592	CC
SERPINB1	rs78521699	AA
FARP2	rs41342147	GG
TICAM1	rs4807000	AA
PTPRC	rs16843742	TT
HLA-DQA2	rs9271597	TA
TYR	rs1126809	AG
SESN3	rs11021232	TC
IL2RA	rs706779	TC
FAP	rs2111485	AG
SH2B3	rs10774624	GA
RNASET2	rs2247314	CT
GZMB	rs8192917	CT
FOXP1	rs34346645	AC
CASP7	rs12771452	GA
RERE	rs301807	GA
TG	rs2687812	AT
ARID5B	rs71508903	CT
CPVL	rs117744081	AA
IL1RAPL1	rs73456411	G
CFAP36	rs10200159	TT
PTPN22	rs2476601	GG
HERC2	rs1635168	CC
UBASH3A	rs12482904	TT

GENE	SNP	GENOTYPE
SUOX	rs2017445	TG
TNFSF18	rs78037977	AA
C1QTNF6	rs229527	CC
LPP	rs13076312	CC
BACH2	rs72928038	GG
CD44	rs1043101	AA
RAB5C	rs11079035	GG
PIGN	rs8083511	AA
FADS1	rs968567	CC
IRF3	rs2304206	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Skin Rash (Allergic)

Identifying and avoiding contact with the allergen is the most effective strategy to manage allergic contact dermatitis. Some preventive measures that may help include:

- Protective clothing: Wearing gloves or other protective clothing can help prevent skin contact with allergens.
- Careful product selection: Opting for hypoallergenic products and carefully reading labels to avoid known allergens.
- Education: Understanding which substances trigger your allergies and how to avoid them.

Allergic contact dermatitis symptoms can be managed with:

- Topical corticosteroids: To reduce inflammation and itching. These should be used as directed by a healthcare provider.
- Moisturizers: To help repair the skin and relieve dryness.
- Oral antihistamines: They can help alleviate itching.
- Cool, wet compresses: Applying these to the affected area may reduce inflammation and itching.

LESS LIKELY

Less likely to have allergic contact dermatitis based on 16,669 genetic variants we looked at

1st

PERCENTILE

Your risk is **greater than 1% of the population** and **lower than 99% of the population.**

Acne

Key Takeaways:

- About **50-90%** of differences in people's chances of developing acne may be due to genetics.
- Around **85%** of people develop acne between the **ages of 12 and 24**.
- Risk factors include: sugary food, dairy, oily makeup, stress, and hormonal changes.
- If your genetic risk is high, and you are young, take action now.
- Click the **Recommendations** tab for potential dietary and lifestyle changes.

Acne is a common skin condition easily recognized by the pimples that appear on the face and back [R, R].

Pimples are caused by blocked hair follicles. Oil, dead skin cells, and bacteria can all plug hair follicles and contribute to pimples [R, R].

Acne is extremely common in teenagers. In fact, it affects about 90% of boys and 80% of girls at some point in their teen years [R, R].

Researchers aren't sure about the exact cause of acne. One possible explanation is that the body makes more sex hormones during puberty. These hormones can increase the production of *sebum*, a skin oil that can plug a follicle. In response, the bacteria *Cutibacterium acnes* (*C. acnes*) can begin to grow [R, R].

It is normal for *C. acnes* to live on your skin, mainly in and around the hair follicles. In fact, it may even help protect against infection by more dangerous bacteria. However, some types of *C. acnes* have been linked to acne [R].

Besides puberty, factors that may trigger or worsen acne include [R, R]:

- Sugary food
- Dairy
- Oily makeup
- Stress
- Hormonal changes
- **Genetics**

Acne isn't usually dangerous and often goes away on its own. However, zits may leave scars on the skin long after they're gone. Both acne and its scars can affect a person's self-esteem. It is therefore important to manage acne and its potential impact on mental health [R, R, R].

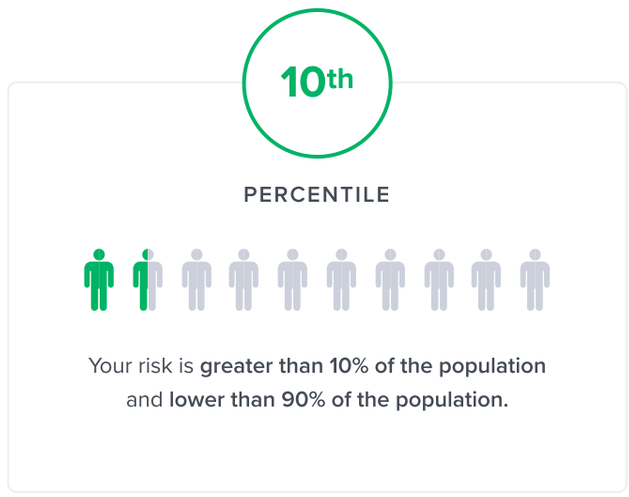
Treatments often combine oral medication, creams, and skin washing. Other treatments include light therapy and chemical peels [R, R, R].

About 50-90% of differences in people's chances of developing acne may be attributed to genetics. Genes involved in acne may influence [R, R, R, R]:

- Hormones(*MYC*, *DDB2*, *SELL*)
- Skin cell function (*TP63*, *CACNA1H*, *ADAM19*)

LESS LIKELY

Less likely to have acne based on 30,027 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
TGFB2	rs1159268	AA
MOCS2	rs38055	GA
SEMA4B	rs34560261	CC
WNT10A	rs74333950	TT
TNFRSF1B	rs1061622	TG
TLR4	rs4986791	CC
FGF10	rs16874036	GG
MYEOV	rs10896460	TT
TNF	rs1799724	CT
DEXI	rs7194305	AA
H4C13	rs169262	CC
IL17F	rs763780	TT
LAMC2	rs513398	AA
MAP3K1	rs455660	CC
GPR25	rs296522	CC
ADAMTS18	rs72803831	AG
MOCS2	rs629725	CT
IL6	rs1800796	GC
PPARG	rs1801282	CC
DBX1	rs1838055	CG
SUGCT	rs9639838	CT

GENE	SNP	GENOTYPE
CYP19A1	rs700518	CC
EDNRA	rs6842241	AC
BORCS7	rs743572	AG
UTP25	rs12086634	TG
BCL11A	rs2901000	GA
SYN3	rs135025	AG
IL1A	rs17561	CC
LPCAT2	rs243865	CC
TNF	rs1800629	GG
SPDYC	rs144908022	AA
PF4V1	rs4073	TT
SLC45A1	rs80293268	GG
LYPLAL1	rs1256580	GG
IL4R	rs1801275	AA
ARNTL	rs3849154	GG
EDAR	rs260643	GG
DLC1	rs17803958	CC
CSTA	rs17265703	AA
MAP3K1	rs158343	CC
PCNX3	rs61744384	AA
TIMP4	rs3773364	AA
TRPM7	rs8042919	GG
CRELD2	rs28470568	GG
UPB1	rs2070475	AA
NUDT6	rs13104688	TT
DUSP16	rs7312010	GG
PAQR8	rs2275913	GG
SLC20A1	rs1800587	GG
PNPLA3	rs738409	GG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Squamous Cell Carcinoma

Symptoms of squamous cell carcinoma include persistent, scaly red patches with irregular borders, open sores that may crust or bleed, an elevated growth with a central depression, or warts; these might itch or be painless. Unlike benign skin blemishes, these lesions often do not heal without treatment.

Squamous cell carcinoma is usually caused by cumulative ultraviolet (UV) exposure over time; thus, protecting the skin from the sun and avoiding tanning beds are critical preventative measures. Treatments include surgical excision, freezing (cryotherapy), laser therapy, or topical medications, depending on the tumor's size, depth, and location.

LESS LIKELY

Less likely to have squamous cell carcinoma based on 8,836 genetic variants we looked at

1st

PERCENTILE

Your risk is **greater than 1% of the population** and **lower than 99% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SLC45A2	rs16891982	GG
CPVL	rs117744081	AA
LPP	rs60946162	TT
BACH2	rs72928038	GG
TYR	rs1126809	AG
TRPS1	rs7834300	GG
HAL	rs3213737	GG
BNC2	rs10810657	TA
FOXP1	rs9853632	CT
CTLA4	rs231729	AT
ADO	rs16917546	TC
IRF4	rs12203592	CC
MC1R	rs1805007	CC
ASIP	rs6059655	GG
ASIP	rs4911466	TT
CNBD2	rs75653149	CC
AHR	rs62444531	AA
OCA2	rs1800407	CC
HLA-DQA2	rs4455710	CC
CHMP4B	rs74645632	TT
MROH8	rs73094911	TT

GENE	SNP	GENOTYPE
CHMP4B	rs403598	GG
AP3M2	rs12542910	TT
NCR3	rs61447909	GG
ENTR1	rs34302850	AA
CTSS	rs41271951	AA
FLACC1	rs7582362	GG
WEE1	rs7939541	TT

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Lichen Planus

Factors that might increase the risk of developing lichen planus include:

- Having a family history of the disease
- Viral infections, such as hepatitis C
- Certain medications, including those for high blood pressure, heart disease, or arthritis
- Exposure to chemicals or allergens
- Stress, though this link remains under study
- Genetics

Individuals with a family history of the condition appear to be at a higher risk, suggesting a potential genetic predisposition. Some studies have indicated certain genetic markers linked to lichen planus, particularly involved in immune system regulation.

LESS LIKELY

Less likely to get lichen planus based on 1,670 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
ETV1	rs112115472	CC
POU5F1	rs2523616	TC
NDUFA12	rs111463574	CC
USP22	rs8065764	CC
VCP	rs277580	GG
RND3	rs13032164	CC
RBM18	rs2773871	GG
SDK1	rs7806494	AA
CYP1B1	rs1800440	CT
MYO10	rs73062921	AT
PRR20G	rs13078360	GA
OTX1	rs6731286	TA
GRM8	rs2021162	GA
CARD11	rs6975452	TA
CDC42EP4	rs112659862	TT
IKZF2	rs78504246	GG
UBE2E2	rs116806118	AA
TFAP2A	rs148661203	CC
CNTN3	rs114108912	GG
GSTA5	rs142366299	CC
TGFBR2	rs1461070	GG
CAMK1D	rs117687547	CC
KIAA1217	rs112198986	CC
IER2	rs79459566	CC
AKAP11	rs10507508	AA
SEMA4B	rs34560261	CC
AKAP12	rs34097647	CC
ST3GAL1	rs760327	CC
BANP	rs6540122	CC

GENE	SNP	GENOTYPE
ERAP2	rs10045403	AA
EFCAB5	rs12951836	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Skin Damage

Every day, your skin faces environmental challenges - from sun exposure to physical stress. Some people burn easily while others rarely do; some develop blisters quickly while others seem more resistant.

These reactions aren't random - your genes influence how your skin responds to various types of damage and stress. Knowing your personal risk factors can help you develop more effective strategies for protecting your skin, whether you're spending a day at the beach or recovering from a burn.

TYPICAL LIKELIHOOD

Radiation-Induced Dermatitis

Typical likelihood of radiation-induced dermatitis

TYPICAL LIKELIHOOD

Sunburn

Typical likelihood of sunburns

TYPICAL

Sun Sensitivity

Likely typical sun sensitivity

TYPICAL LIKELIHOOD

Burns

Typical likelihood of burns

LESS LIKELY

Blisters

Less likely to have blisters

Radiation-Induced Dermatitis

Management and care of radiation-induced dermatitis involve a multi-faceted approach to alleviate symptoms and promote healing. Patients are advised to practice gentle skin care routines, avoiding irritants and harsh chemicals; to use topical treatments such as steroidal or non-steroidal creams designed to reduce inflammation and pain; and to keep the affected area clean and well-moisturized.

In some instances, when the dermatitis is severe, the radiation treatment schedule may be adjusted to allow the skin time to recover. Preventive measures and early interventions play a critical role in managing the condition, ensuring that patients can continue with their prescribed radiation therapy with minimal discomfort and disruption.

TYPICAL LIKELIHOOD

Typical likelihood of radiation-induced dermatitis based on 34 genetic variants we looked at

Sunburn

Risk factors include:

- Fair skin
- Genetics
- Lack of protective clothing
- Not using sunscreen

Severe sunburn can increase the risk of skin cancers like basal cell carcinoma, squamous cell carcinoma, and malignant melanoma.

TYPICAL LIKELIHOOD

Typical likelihood of sunburns based on 193 genetic variants we looked at

49th

PERCENTILE

Your risk is **greater than 49% of the population** and **lower than 51% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
MC1R	rs1805007	CC
TYR	rs1126809	AG
IRF4	rs12203592	CC
NTM	rs12421680	GG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Sun Sensitivity

Factors and conditions that might increase the risk or cause sun sensitivity include:

- Specific medications, including certain antibiotics, antifungals, antihistamines, and diuretics.
- Medical conditions like lupus, porphyria, or polymorphous light eruption.
- Cosmetic and skincare products that contain alpha hydroxy acids, retinoids, or certain essential oils.
- Certain chemicals, like those used in fragrances or industrial products.
- Prior use of certain plants (like limes, celery, or parsley) that can make the skin more sensitive to sunlight.
- Genetics

Specific gene variants can increase the risk of sunburn or the development of sun-sensitive skin conditions. Additionally, genetically determined skin types, which vary in their melanin content, can influence how easily someone burns or tans in the sun. Fair-skinned individuals, often with light hair and eyes, are generally more sensitive to the sun's UV radiation.

TYPICAL

Likely typical sun sensitivity based on 23 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SLC45A2	rs6451047	CC
RXFP3	rs35404	AA
SLC45A2	rs3797201	GG
SLC45A2	rs10080040	AA
SLC45A2	rs16891982	GG
SLC45A2	rs35412	GG
SLC45A2	rs35406	AA
RXFP3	rs2331343	TT
RXFP3	rs34280294	GG
RXFP3	rs13177787	CC
ADAMTS12	rs2591719	GG
RXFP3	rs7713279	TT
C1QTNF3	rs3776546	TT
ADAMTS12	rs11742467	AA
RXFP3	rs7729545	AA
KATNAL1	rs9508664	GA
HERC2	rs12913832	AG
ADAMTS12	rs114803348	CA
ADAMTS12	rs1833923	CA
TYR	rs1126809	AG
ADAMTS12	rs1423300	AG
IRF4	rs12203592	CC
OCA2	rs1800407	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Burns

The consequences of burns extend beyond the immediate physical damage. Serious burns can lead to complications such as infections, dehydration, and hypothermia, due to the skin's role in regulating body temperature and fluid balance.

In the long-term, burns can result in scarring and the need for skin grafts; they may also lead to psychological challenges stemming from the trauma of the injury and its aftermath on body image. Treatment for burns varies depending on the severity but can include pain management, topical antibiotics, dressing changes, and for more serious cases, surgery or rehabilitation therapies.

TYPICAL LIKELIHOOD

Typical likelihood of burns based on 346,195 genetic variants we looked at

57th

PERCENTILE

Your risk is **greater than 57% of the population** and **lower than 43% of the population.**

Blisters

Factors that might increase the risk of developing blisters include:

- Engaging in activities with repetitive motions, like rowing or hiking, especially without appropriate gear.
- Exposure to chemicals without protective equipment.
- Having certain skin conditions or infections.
- Sunbathing or using tanning beds without protection.
- Wearing tight or ill-fitting shoes.
- Prolonged exposure to cold temperatures.
- Genetics

Genetics can play a role in susceptibility to certain skin conditions that manifest with blistering. For instance, a genetic predisposition might make some individuals more susceptible to specific infections or skin reactions that can result in blisters. Nonetheless, most everyday blisters are a result of direct skin injuries or irritations and are not heavily influenced by genetics.

LESS LIKELY

Less likely to have blisters based on 182,238 genetic variants we looked at

1st

PERCENTILE

Your risk is **greater than 1% of the population** and **lower than 99% of the population.**

Skin Infections

Despite its role as a protective barrier, skin can be vulnerable to infections - from common athlete's foot to more serious bacterial infections. Quick identification and proper treatment are key to preventing complications.

Understanding your genetic predisposition to certain skin infections can help you stay vigilant and take preventive steps, especially if you're at increased risk for specific conditions.

TYPICAL LIKELIHOOD

Ringworm

Typical likelihood of getting ringworm

TYPICAL LIKELIHOOD

Impetigo (School Sores)

Typical likelihood of impetigo

TYPICAL LIKELIHOOD

Warts

Typical likelihood of warts

TYPICAL LIKELIHOOD

Pink Eye

Typical likelihood of getting pink eye

TYPICAL LIKELIHOOD

Leg Cellulitis

Typical likelihood of leg cellulitis

LESS LIKELY

Athlete’s Foot

Less likely to have athlete's foot

LESS LIKELY

Staph Infection

Less likely to have a staph infection

Ringworm

Factors that might increase the risk of contracting ringworm include:

- Close contact with an infected person or animal
- Poor personal hygiene
- Sharing items like combs, clothing, or towels with someone who's infected
- A weakened immune system
- Participation in sports that involve skin-to-skin contact, like wrestling
- Living in warm, humid climates
- Genetics

While ringworm is primarily contracted through exposure to the fungal pathogens, there might be genetic factors that influence an individual's susceptibility to fungal infections. Some individuals may have a genetic makeup that makes their skin more prone to fungal growth or affects their immune response to fungal pathogens.

TYPICAL LIKELIHOOD

Typical likelihood of getting ringworm based on 1,669 genetic variants we looked at

32nd

PERCENTILE

Your risk is **greater than 32% of the population** and **lower than 68% of the population.**

Impetigo (School Sores)

Effective treatment for impetigo usually involves local topical antibiotics to combat the bacterial infection and, in more severe cases, could require oral antibiotics. To prevent spreading the infection, good hygiene practices such as hand washing, regular bath or showers, and not sharing personal items are crucial.

Children diagnosed with impetigo are often advised to stay home from school or daycare to avoid infecting others until they are no longer contagious, which often means 24-48 hours after starting treatment. Complete healing without scarring is expected, but vigilance in treatment and hygiene is necessary to prevent reinfection and spreading to others.

TYPICAL LIKELIHOOD

Typical likelihood of impetigo based on 1,673 genetic variants we looked at

28th

PERCENTILE

Your risk is **greater than 28% of the population** and **lower than 72% of the population.**

Warts

The experience of having warts can range from being an unsightly nuisance to causing discomfort or pain, depending on their location and size. For instance, plantar warts located on the soles of the feet can become painful with the pressure exerted during walking.

Treatment options for warts include over-the-counter remedies, such as salicylic acid, as well as professional medical treatments like cryotherapy, laser therapy, or surgical removal. It's important to consult with a healthcare provider for persistent or bothersome warts to determine the most appropriate course of action.

TYPICAL LIKELIHOOD

Typical likelihood of warts based on 509,200 genetic variants we looked at

36th

PERCENTILE

Your risk is **greater than 36% of the population** and **lower than 64% of the population.**

Pink Eye

Pink eye can be caused by various factors, including:

- Viral infections: Often associated with colds or respiratory infections.
- Bacterial infections: Caused by bacteria entering the eye or the area around the eye.
- Allergic reactions: Triggered by allergens like pollen, dust, or smoke.
- Chemical reactions: Caused by irritants like chlorine in swimming pools or products used around the eye.

While pink eye itself isn't directly linked to genetics, one's susceptibility to allergic reactions or certain infections can have a genetic component. For instance, if allergic diseases run in the family (like hay fever, asthma, or eczema), an individual might be more predisposed to allergic conjunctivitis.

Moreover, genetically high levels of omega-3s may be causally associated with a lower risk of allergic conjunctivitis [R].

TYPICAL LIKELIHOOD

Typical likelihood of getting pink eye based on 1,671 genetic variants we looked at

35th

PERCENTILE

Your risk is **greater than 35% of the population** and **lower than 65% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
IL18R1	rs11406702	AA
IL18R1	rs10208293	GG
TREH	rs487728	CG
DDX6	rs4938573	TC
DDX6	rs4936444	CT
KIAA1217	rs7070482	GA
SLC25A46	rs72774898	CC
TLR6	rs7673348	AA
DSG3	rs12959976	AA
FECH	rs113920339	TT

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Leg Cellulitis

Treatment of leg cellulitis usually involves antibiotics to combat the bacterial infection and may require hospitalization if symptoms are severe or the patient has underlying health conditions. Rest, elevation of the affected limb, and wound care are also key to managing the condition and preventing complications such as sepsis or the spread of infection to deeper tissues.

It's important for those with cellulitis to closely monitor their symptoms and seek medical attention if the area of redness expands or high fever develops, as these can be signs of a worsening infection or a systemic response.

TYPICAL LIKELIHOOD

Typical likelihood of leg cellulitis based on 936,858 genetic variants we looked at

22nd

PERCENTILE

Your risk is **greater than 22% of the population** and **lower than 78% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
BCL11B	rs3933088	TC
SLC39A8	rs13107325	CC
FTO	rs1558902	TT
FTO	rs62048402	GG
FTO	rs9927317	CC
FTO	rs17817712	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Athlete’s Foot

Symptoms of athlete's foot include itching, stinging, and burning sensations between the toes or on soles of the feet. The skin may also flake, peel, and crack, sometimes leading to pain, swelling, and blisters. A distinctive sign is a scaly, red rash that itches intensely, often accompanied by a foul odor.

If untreated, the infection can become chronic and might even lead to a secondary bacterial infection due to skin breakdown. Good foot hygiene, using antifungal medications, and keeping feet dry and cool can help manage the symptoms and prevent the recurrence of athlete's foot.

LESS LIKELY

Less likely to have athlete's foot based on 16,204 genetic variants we looked at

1st

PERCENTILE

Your risk is **greater than 1% of the population** and **lower than 99% of the population.**

Staph Infection

Factors that might increase the risk of a staph infection include:

- Current or recent hospitalization
- Having medical devices (e.g., catheters or feeding tubes)
- Skin injuries or disorders
- Weakened immune system (e.g., HIV/AIDS, diabetes, or cancer)
- Practicing contact sports.
- Living in crowded conditions (e.g., military barracks or correctional facilities)

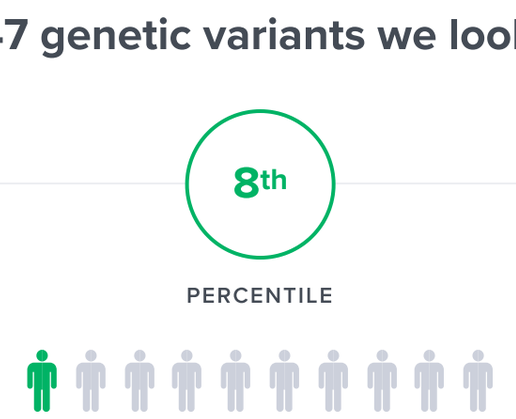
Genetic variations in immunity genes may slightly increase the susceptibility to staph infection or its complications. **However, factors other than genetics seem to play a much bigger role** [R].

LESS LIKELY

Less likely to have a staph infection based on 56,947 genetic variants we looked at

8th

PERCENTILE

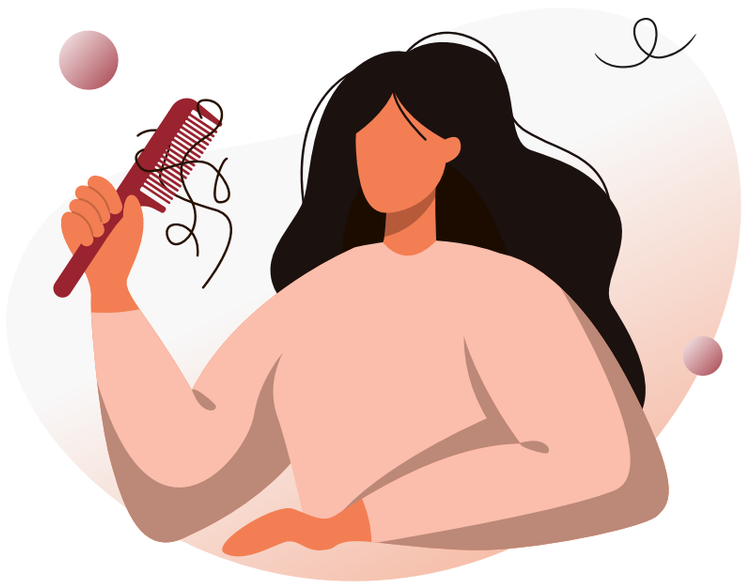


Your risk is **greater than 8% of the population** and **lower than 92% of the population.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
MAP2	rs72989928	TT
BCL11B	rs7152530	GA
SLC12A2	rs3749748	TT
COPB1	rs2007361	AA
HLA-DQA2	rs4321864	CA
PDE4B	rs2455012	GG
PNPLA5	rs470093	GG
TXNRD2	rs3804047	AA
/	rs115231074	CC
H4C8	rs115740542	TT

The number of "risk" variants in this table doesn't necessarily reflect your overall result.



Hair Health

The story of your hair - from its thickness and growth patterns to how it changes with age - is written partly in your genes. Whether you're curious about hair graying, thinning, or hair regrowth options, genetics plays a key role.

Your genetic profile can influence everything from your natural hair characteristics to how well you might respond to hair loss treatments like minoxidil or finasteride. This knowledge can help you make more targeted choices for maintaining healthy hair.

WORSE RESPONSE

Response to Blood Flow Boosters (Hair Loss)

Predisposed to a worse response to blood flow boosters

TYPICAL

Hair Thickness

Typical

TYPICAL RESPONSE

Dutasteride Response (Hair Loss)

Predisposed to a typical dutasteride response

TYPICAL LIKELIHOOD

Hair Loss

Typical

TYPICAL

Hair Graying

Typical

TYPICAL LIKELIHOOD

Alopecia Areata

Typical

TYPICAL RESPONSE

Response to Retinoids (Hair Loss)

Predisposed to a typical response to retinoids

TYPICAL LIKELIHOOD

Dandruff

BETTER

Minoxidil Response (Hair Loss)

Predisposed to a better minoxidil response

BETTER RESPONSE

Finasteride Response (Hair Loss)

Predisposed to a better finasteride response

Response To Blood Flow Boosters (Hair Loss)

The *ACE* gene encodes an enzyme called angiotensin I converting enzyme. ACE narrows blood vessels and increases blood pressure as part of the fight or flight response [R].

Specifically, ACE converts angiotensin I to angiotensin II, a potent vasoconstrictor involved in blood pressure regulation and fluid balance. This enzyme also degrades bradykinin, a vasodilator, thus balancing vasoconstriction and vasodilation [R].

One of the two main *ACE* gene variants, **rs4343**, influences gene and enzyme activity. Its **"G" allele** may increase ACE activity and levels [R, R, R, R].

A study of 26,607 associated the 'G' allele of rs4343 with an increased risk of male-pattern hair loss. The association was stronger in those who also carried the minor 'T' variant of *PTGES2* **rs13283456** [R].

Based on their effects on blood flow, **patients with male-pattern hair loss and these variants may respond better to blood flow boosters like adenosine** [R].

Other interventions for hair loss that may work by boosting blood flow include **arginine and topical caffeine** [R, R].

However, there are **no studies** directly linking this variant to responses to hair regrowth interventions.

WORSE RESPONSE

Predisposed to a worse response to blood flow boosters based on the genetic variants we looked at

19%

OF USERS SHARE THE SAME SCORE

You have the same genetic predisposition as **19% of our users.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
ACE	rs4343	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Hair Thickness

Hair thickness refers to the **diameter of individual hair strands** and is often genetically determined. Two variants at the *FGFR2* and *EDAR* genes have been linked to increased hair thickness, especially in Asians [R, R, R].

Other factors that may affect hair thickness include:

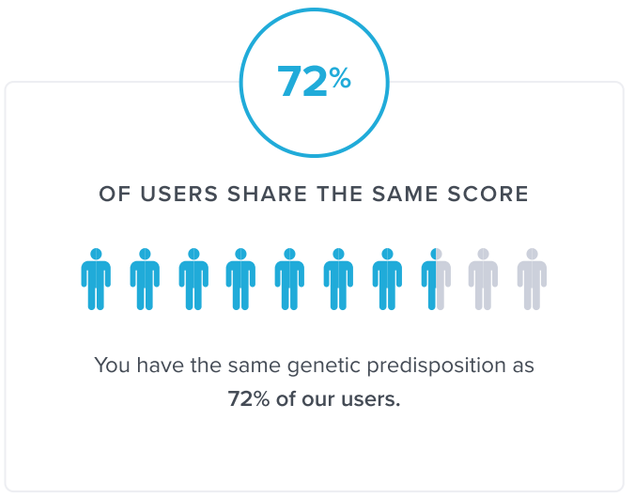
- Diet and nutrition [R]
- Overuse of heat styling tools and harsh chemical treatments [R, R]
- Health conditions, such as thyroid disorders, hormonal imbalances, and scalp conditions [R, R]
- Stress [R]
- Sun exposure (UV) and pollution [R, R]
- Aging [R]

The following can help improve your hair thickness and health:

- **Scalp care**: A healthy scalp is important for growing healthy hair. Scalp massage can stimulate blood flow to hair follicles and may improve hair thickness [R, R, R, R].
- **Proper nutrition**: A balanced diet rich in essential nutrients, especially B vitamins, vitamin D, iron, zinc, protein and omega-3 fatty acids can help maintain hair health [R, R, R, R, R].
- **Limiting heat and chemical exposure**. Hair dryers, straighteners and chemical treatment can damage hair follicles [R, R].
- **Low-level light therapy**: Initial studies suggest low-level light therapy (LLLT) may improve hair thickness and density in people with hair loss [R, R, R].

TYPICAL

Typical based on the genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
EDAR	rs3827760	AA
FGFR2	rs4752566	TG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Dutasteride Response (Hair Loss)

A 2019 study identified several genetic variants associated with dutasteride response [R].

The most significant finding was a SNP rs72623193 in the *DHRS9* gene, which showed a negative correlation with treatment response. *DHRS9* is particularly interesting as it functions in both androgen metabolism and retinoid signaling pathways.

Other notable genetic associations include:

- ***SRD5A1*** (rs3822430): The type I 5α-reductase gene, which enables DHT production
- *ESR1* (rs3020314): The estrogen receptor gene
- *CYP19A1* (rs700519): Involved in estrogen synthesis

The findings suggest that treatment response isn't solely determined by androgen-related genes. The involvement of retinoid pathway genes (*DHRS9*, *RXRG*) and estrogen-related genes (*ESR1*, *CYP19A1*) points to a complex interplay between different hormonal systems in determining treatment outcomes.

Interestingly, variants in *SRD5A2* (type II 5α-reductase) weren't significantly associated with response, despite being dutasteride's primary target, along with SRD5A1.

These insights might help predict people's dutasteride response, allowing more personalized approaches to AGA.

TYPICAL RESPONSE

Predisposed to a typical dutasteride response based on 5 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
IGFBP3	rs10255707	CC
CYP19A1	rs700519	GG
ESR1	rs3020314	CC
SRD5A1	rs3822430	AG
DHRS9	rs72623193	TT
HSD17B12	rs10838177	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Hair Loss

Key Takeaways:

- About **60%** of differences in people's chances of having hair loss may be due to genetics.
- Risk factors include genetics, cancer treatments, excessive male hormone activity, and certain health conditions.
- Up to half of all men and women develop androgenetic alopecia. If you are experiencing hair loss, speak to your doctor.
- Click the **next steps** tab for relevant labs and lifestyle factors.

Androgenetic alopecia is a common type of hair loss. You may know it as **male- or female-pattern baldness** [R].

Up to half of all men and women develop androgenetic alopecia. Men typically experience a receding hairline and hair loss at the top of the head. Women typically experience hair thinning at the top and crown of the head [R, R].

Androgenetic alopecia is fairly common and harmless. However, it may impact confidence and self-image in some people [R, R].

Androgenetic alopecia is usually caused by high activity of male sex hormones, like dihydrotestosterone (DHT). However, hair loss may also be caused by a health condition or exposure to cancer treatments [R, R].

Some people are at greater risk than others of losing their hair. This may be partly due to **genetics** [R].

Treatments for androgenetic alopecia include [R, R]:

- Topical medication
- Hair transplants
- Low-level laser therapy

Up to 60% of differences in people's chances of losing their hair may be attributed to genetics. Genes involved in hair loss may influence [R, R, R, R, R, R, R]:

- Hair follicle activity (*LGR4*, *TWIST1*, *PRKD1*, *RUNX3*)
- Hair cell death (*BCL2*, *TOP1*, *IRF4*, *MAPT*)
- Male sex hormone activity (*AR*, *MEF2C*)

Genetically high free testosterone levels may be causally associated with a high risk of androgenetic alopecia [R].

TYPICAL LIKELIHOOD

Typical based on 13,086 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
TWIST2	rs9287638	CA
PAX1	rs2180439	TC
BCL2	rs7226979	TT
BCL2	rs12457893	CC
COPB2	rs10212419	GG
PTHLH	rs10843026	GG
KLF15	rs35892873	TT
AUTS2	rs4718886	AA
LRMDA	rs1907350	AA
L3MBTL3	rs1415701	AA
FADS2	rs1535	AA
SUPT3H	rs227808	CC
SLC14A2	rs10502861	CC
SLC14A2	rs34800162	TT
SLC14A2	rs8085664	CC
ALX4	rs2863081	GA
TWIST1	rs13245206	GA
TWIST1	rs10225279	GT
RORA	rs11071559	TC
ICE2	rs2028122	AG
TCF4	rs1452787	GA
TCF4	rs2958184	AC
AUTS2	rs6945541	TC
AUTS2	rs939963	CG
LRMDA	rs10762668	CT
TWIST2	rs11684254	CG
PAX1	rs1160312	AG
SETBP1	rs9967367	TC
/	rs382854	TC

GENE	SNP	GENOTYPE
COPB2	rs7642536	TT
FERD3L	rs2073963	TT
LRMDA	rs117246174	AA
TMEM50A	rs2064251	GG
KLF15	rs9850626	TT
ALX4	rs922017	TT
PTHLH	rs805512	AA
RUNX3	rs760805	TT
WNT10A	rs74333950	TT
WNT10A	rs7349332	CC
CLIC6	rs68088846	GG
RREB1	rs675209	CC
HDAC4	rs4075018	GG
FAM53B	rs3781458	TT
BCL11A	rs2540917	TT
/	rs2149150	CC
TWIST1	rs17140672	AA
MEF2C	rs1366594	CC
PRDM1	rs12214131	GG
IRF4	rs12203592	CC
ALX4	rs11037975	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Hair Graying

Hair color is determined by the amount and type of pigment called **melanin** in your hair follicles. The same pigment determines skin, eye, and hair color. **Graying happens with the loss of this melanin**, which is a natural effect of aging.

Anywhere from **30% up to 90%** of differences in people's hair graying may be due to genetics [R].

Other risk factors for graying hair include [R]:

- Obesity
- Lack of exercise
- Drug use
- High cholesterol
- High uric acid

Conditions that may contribute to hair graying include [R]:

- High blood pressure
- Thyroid disorders
- Liver conditions

TYPICAL

Typical based on 5 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
KIF1A	rs59733750	AA
MROH2A	rs2361506	GT
NSMCE1	rs1127228	TC
PRDM8	rs7680591	AT
IRF4	rs12203592	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Alopecia Areata

Risk factors for alopecia areata include:

- Family history of alopecia areata or other autoimmune conditions.
- Having another autoimmune disorder, such as thyroiditis or vitiligo.
- Certain genetic markers related to the immune system.
- Stress, which may trigger or exacerbate the condition.

Alopecia areata has a strong genetic component, and multiple genes are involved, especially those linked to the immune system and inflammatory processes. People with a family history of autoimmune diseases are at a higher risk.

Currently, there's no known way to prevent alopecia areata. Managing stress and leading a healthy lifestyle might help reduce the risk of exacerbations.

The condition has no cure but hair often regrows on its own without treatment within a year. Treatments that can promote a faster hair growth include:

- Topical corticosteroids
- Topical immunotherapy
- Minoxidil
- Platelet-rich plasma injections

TYPICAL LIKELIHOOD

Typical based on 42 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
PPARGC1A	rs16873952	AA
NTM	rs11600229	AA
CPVL	rs505532	TT
/	rs1431704	CT
REELD1	rs9997120	CC
ITPR2	rs10506012	GG
HLA-DQA2	rs9275572	AG
ARHGAP42	rs11224294	CT
DISP3	rs3099624	CC
BBS12	rs7664318	GA
HLA-DQA2	rs9268528	AG
ST8SIA5	rs9952976	AA
CCDC24	rs304303	GT
ST3GAL3	rs4660260	CT
B3GAT1	rs10791360	AA
CSMD1	rs718121	CT
NUP35	rs13409979	AG
KCNU1	rs10503991	GA
DPYSL4	rs9419187	TC
RBBP8	rs9954649	AG
DOCK5	rs2979742	TC
TERF1	rs4738296	AA
CXXC4	rs7657799	TT
TFF3	rs9982439	TT
RDH14	rs2345724	AA
IQSEC3	rs2270797	CC
RNF5	rs3115553	CC
UVSSA	rs4130791	GG
SRRM4	rs12228387	GG
UNC5C	rs17023881	CC

GENE	SNP	GENOTYPE
LDLRAD3	rs16928055	TT
LIPA	rs17479692	TT
BRD4	rs11666141	TT
CRIM1	rs2666138	AA
LURAP1L	rs7022183	TT
APOLD1	rs2110597	AA
OPCML	rs11223339	GG
ARHGAP42	rs1216476	AA
ACOX1	rs12430	GG
FNDC3B	rs6414541	TT
SNX2	rs2125856	TT
NUDT6	rs304650	TT
APCDD1	rs7228576	CC
UBE2E2	rs1692617	GG
HSD17B3	rs10512241	CT
PGM5	rs7036795	TT
ZNF217	rs2766671	CC
DCBLD1	rs916305	CC
DPH5	rs12403551	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Response To Retinoids (Hair Loss)

A study of 26,607 associated the ‘G’ allele of **rs12724719** with an increased risk of male-pattern hair loss. This variant has also been associated with lower retinoic acid levels [R].

Retinoic acid promotes hair growth, and carriers of this variant may especially benefit from supplementation with topical retinoic acid or retinol. However, there are **no studies** directly linking this variant with a response to retinoids [R].

TYPICAL RESPONSE

Predisposed to a typical response to retinoids based on the genetic variants we looked at

27%

OF USERS SHARE THE SAME SCORE

You have the same genetic predisposition as **27% of our users.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
RRNAD1	rs12724719	AG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Dandruff

Key Takeaways:

- Risk factors for dandruff include age, stress, dry or oily skin, sensitivities, and impaired gut/skin microbiome.
- Dandruff is a common condition. If you have higher genetic risk, taking action on factors you can change may lower the overall risk.
- Click the **Recommendations** tab for potential dietary and lifestyle changes.

Dandruff is a common inflammatory skin condition that mainly affects the scalp. It causes flaking skin and sometimes mild itchiness. Some consider it a mild form of seborrheic dermatitis [R].

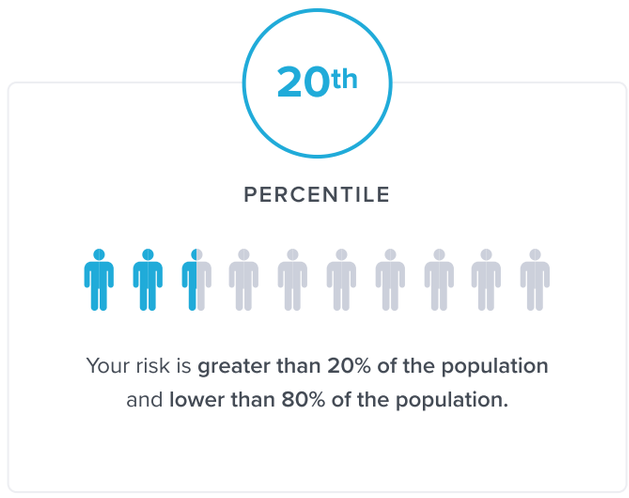
Risk factors for developing dandruff include [R]:

- Skin conditions such as **seborrheic dermatitis**, eczema, and psoriasis
- Being male
- Younger age
- Stress
- Not shampooing enough
- Dry or oily skin
- Sensitivity to hair care products
- Certain medical conditions
- Impaired gut or skin flora (microbiome)
- **Genetics**

Genes that play a role in dandruff may affect inflammation and immune response [R].

TYPICAL LIKELIHOOD

Typical based on 1,672 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
CDKL2	rs56229013	CC
CFAP61	rs115175415	CC
KRT83	rs2857667	AA
ADPRHL1	rs139075628	GG
PKD1	rs147350387	GG
CERCAM	rs148321495	GG
SDF2L1	rs73166641	GG
KIF20A	rs3172747	CC
UNC93A	rs113906647	GG
GANC	rs35285091	CC
NUP214	rs61751470	AA
ZP4	rs36017138	TT
XRN1	rs35351308	GG
TCP10L2	rs146018563	CC
PTK7	rs34021075	AA
METTL17	rs72661115	GG
CYP4B1	rs45467195	AA
AGA	rs76491548	GG
GRM2	rs116567227	GG
ST7L	rs114199731	TT
ERICH6	rs114572143	GG

GENE	SNP	GENOTYPE
ZNF154	rs74939505	GG
UNC5C	rs34585936	CC
MIS18BP1	rs34168608	GG
NTN5	rs549539292	AA
SRPRA	rs114538197	CC
CACNA2D3	rs112362995	CC
APOD	rs76929107	CC
PKHD1L1	rs72687022	GG
VPREB1	rs11089977	AA
PDZD2	rs116598198	GG
KRT75	rs2232398	CC
ABCC11	rs60681475	CC
AP1S3	rs138292988	GG
NBAS	rs76459791	CC
PIK3C2G	rs61757718	GG
XIRP2	rs16853333	GG
ALPK1	rs35756863	TT
CAPG	rs62623452	CC
DYNC2H1	rs144717489	GG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Minoxidil Response (Hair Loss)

Not everyone responds well to minoxidil for hair loss, and this difference may be partly due to genetics.

Minoxidil needs to be “activated” in hair follicles by enzymes called *sulfotransferases*. Scientists have found that people with higher activity of these enzymes may respond better to minoxidil for hair loss [R, R. R].

The *SULT1A1* gene helps make one such enzyme. A variant in this gene known as **SULT1A1*2** may reduce its activity. People with the **“T” allele at rs1042028** (previously named rs9282861) carry this variant and may thus have a worse response to minoxidil [R, R, R].

Researchers have found other variants like rs1042157 affecting SULT1A1 activity, but their link with minoxidil response is not clear. Also, they are usually inherited together with SULT1A1*2 [R, R].

Salicylic acid is commonly applied on the scalp for different issues like dandruff. However, it may reduce SULT1A1 activity and thus potentially impair minoxidil response. **People with poor minoxidil response may want to avoid using salicylic acid** [R, R].

Some popular resources claim that **PTGES2** gene variants may also affect minoxidil response. This gene helps produce prostaglandin E2, which plays a role in hair follicle development and may be one of the minoxidil's targets. One PTGES2 variant, rs13283456, has shown a link with androgenetic alopecia. However, no studies have linked this or any other PTGES2 variants to minoxidil response.

BETTER

Predisposed to a better minoxidil response based on the genetic variants we looked at

64%

OF USERS SHARE THE SAME SCORE

You have the same genetic predisposition as **64% of our users.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SULT1A1	rs1042028	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Finasteride Response (Hair Loss)

Genetics plays a crucial role in both the development of androgenetic alopecia (AGA) and the variability in response to treatments like finasteride. Two key genes of interest are *SRD5A2* and *AR*, both of which influence how the body processes and responds to androgens.

The *SRD5A2* gene encodes the type II 5-alpha reductase enzyme, which converts testosterone into dihydrotestosterone (DHT). Finasteride helps with AGA by blocking this enzyme. One *SRD5A2* variant, rs9282858, is linked to male-pattern baldness and may in theory affect finasteride response [R, R, R].

Some sources mention another *SRD5A2* variant, rs523349, as a potential factor in finasteride response. However, most studies haven't observed a link between this variant and AGA, DHT levels, or prostate health issues. This variant may have mild and complex effects that depend on ethnicity [R, R, R].

The *AR* (androgen receptor) gene also plays a significant role in AGA. Variations in AR androgen receptor sensitivity. Increased sensitivity to DHT is strongly associated with AGA severity. These genetic differences may thus affect finasteride response. Key variants include rs12558842 and rs2497938 [R].

A 2019 study revealed some genetic variants linked to dutasteride response. Dutasteride is a drug from the same class also sometimes used for AGA. These variants include [R]:

- *DHRS9* (rs72623193): Involved in both androgen metabolism and retinoid signaling
- *CYP26B1* (rs2241057): Involved in retinoic acid metabolism
- *ESR1* (rs3020314): The estrogen receptor gene
- *CYP19A1* (rs700519): Involved in estrogen synthesis
- *RXRG* (rs1128977): A retinoid receptor gene

In theory, these variants may affect finasteride response as well, but the specific research is lacking.

Saw palmetto is a popular supplement for hair loss that also works by blocking 5-alpha reductase. In theory, people who respond well to finasteride may also respond well to saw palmetto, but there is no direct evidence to support this [R].

BETTER RESPONSE

Predisposed to a better finasteride response based on 11 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
AR	rs12558842	A
IGFBP3	rs10255707	CC
CYP19A1	rs700519	GG
ESR1	rs3020314	CC
CYP26B1	rs2241057	GA
RXRG	rs1128977	AG
CYP4V2	rs3736456	TC
SRD5A2	rs9282858	CC
AR	rs2497938	T
DHRS9	rs72623193	TT
HSD17B12	rs10838177	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Skin Health Genes

The health, appearance, and resilience of skin is governed by genes that regulate collagen maintenance, environmental response, and pigmentation. This section explores genetic variations in MMP1, which influences collagen breakdown and skin remodeling, CYP1B1's role in responding to environmental factors, and MC1R's impact on pigmentation and UV response. Understanding these genetic factors can provide insights into individual skin characteristics and help inform personalized skin care strategies.

HIGHER ACTIVITY

MMP1 (Collagen)

Predisposed to higher MMP1 activity

HIGHER ACTIVITY

CYP1B1 (Detox/ Skin Health)

Predisposed to higher CYP1B1 activity

TYPICAL ACTIVITY

MC1R (Pigmentation & Skin Damage)

Likely typical MC1R activity

TYPICAL ACTIVITY

COL5A1 (Collagen)

Likely typical COL5A1 activity

MMP1 (Collagen)

The MMP1 gene contains a well-studied variant, **rs1799750**. This SNP involves the insertion or absence of a guanine (G) nucleotide (corresponding to **cytosine-C** on a forward strand). The **insertion (2G allele)** is associated with higher activity of the MMP1 gene, leading to **increased** enzyme production [R].

Individuals carrying the 2G allele may have a genetic predisposition to **faster collagen breakdown**, which may manifest as earlier or more pronounced **skin aging** [R, R].

This variant is also linked to:

- Pain and disability due to disc degeneration [R]
- Joint pain (osteoarthritis) [R]
- Glaucoma [R]
- Reduced lung function and lung cancer risk [R, R]
- Poorer cancer prognosis and increased progression [R, R]

HIGHER ACTIVITY

Predisposed to higher MMP1 activity based on the genetic variants we looked at

25%

OF USERS SHARE THE SAME SCORE

You have the same genetic predisposition as **25% of our users.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
MMP1	rs1799750	TT

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

CYP1B1 (Detox/ Skin Health)

The main *CYP1B1* variant is **rs1056836** (Leu432Val). The **G (Val) allele** seems to **increase** the enzyme's activity. This may lead to increased production of toxic metabolites of hormones and toxins.

In line with this, studies have found a link between this allele and higher odds of multiple myeloma and lung cancer [R, R].

On the other hand, increased CYP1B1 activity may protect the skin against excessive UV radiation. The high-activity G allele may be linked to lower odds of skin cancer [R].

Other important *CYP1B1* variants include:

- **rs1800440**: The “C” allele may increase enzyme activity. It’s linked to lower odds of skin cancer but also lower vitamin D levels and higher odds of asthma [R]
- **rs10012**: The “C” allele may increase enzyme activity. It’s linked to lower odds of skin cancer but higher odds of bladder cancer [R, R]

HIGHER ACTIVITY

Predisposed to higher CYP1B1 activity based on 3 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
CYP1B1	rs1056836	GG
CYP1B1	rs1800440	CT
CYP1B1	rs10012	GC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

MC1R (Pigmentation & Skin Damage)

A variant of *MC1R* has been associated with hair and skin color. Carriers of the minor 'T' allele of **rs1805007** are more likely to [R]:

- Have red or blonde hair
- Have lighter skin
- Get sunburns

Unsurprisingly, this variant has also been associated with skin cancer, including melanoma [R, R].

This variant likely reduces the production and activity of MC1R, leading to lower eumelanin and higher pheomelanin levels [R].

TYPICAL ACTIVITY

Likely typical MC1R activity based on the genetic variants we looked at

86%

OF USERS SHARE THE SAME SCORE

You have the same genetic predisposition as **86% of our users.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
MC1R	rs1805007	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

COL5A1 (Collagen)

Variants resulting in reduced type V collagen may increase the risk of injuries. This may be because carriers of these variants may have weaker ligaments, tendons, and muscles. One of such variants is **rs12722**. Its minor 'T' allele has been associated with an increased risk of:

- Achilles tendon injury [R, R]
- Anterior cruciate ligament injury [R, R]
- Tennis elbow [R, R]
- Carpal tunnel syndrome [R]
- Muscle cramps [R]

People with the 'TT' genotype may also have more severe (but not more frequent) muscle injuries. Probably due to the association of this variant with soft tissue injuries, carriers may have lower odds of elite rugby status [R, R].

On the bright side, this genotype has also been associated with improved endurance performance in runners. Moreover, the 'T' variant may reduce the risk of rotator cuff injury [R, R].

TYPICAL ACTIVITY

Likely typical COL5A1 activity based on the genetic variants we looked at

46%

OF USERS SHARE THE SAME SCORE

You have the same genetic predisposition as **46% of our users.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
COL5A1	rs12722	TC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Recommendations Details

1 Maintain Optimal Vitamin D Levels

Check your vitamin D levels, they should ideally be in the 30-66 ng/mL range. If your levels are lower than that, take a vitamin D supplement, 1000-4000 IU daily, to reach an optimal range.

TYPICAL STARTING DOSE

1000 iu

Helps with these Symptoms & Conditions:

Allergies | Anxiety | High Blood Pressure | Migraines

Helps with these Goals:

Energy | Immunity | Mood | Muscle Growth

Helps with these DNA Risks:

Melanoma | Psoriasis | Eczema

2 Avoid Secondhand Smoke

Implementing a smoke-free lifestyle involves communicating your needs to family, friends, and coworkers, requesting they respect your choice by smoking away from you. At home, establish strict no-smoking policies indoors. When out, choose smoke-free venues and accommodations. Advocate for smoke-free environments in your community and support legislation that promotes public health by reducing exposure to secondhand smoke. Utilize air purifiers at home to reduce any residual particles.

Helps with these Symptoms & Conditions:

High Blood Pressure

Helps with these Goals:

Immunity

Helps with these DNA Risks:

Melanoma | Psoriasis | Eczema

3 Omega-3 (Fish Oil)

Take 1-2 g of omega-3 (fish oil) supplement daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

2000 mg

Helps with these Symptoms & Conditions:

Anxiety | High Blood Pressure | Migraines

Helps with these Goals:

Exercise Recovery | Immunity | Mood

Helps with these DNA Risks:

Melanoma | Psoriasis | Eczema

4 Maintain a Healthy Weight

Engage in at least 150 minutes of moderate aerobic exercise or 75 minutes of vigorous exercise weekly, along with strength training exercises for all major muscle groups on 2 or more days a week. Follow a balanced diet, rich in vegetables, fruits, whole grains, and lean proteins while controlling calorie intake to prevent excessive weight gain. Regularly monitor body fat percentage through methods like bioelectrical impedance analysis (BIA) scales, skinfold measurements, or DEXA scans to ensure it remains below 25%.

TYPICAL STARTING DOSE

30 minutes

Helps with these Symptoms & Conditions:

Allergies | High Blood Pressure | Migraines

Helps with these Goals:

Immunity

Helps with these DNA Risks:

Psoriasis

Eczema

5 Methylfolate

Take an L-methyl folate supplement (400-800 micrograms daily), ideally with a meal, to improve absorption. This dosage is recommended for adults, including pregnant women, to support overall health, especially to reduce the risk of neural tube defects in developing fetuses. Continue daily use as part of your regular supplement routine.

TYPICAL STARTING DOSE

400 mcg

Helps with these Symptoms & Conditions:

High Blood Pressure

Helps with these Goals:

Immunity

Mood

Helps with these DNA Risks:

Melanoma

Psoriasis

6 Relaxation Techniques

Incorporate relaxation techniques such as deep breathing exercises, meditation, or yoga into your daily routine. Spend at least 15-30 minutes each day practicing one of these techniques, preferably in a quiet, comfortable space without interruptions.

TYPICAL STARTING DOSE

30 minutes

Helps with these Symptoms & Conditions:

Anxiety

High Blood Pressure

Migraines

Helps with these Goals:

Energy

Immunity

Mood

Helps with these DNA Risks:

Psoriasis | Eczema | Heavy Sweating

7 Aerobic Exercise (Cardio)

Engage in at least 150 minutes of moderate-intensity aerobic exercise or 75 minutes of vigorous-intensity activity each week. Distribute this time over at least 3 days per week, avoiding consecutive days of vigorous exercise to allow for recovery.

TYPICAL STARTING DOSE

1 hour

Helps with these Symptoms & Conditions:

Allergies | Anxiety | High Blood Pressure | Migraines

Helps with these Goals:

Energy | Immunity | Mood

Helps with these DNA Risks:

Melanoma | Psoriasis

8 Mediterranean Diet

Incorporate a variety of primarily plant-based foods, such as fruits, vegetables, whole grains, nuts, and legumes, into every meal. Choose healthy fats, like olive oil, over saturated fats and consume fish and poultry at least twice a week. Limit red meat to a few times a month and include a moderate amount of dairy products. Opt for water and red wine in moderation as your beverages.

Helps with these Symptoms & Conditions:

Allergies | High Blood Pressure

Helps with these Goals:

Energy | Mood

Helps with these DNA Risks:

Melanoma

Psoriasis

9 Avoid Excess Sunlight Exposure

Limit direct sun exposure to early morning or late afternoon hours, ideally before 10 a.m. or after 4 p.m., when UV rays are less intense. Wear protective clothing, such as long-sleeved shirts, pants, and wide-brimmed hats, along with sunglasses that block UVA and UVB rays. Apply a broad-spectrum sunscreen with at least SPF 30 to all exposed skin, reapplying every two hours or immediately after swimming or sweating.

Helps with these DNA Risks:

Melanoma

10 Light Therapy for Skin

Sit in front of a light therapy box that emits a bright light (without UV rays) for about 20 to 30 minutes daily, preferably in the morning. Make sure the light is indirectly entering your eyes, as direct exposure can be harmful. Consistently use light therapy daily over several weeks to notice improvements in skin conditions.

TYPICAL STARTING DOSE

30 minutes

Helps with these DNA Risks:

Psoriasis

Eczema

11 Avoid Sugary Foods & Drinks

To avoid sugary foods, eliminate or significantly reduce consumption of foods and beverages high in added sugars such as sodas, candies, baked goods, and sugary cereals from your diet. Instead, opt for natural sugar sources like fruits. Aim to do this daily for ongoing health benefits.

Helps with these Goals:

Energy

Mood

Helps with these DNA Risks:

Melanoma | Psoriasis | Heavy Sweating

12 Moisturize the Skin

Apply a moisturizer to your skin within a few minutes after bathing or showering once daily. For dry skin conditions, moisturizing twice daily, once in the morning and once at night before bed, may be beneficial. Choose a moisturizer suited for your skin type; for sensitive skin, opt for fragrance-free options.

Helps with these DNA Risks:

Psoriasis | Eczema

13 Topical Licorice Root

Apply a thin layer of licorice root extract cream or gel directly to the affected skin areas twice daily, morning and evening, for at least two to four weeks to see improvements.

Helps with these DNA Risks:

Psoriasis | Eczema

14 Topical Retinoids

Apply a pea-sized amount of topical retinoid to clean, dry skin once every evening before moisturizing. Start with applications 2-3 times a week, gradually increasing to nightly use as your skin tolerates it.

Helps with these DNA Risks:

Psoriasis

15 Infrared Light Therapy

Helps with these Goals:

Exercise Recovery

Mood

Helps with these DNA Risks:

⚠ Psoriasis

Next Steps

Remember, your genes only tell one important part of your health story!

Now that you've seen your DNA-based results for this health topic, let's take a look at other contributing factors.

Your Lifestyle Assessments

Ever heard of the term Nature vs. Nurture?

The thing is, both DNA and environment play a role in determining your health risks. The following assessments shows how much of an impact your lifestyle, environment and medical history are having on your health risks.

LIFESTYLE

You have a slightly reduced risk of eczema based on the answers you provided.

Factors impacting your risk:

What is your age?
41

Do you have a parent or sibling who has ever suffered from eczema?
Yes — Increasing Risk

Your BMI:
30.77 — Increasing Risk

Have you ever been diagnosed with asthma?
No — Decreasing Risk

Do you smoke tobacco?
No, never — Decreasing Risk

Did your mother smoke while pregnant with you?
No — Decreasing Risk

Have you ever been diagnosed with allergic rhinitis (hay fever)?
No — Decreasing Risk

Did your mother have an infection while pregnant with you?

No

Decreasing Risk

Do you have a parent or sibling who has ever been diagnosed with allergic rhinitis (hay fever)?

No

Decreasing Risk

Do you have a parent or sibling who has ever been diagnosed with asthma?

No

Decreasing Risk

What is your sex?

Male

Decreasing Risk

What is your height?

178 cm

No impact

What is your current weight?

97.5 kg

No impact

LIFESTYLE

You have a slightly reduced risk of hair loss (male) based on the answers you provided.

Factors impacting your risk:

What is your age?

41

Increasing Risk

Your BMI:

30.77

Increasing Risk

Do you smoke tobacco?

No, never

Decreasing Risk

What is your height?

178 cm

No impact

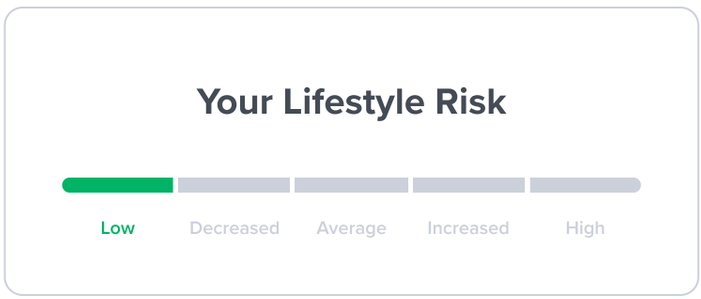
What is your current weight?

97.5 kg

No impact

LIFESTYLE

You have a reduced risk of acne based on the answers you provided.



Factors impacting your risk:

How often do you eat fish?

1 or more times a week

Decreasing Risk

Do you follow a dairy-free diet?

Yes

Decreasing Risk

Do you have a sibling or parent who has ever suffered from acne?

No

Decreasing Risk

How often do you eat sugary foods (such as candy, chocolate, and sweet pastries)?

Never

Decreasing Risk

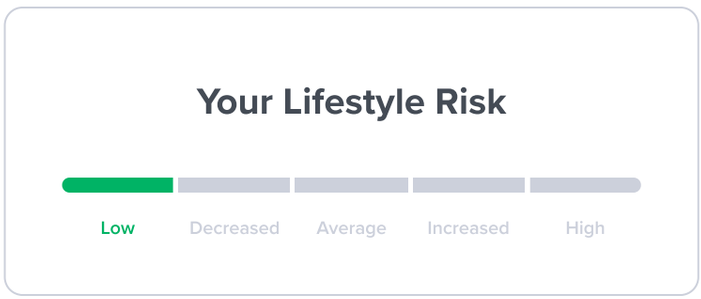
What is your age?

41

Decreasing Risk

LIFESTYLE

You have a reduced risk of dandruff based on the answers you provided.



Factors impacting your risk:

Do you eat a diet rich in fruits, vegetables, whole grains, and nuts (e.g., vegetarian, Mediterranean)?

No

Increasing Risk

Do you smoke tobacco?

No, never

Decreasing Risk

How much alcohol do you drink on a typical day?
Calculate your alcohol consumption in units here

0 units

Decreasing Risk

On a scale of 1 to 5, how would you rate the amount of stress in your life in the past month (at home and at work)?

2

Decreasing Risk

Do you regularly eat 5 or more servings of fruit or vegetables a day?

Yes

Decreasing Risk