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SkinDNA Test Results

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REPORT DATE

19 March 2021



Thank you for taking the SkinDNA Genetic Test

You are about to become one of thousands who are experiencing a better skin future.

Your DNA results are used to scientifically create a personalised guide provide you with a unique regime tailored specifically to you. This allows you to advance beyond the 'one-size-fits-all' suggestions - using the right skincare ingredients targeted to your own genetic blueprint.



Do I need to take this test again?	No - your DNA results do not change. Instead use this report to allow you to determine the best course of action to combat any unfavourable genetic outcomes.
How dependable are the results?	If we talk about dependability as the scientific accuracy of the process, it's as predictable as can be, currently 99.96%. There is that small margin for error however we have technical measures in place to ensure very high accuracy. Your genes play a big role on skin outcomes, it's also important to realize that genes are not the only determinate, one's lifestyle and diet can also play a role too. For example, based on a client's SkinDNA® results if they are more prone to wrinkling it does not necessarily mean that they will definitely come across this problem in later years - if they are also careful with their lifestyle choices.
I scored low risk but I have all the visible signs?	We identify genetic factors only - what you do on the outside also impacts your skin. For example you may be genetically low risk in Collagen Breakdown, but how is your lifestyle? do you run or jog or cycle? These types of motions can cause gravity to strike faster. Low risk in Skin Sensitivity? External factors to consider - are you using active skincare products that can strip the skin? Are you over exfoliating the skin? These are the types of things to consider if you score Low but have all the symp - toms.
I am high risk but I have no signs?	Genetically your results are accurate. SkinDNA can help to identify risk factors at a DNA level. What you do on the outside matters too. For example high risk in Wrinkling / Glycation and no visible signs? Things to consider - do you have a low sugar diet? Have you been a regular skincare user? What sort of interventions have you experienced. These are the types of things to consider if you score Low but have all the symp - toms.
How to select recommendations	At the end of this report you will be presented with a list of recommendations based on Higher and Medium Risk categories. While there may be several recommendations we suggest speaking with your skincare professional and selecting 2-3 from each category.
Why don't you recommend for low risk?	SkinDNA was developed to allow patients to understand what skin areas they should focus on as a priority. While Low Risk categories are still of importance, our algorithms determine that the lower risk categories should be something as a secondary step to be discussed with a professional at a time when you have targeted the higher priority categories.

How to read your report





Similarity score

The number of people in our database that have the same outcome as you

Internal and Visible Signs

Skin ages from the inside out

COLLAGEN PRODUCTION ISSUES

less collagen production

Increased collagen breakdown as well as

This means that the internal signs begin to occur before the visible signs begin to show.

Internal Signs

These signs generally occour BEFORE the age of 30

Visible Signs



SKIN LAXITY & SAGGING

- Hollowing under eyes
- Loss of volume

PART THREE Scientifically Selected Recommendations

SELECT 2 minimum		SELECT 1 minimum		SPEAK TO A skin care professional		
TOPICAL INGREDIENTS		INTERNAL SUPPLEMENTS		PROFESSIONAL		
Epidermal Growth Factors Increases and maintains collagen fibres		Alpha Lipoic Acid Raises collagen protective mechanisms		Radiofrequency Laser Increases collagen production		
L-ascorbic Acid 15%+ Promotes Collagen Production		Coenzyme Q10 Reduces collagen breakdown activities		Sculptra or Radiesse Stimulates collagen growth		
Palmitoyl Oligopeptide Peptide - Promotes Collagen Production		N-Acetyl Cysteine Amino Acid shown to reduce collagen damage		Skin Needling Increases collagen production without laser		
Panthenol Vitamin B5 Assists in collagen healing		Vitamin C + E Boosts collagen production while reducing collagen breakdown				

PART FOUR

Gene Outcomes

Normal

Indicates that you do not have any genetic variations and that the gene is functioning optimally.



Impaired

Indicates that you have one variant (SNP) and that the gene's processes are functioning less than optimally.



Deficient

Indicates that you have two or more variants (SNPs) and that the gene's processes are functioning minimally.

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Your SkinDNA Profile

This section will provide a summary of all the results and what they mean for you

SNAP SHOT Your SkinDNA Profile



Bernice Wolmarans

Thank you for taking the SkinDNA Genetic Test. Below is a summary of our findings.



Collagen Breakdown

Lower Risk

Genetically, your body is working at a near optimum. You are producing close to normal levels of collagen to counteract the breakdown process.



Wrinkling / Glycation

Higher Risk

Genetically, your body has a reduced ability to efficiently break down glucose. Excess glucose has been linked to a number of age related traits, amongst them – wrinkles.



Sun Damage & Pigmentation

Medium Risk

Genetically, you may have a higher probability to experience irregular pigmentation & burning. Your results indicate that there may be vulnerabilities in the production of melanin and other processors that aim to protect your skin from the sun. Explore the gene data below to find out more about this result.



Free Radical Damage

Medium Risk

Genetically, you may have a reduced ability to produce essential antioxidants. Your results also suggest that you may be sensitive to Environmental Pollutants. By living an unhealthy lifestyle that includes smoking & stress will ultimately increase your lifetime free of radical production. Explore the gene data below to find out more about this result.



Skin Sensitivity

Lower Risk

Genetically, your body is producing normal levels of inflammatory proteins. Your results indicate that you have a normal risk factor to chemical sensitivity issues and skin inflammatory responses. You may still at times experience skin irritations when using a highly active or highly chemical product.



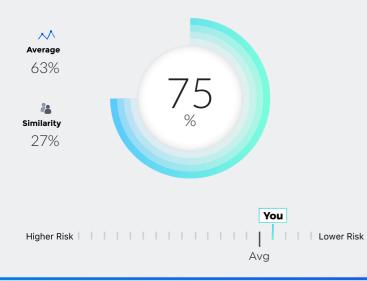


Detailed Results

This next section will go into depth for each category that we test

CATEGORY ONE

Collagen Breakdown





Why do we experience skin sagging?

Collagen makes up 75% of the skins dry weight.

Your genetic predisposition plays a big role in determining both the speed of collagen production and breakdown. When you are younger, your body makes more collagen than it loses, but after about the age of 40, collagen loss can accelerate, leading to a decline in the health and appearance of your skin. This process is precipitated by a protein called MMP1 or Collagenase.

The SkinDNA® Genetic Test can help identify if the production of collagen is in balance, or if the breakdown of collagen is more rapid which can result in the appearance of premature sagging of the skin.

Collagen Balance



In youthful skin, the production and degradation of collagen is in balance.

Collagen Imbalance



Genetic abnormalities can lead to an increased rate of collagen breakdown.

DID YOU KNOW?

Most people understand that prevention is better than the cure. Skin care is the only field where most people **do not** use an anti-aging regime or even take any action until they can see the signs.

Technicals

Collagen Breakdown

Impaired

Collagen Protection

The enzyme responsible for Collagen Breakdown (known as MMP's) is heightened. As such you may prone to skin laxity and looseness. Other ageing effects may include: Hollowed cheeks, drooping eyelids, as well as a slowdown tissue re-modelling. The Glutathione Antioxidant (labelled as "Collagen Protection") is functioning optimally. Overall you are still in the optimal range. You may want to consider collagen boosting modalities as a future after you have targeted the higher risk categories

YOU ARE

Lower Risk

What this means for you:

Genetically, your body is working at a near optimum. You are producing close to normal levels of collagen to counteract the breakdown process.

Internal Signs

These signs generally occour **BEFORE the age of 30**

SLOWDOWN IN TISSUE REMODELLING Tissue remodelling is important in maintaining and building a healthy collagen structure to help keep skin firm and plump

COLLAGEN PRODUCTION ISSUES
 Increased collagen breakdown as well as less collagen
 production

SLOWER HEALING

• Slower Healing

Visible Signs



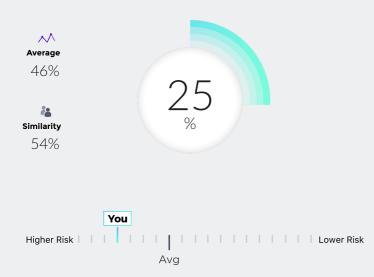


Hollowing under eyesLoss of volume

- PROMINENT NASOLABIAL FOLDS
- Deeper smile lines

SKIN LAXITY & SAGGING

CATEGORY TWO Wrinkling / Glycation



What is Glycation?

How your body processes sugar is determined in part by your genes.

Glycation occurs when excess bodily glucose molecules link to the skin's Collagen and Elastin fibers. This cross-linking can form chemical bridges between these proteins. Glycated collagen fibers can become rigid, less elastic and have reduced regenerative ability which can lead to damage such as laxity, cracking and thinning skin.

Variations in the these genes can alter the functioning of normal glucose and energy metabolism. In addition, by consuming higher amounts of sugar intake with your lilfestyle can override your genetic risk and can in turn create skin glycation issues



DID YOU KNOW?

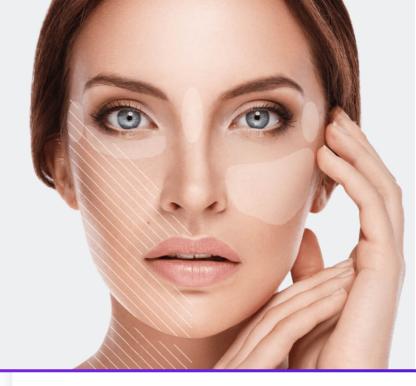
Skin ages from the inside out. Biological effects that are not seen by the human eye must occur before the visible signs become apparent. A small change such as watching your sugar intake can be mean the difference between wrinkles and flawless skin.

Technicals

Wrinkle Factor

Deficient

You have a minimal functioning gene process that can reduce the ability to efficiently breakdown glucose. Excess glucose molecules stick to collagen and elastin resulting in cross-linked fibers - binding them together. This ultimately leads to the formation of wrinkles, thinning skin, free radicals, and structural skin damage.



Higher Risk

You are

What this means for you:

Genetically, your body has a reduced ability to efficiently break down glucose. Excess glucose has been linked to a number of age related traits, amongst them – wrinkles.

Internal Signs

These signs generally occour **BEFORE the age of 30**

• STIFFENED COLLAGEN FIBERS

Leading to decreased elasticity. This is similar to rusty springs in a mattress, overtime it doesn't quite bounce back as much

WEAK DERMAL EPIDERMAL JUNCTION

Support structures within the skin begin to weaken loosing their ability to support the dermis. Overtime, areas begin to collapse inwards Eg, Wrinkles

Visible Signs

HEAVY WRINKLES & FOLDS

- Upper lip and chin lines
- Vertical lines across cheeks
- Fine Lines

AGING EYES

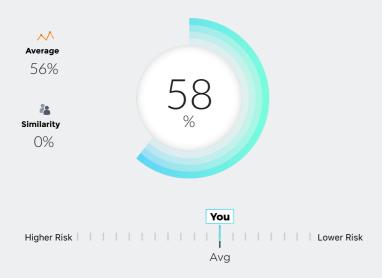
• Dryness and lines

UNEVEN SKIN TEXTURE

- Rough surface area
- Leathery looking skin
- Crepey skin

CATEGORY THREE

Sun Damage & Pigmentation

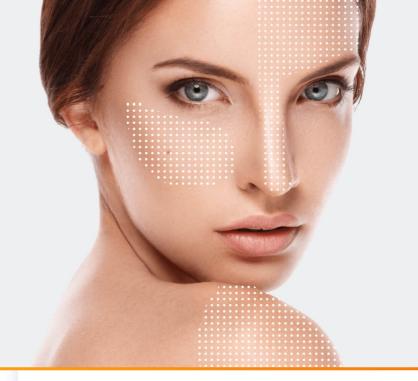


What is Photo-protection?

The sun's UV rays are one of the most significant causes of premature skin aging.

Symptoms of sun damage can include: texture changes, pigment changes, skin cancers, and take years to surface often when the damage is too late. Your body is equipped with natural responses (photo-protection) that help to break down UV rays once they have entered the skin.

The SkinDNA® Genetic Test can help to identify genetic predispositions that play an important role in determining how well your skin can naturally cope under the strains of the sun.



YOU ARE

Medium Risk

What this means for you:

Genetically, you may have a higher probability to experience irregular pigmentation & burning. Your results indicate that there may be vulnerabilities in the production of melanin and other processors that aim to protect your skin from the sun. Explore the gene data below to find out more about this result.

Internal Signs

These signs generally occour **BEFORE the age of 30**

• CELLULAR STRUCTURE DAMAGE

Sun damage created by UV Free Radicals including DNA damage from UVA rays

 IRREGULAR CELLULAR FUNCTIONS
 Hyper Pigmentation: more pigmentation such as brown spots
 Hypo Pigmentation: lack of pigmentation such as white spots

Visible Signs

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PIGMENTATION SPOTS

- Blemishes and Freckles
- Brown Spots

REDNESS

- Broken capillaries
- Sun Sensitivity Eg Sunburns
- Patches of redness, mainly on the neck and chest

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DEEP FURROWS

Upper face deep lines
 Eg. Frown, expression lines

Technicals

Melanin Production 1

Melanin Production 2

We test 2 locations within this gene (M1 & M2). Your results indicate that your body may produce irregular volumes of melanin (pigment). As a result, you may find that your skin can become at times sensitive when exposed to sunlight. You may be more prone to freckling and other various pigmentation spots (hyper-pigmentation). You may also be prone to white spots (hypo-pigmentation). It is likely that you are burner rather than tanner and extra precaution should be taken when outdoors.

Photo Defense 1

Impaired

💶 💶 🔹 Normal

Photo Defense 2

Impaired

We test 2 locations within this gene (M1 & M2). Your results indicate that genetically your body is functioning less than optimal in breaking down free radicals produced from UVB rays once they have entered the skin. These rays are often referred to as the "Burning" Rays and are responsible not only sunburns but also pigmentation responses.

UV Repair

Your genetic outcome suggests that you have an optimal ability to repair DNA damage caused by exposure from UVA rays. These rays are often referred to as the "Aging" Rays

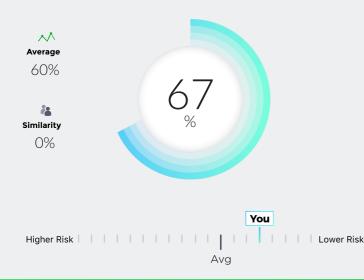
UV Radical

Normal

Your genetic outcome suggests that you have optimal DNA repairing ability. After UVA exposure, this gene is crucial for maintaining the overall health and integrity of skin by repairing any DNA damage the exposure might have caused

CATEGORY FOUR

Free Radical Damage

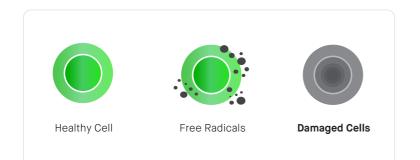


What are Free Radicals?

Free radicals damage virtually any molecule in our body.

It's a chain reaction that can wreck havoc in every layer of the skin. This sort of cellular destruction in any one of the skin's layers can lead to a dull, lifeless, aged complexion.

Our bodies have been built with a natural defense, Antioxidants. There are 2 main types of Antioxidants produced by your body which stop the damage of Free Radicals. SkinDNA test 2 main types of Antioxidants produced by your body as well as other genetic markers responsible for protecting your skin against Free Radicals.



Technicals

Antioxidant Power

Antioxidant Power

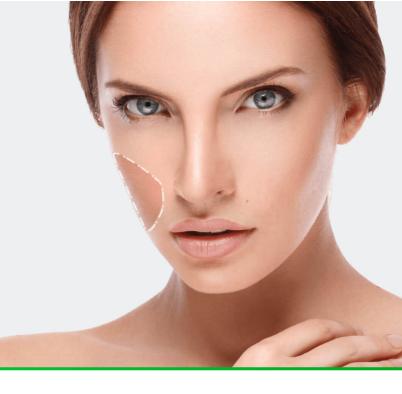
Superoxide Dismutase and Glutathione Antioxidant are arguably the body's most crucial antioxidants. The higher the levels the less prone we are to the destructive effects of free radicals.

Your genes outcomes show that you have optimal functioning ability to produce Glutathione Antioxidant and a less than optimal ability to produce Superoxide Dismutase. The benefits of having at least optimal Glutathione can still help in aiding to efficiently breakdown free radicals and prevent unnecessary damage to skin cells. Increasing your antioxidant intake can help provide added support.

Pollution Defense

Impaired

Quinones are highly active molecules that stem from Pollutants such as UV radiation, car exhaust fumes, carbon and cigarette smoke. Once absorbed into the skin if not efficiently broken down can begin to oxidize and cause damage within the skin's wall. Your genes have less than optimal ability to efficiently breakdown Quinones. This may cause your skin to become more sensitive to Environmental pollutants.



YOU ARE

Medium Risk

What this means for you:

Genetically, you may have a reduced ability to produce essential antioxidants. Your results also suggest that you may be sensitive to Environmental Pollutants. By living an unhealthy lifestyle that includes smoking & stress will ultimately increase your lifetime free of radical production. Explore the gene data below to find out more about this result.



CELL APOPTOSIS

Increased Mitochondrial Damage (the powerplant of a cell) leading to premature cell death

Visible Signs



Uneven skin toneDull and lifeless skin

TEXTURUAL ISSUES

Rough texture

• Tired looking appearance

SKIN BARRIER ISSUES

- Excessive drynessExcessive oiliness
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Skin irritations

Inflammation acts as the first line of response for healing and counteracting infection and foreign substances like germs, bacteria, allergens, and toxins.

Avg

Higher Risk

Sometimes the body can over compensate and release too many infla - matory proteins to take care of an issue that only required fewer - as a result the body begins to overreact to anything and everything! Soon the body begins to think that your favourite perfume is a virus and the skincare product you love is going to cause harm. This type of sensitivity is not good as the trauma caused by a constant over supply of inflamm - tion dramatically ages the skin.

Undergoing skin treatments?

Let your skin professional know about any risks in this category so that they can adjust the treatment protocol to avoid unexpected potential downtime such as extra redness you might not have expected.

Technicals

Inflammation



Excessive inflammation is one of the most common themes in early onset skin aging. While it is a helpful response in the short term, if inflammation continues on-going, it can play a negative role. Often subtle the signs include skin sensitivity, redness and irritation. The gene responsible for the regulation of inflammation is optimal.

Xenobiotic Detox

Impaired

Your genes have less than optimal ability to breakdown xenobiotic compounds such as cigarette smoke, exhaust fumes, air pollution, alcohol, gluten and certain other food compounds. Variations in this gene can create internal inflammatory responses. These responses can manifest into redness, rashes and acne.

Skin Sensitivity 1

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Skin Sensitivity 2

We test 2 locations within this gene (M1 & M2).

Your genes have less than optimum ability to breakdown toxic chemical compounds found in everyday pollutions. As a result, there may be times your skin can become overly sensitive to perfumed products, active skincare ingredients and general city pollution. These responses can manifest into redness, rashes and acne.

YOU ARE

Lower Risk

What this means for you:

Genetically, your body is producing normal levels of inflammatory proteins. Your results indicate that you have a normal risk factor to chemical sensitivity issues and skin inflammatory responses. You may still at times experience skin irritations when using a highly active or highly chemical product.

Internal Signs

These signs generally occour **BEFORE the age of 30**

- Overactive Inflammation
 Production oversupply that heightens your bodies responsiveness to stressors
- Irregular Tissue Healing Slow cellular renewal such as renewal after cuts, burns and peeling
- Decreased Cellular Defence

Inability to breakdown chemicals and external toxins

Visible Signs

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TEXTURUAL ISSUES

- Dryness
- Itching
- Heightened sensitivity to:
- Highly active skincare products

• Redness

• Rashes

- Perfumes and scents
- Additives or detergents

Prolonged Redness After:

• Facial treatments, laser, peels, dermal needling

Environmental Sensitivity

Airborn particlesPollution





Recommendations

This next section will provide you with your scientifically selected recommendations

CATEGORY ONE

Collagen Breakdown



YOU ARE	YOL
Lower Risk	-



Genetically, your body is working at a near optimum. You are producing close to normal levels of collagen to counteract the breakdown process.

CATEGORY TWO

Wrinkling / Glycation

YOU ARE

Higher Risk



Genetically, your body has a reduced ability to efficiently break down glucose. Excess glucose has been linked to a number of age related traits, amongst them – wrinkles.

TOPICAL INGREDIENTS

ALGAE EXTRACT
 Minimises cellular and tissue damage caused by glycation

HYALURONIC ACID
 Retains 1000 times its weight in water, helps reduce appearance of glycated skin

KOMBUCHA
 Tea ferment that decelerates glycation bonding

LACTIC ACID Treats the signs of glycation with minimal irritation

INTERNAL SUPPLEMENTS

- BLUEBERRY EXTRACT
 Breaks the glycation cycle
- QUERCETIN
 Anti-glycation properties
- VITAMIN B1 & B6 Anti-glycation properties

PROFESSIONAL

- CHEMICAL PEELS Helps to remove the layers of glycated damaged skin
- LOW SUGAR DIET
 Consult a professional before commencing dietary changes
- SKIN NEEDLING Increases collagen production to treat the signs of glycation

wn glucose. Excess st them – wrinkles.

YOU ARE

Sun Damage & Pigmentation

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67%



YOUR SCORE & burning. Your results indicate that there may be vulnerabilities in the production **Medium Risk** 58% of melanin and other processors that aim to protect your skin from the sun. Explore the gene data below to find out more about this result. **TOPICAL INGREDIENTS** C + FERULIC ACID Provides added support from UVA & UVB damage while reducing pigmentation C + PHLORETIN Provides added support from UVA & UVB damage while reducing pigmentation **COENZYME Q10** Helps to reduce damage for UV radicals **KOJIC ACID** Reduces irregular pigmentation production RESVERATROL Shown to protect against damage caused by **UVB** radicals **VITAMIN B3 (NIACINAMIDE)** Reduces irregular pigmentation production

INTERNAL SUPPLEMENTS

- **BETA-CAROTENE OR LYCOPENE** Provides added protection against UV light-induced redness/burns
- **GRAPE SEED EXTRACT OR PYCNOGENOL** Provides added protection against UV light-induced redness/burns
- **N-ACETYL CYSTEINE** Helps to reduce DNA damage caused from UV-induced free radicals
- RESVERATROL Provides protective effects against UV-induced Free Radicals
- VITAMIN D3 Suitable if you are receiving minimal sun exposure

PROFESSIONAL

IDI Laser to help remove freckles and pigmentation

- MODIFIED JESSNER PEEL A combination peel of salicylic acid, resorcinol, lactic acid and Kojic acid to help lighten and also remove pigmentation
- **RESURFACING LASER -**FRAXEL, CO2

Resurfaces skin to remove layers of sun damaged skin

TCA PEEL - 10-35%

Superficial resurfacing of the skin to improve skin texture and remove pigmentation

CATEGORY FOUR

YOU ARE

Medium Risk

Free Radical Damage



Genetically, you may have a reduced ability to produce essential antioxidants. Your YOUR SCORE results also suggest that you may be sensitive to Environmental Pollutants. By living an unhealthy lifestyle that includes smoking & stress will ultimately increase your lifetime free of radical production. Explore the gene data below to find out more about this result.

Genetically, you may have a higher probability to experience irregular pigmentation

TOPICAL INGREDIENTS

- **COPPER PEPTIDE** Antioxidant that counteract and neutralise free radicals
- **COENZYME Q10** Protects the mitochondria (the 'powerplant" of the cell)
- **GRAPE SEED EXTRACT** Promotes cellular health and protection
- **GREEN TEA EXTRACT** Free radical scavenger
- RETINOL Targets and removes cells damaged by free radicals
- **VITAMIN C (L-ASCORBIC ACID)** Antioxidant that counteract and neutralise free radicals
- **VITAMIN E** Protects skin against environmental pollutants

INTERNAL SUPPLEMENTS

- **ALPHA LIPOIC ACID** Free radical scavenger
- GLISODIN Increases the bodies most essential antioxidant - Superoxide Dismutase
- **GREEN TEA EXTRACT** Neutralises free radicals
- **L-CARNTINE** Reduces oxidative stress and increases antioxidant activities
- **N-ACETYL CYSTEINE** Precursor to one of the bodies most essential antioxidant - Glutathione
- RESVERATROL Super Antioxidant

PROFESSIONAL

ANTIOXIDANT FACIALS Various topicals to infuse the skin with high concentrations of antioxidants

- **GLUTATHIONE IV** Intravenous drip, helps to neutralise and prevent free radical damage
- **MESOTHERAPY INFUSION** Miniature injections over the face containing various antioxidants
- VITAMIN C IV Intravenous drip, helps to neutralise and prevent free radical damage
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Skin Sensitivity



YOU ARE

Lower Risk



Genetically, your body is producing normal levels of inflammatory proteins. Your results indicate that you have a normal risk factor to chemical sensitivity issues and skin inflammatory responses. You may still at times experience skin irritations when using a highly active or highly chemical product.

Clinical Notes

Collagen Breakdown			
Wrinkling / Glycation			
Sun Damage & Pigmentation			
Free Radical Damage			
Skin Sensitivity			

Disclaimers

General Disclaimer	This test is not intended to provide medical advice, diagnosis, or treatment. Specifically, the results of this test are for aesthetic purposes only and are intended to provide information which will help with cosmetic product selection now and in the future.			
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