# skindna 🖡



# SkinDNA Test Results

DOB

ID

CA-4915

**REPORT DATE** 



## 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?	<b>No - your DNA results do not change.</b> 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.
l 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?	<b>SkinDNA was developed to allow patients to understand what skin areas they should focus on as a priority.</b> 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.







**Population Average** 

This number represents what the average person scored compared to your score



#### **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

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



### Istiqama Al Riyami

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



# Collagen Breakdown

#### **Medium 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

#### **Medium 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

#### Lower Risk

Genetically, you have near optimal ability to produce essential antioxidants. Your results also suggest that you are unlikely to be sensitive to Environmental Pollutants. However, by living an unhealthy lifestyle that includes smoking & stress will ultimately increase your lifetime free of radical production.



### 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

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

### Medium Risk

#### What this means for you:

Cenetically, 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

#### Visible Signs



#### **SLOWER HEALING**

• Slower Healing

#### **SKIN LAXITY & SAGGING**

- Hollowing under eyes
- Loss of volume

#### PROMINENT NASOLABIAL FOLDS

• Deeper smile lines

### 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

Impaired

Genetically, your body's ability to efficiently breakdown glucose is normal. However, a diet high in carbohydrates and sugars can reduce your body's ability to metabolise excess sugar. A high sugar diet can ultimately lead to the formation of wrinkles, thinning and skin structural damage.

#### You are Medium Risk

#### 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

#### **Visible Signs**



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#### **HEAVY WRINKLES & FOLDS**

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

begin to collapse inwards Eg, Wrinkles

#### **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

#### DEEP FURROWS

Upper face deep lines
 Eg. Frown, expression lines

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# 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

### Photo Defense 2

📕 🚺 🚺 Normal

We test 2 locations within this gene (M1 & M2). Your results indicate that genetically your body is near optimal to 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

Normal

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

#### 📕 💶 🖌 Deficient

Your genetic outcome suggests that you have minimal 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

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Antioxidant Power

Your genes have optimal functioning ability to produce Superoxide Dismutase Antioxidant and Glutathione Antioxidant. They are arguably the body's most crucial antioxidants. The higher the levels the less prone we are to the destructive effects of free radicals.

#### 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

### **Lower Risk**

#### What this means for you:

Cenetically, you have near optimal ability to produce essential antioxidants. Your results also suggest that you are unlikely to be sensitive to Environmental Pollutants. However, by living an unhealthy lifestyle that includes smoking & stress will ultimately increase your lifetime free of radical production.





- **TEXTURUAL ISSUES**
- Rough texture
- Uneven skin tone
- Dull and lifeless skin
- Tired looking appearance

#### **SKIN BARRIER ISSUES**

- Excessive dryness
- Excessive oiliness



### Skin irritations

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

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

#### Impaired

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. The gene responsible for the regulation of inflammation is less than optimal and can result in the body's ability to over-respond to a threat creating a heightened inflammatory response that can be unnecessary to skin cells. Itching, redness, rashes and sensitivity issues are the types of symptoms that can manifest. It is likely that you could also experience hay fever and various other allergies.

#### 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 near optimal to optimal ability to breakdown toxic chemical compounds found in everyday pollutions. It is likely that you do not suffer inflammation or irritations caused by perfumed products, active skincare ingredients and general city pollution.

#### 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

• Redness

Rashes

#### Heightened sensitivity to:

- Highly active skincare products
- 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 YOUR SCORE **Medium Risk**

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

#### **TOPICAL INGREDIENTS**

ARGIRELINE Peptide - Collagen builder

- **COENZYME Q10** Increases Collagen and Elastin
- **EPIDERMAL GROWTH FACTORS** Increases and maintains collagen fibres
- L-ASCORBIC ACID 15%+ Promotes Collagen Production
- PALMITOYL OLIGOPEPTIDE Peptide - Promotes Collagen Production
- **PANTHENOL VITAMIN B5** Assists in collagen healing
- RETINOL Stimulates skin cell reproduction

#### **INTERNAL SUPPLEMENTS**

- **ALPHA LIPOIC ACID** Raises collagen protective mechanisms
- **COENZYME Q10** Reduces collagen breakdown activities
- **N-ACETYL CYSTEINE** Amino Acid shown to reduce collagen damage
- RESVERATROL Reduces collagen breakdown activities
- VITAMIN C + E Boosts collagen production while reducing collagen breakdown

#### PROFESSIONAL

LED 590NM Temporarily reduces collagen breakdown activities allowing for more effective treatment and skincare use

- **RADIOFREQUENCY LASER** Increases collagen production
- **SCULPTRA OR RADIESSE** Stimulates collagen growth
- **SKIN NEEDLING** Increases collagen production without laser
- ULTRASOUND Increases collagen production

#### **CATEGORY TWO**

## Wrinkling / Glycation

**YOU ARE Medium Risk** 



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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
- **BLUEBERRY EXTRACT** Breaks down glycation bonds
- **GLYCOLIC ACID** Treats the signs of glycation (seek skincare advice before use)
- 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
- **VITAMIN B6 (PYRIDOXINE)** Shown to prevent the formation of glycation end-products

#### **INTERNAL SUPPLEMENTS**

- **BLUEBERRY EXTRACT** Breaks the glycation cycle
- Decreases high blood serum glucose levels and prevents formation of glycation end-products
- QUERCETIN Anti-glycation properties
- SILICA 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

# Sun Damage & Pigmentation





#### PROFESSIONAL

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** 

### Free Radical Damage



YOU ARE	YOUR SCORE	Genetically, you have near optimal ability to produce essential antioxidants. Your		
Lower Risk	87%	results also suggest that you are unlikely to be sensitive to Environmental Pollutants. However, by living an unhealthy lifestyle that includes smoking & stress will ultimately increase your lifetime free of radical production.		

**CATEGORY FIVE** 

# Skin Sensitivity



YOU ARE

**Lower Risk** 

your score 75%

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	<b>This test is not intended to provide medical advice, diagnosis, or treatment.</b> 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.			
HIPAA Confidentiality Notice and Disclaimer	The information contained in this document is confidential and intended solely for the use of the specific recipient(s) addressed above. To the extent the information in this document contains protected health information as defined by the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), such information is subject to specific confidentiality requirements and may also be privileged. To the extent possible, such information has been transmitted and stored pursuant to HIPAA encryption standards to ensure optimal protection of the information under HIPAA security protocols. Any disclosure, dissemination, distribution, or copying of this confidential and privileged information by anyone other than the intended recipient(s) is strictly prohibited by law.			
Category Disclaimers	<b>Sun Damage &amp; Pigmentation</b> The information in this category is not intended to provide medical advice, diagno - sis, or treatment. This information should in no way be interpreted as providing information on recommended sun exposure or skin cancer risk.			