

ORIG3N DNA Test



EXPONENTIAL Report

Personalized for: mark van houdenhoven

Your profile includes insights into the following categories:

XMED 2016

ORIG3N 

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Genes in this category:

NQO1 FOXP2 DRD4 MTHFR TERC CYP1A2

Gene		Your Result
NQO1	Skin Health	GG

People with AA:

People with this result are rare (10% of the population) and have been found to be very sensitive to oxidative damage from environmental factors. Oxidative stress in skin plays a major role in the aging process.

People with this result should be using serums, creams, masks and products that contain anti-oxidant compounds such as:

- Vitamin E
- Vitamin C
- Green Tea extracts
- Peptide blends
- Retinol
- Resveratrol
- Peptide blends

In addition reducing environmental exposure to oxidative damage is critical:

- Stay out of the sun and use sunscreens
- Do not smoke
- Reduce exposure to pesticides, pollutants and heavy metals
- Reduce alcohol intake

Increasing intake of antioxidant and carotenoid containing foods can significantly impact skin aging effects. Foods such as

- Wild blueberries
- Gogi Berries
- Dark chocolate
- Pecans
- Artichoke
- Elderberries
- Kidney beans
- Cranberries
- Carrots
- Plums
- Apricots
- Kale
- Spinach
- Sweet Potatoes

Consider consulting an in store beauty consultant for products that match the above descriptions or a licensed esthetician or dermatologist for recommendations on the appropriate course of action. It is recommended to work with a Registered Dietitian Nutritionist that can create a nutrition plan for you based on nutrient dense foods to meet your personal needs for a healthy skin.

People with AG:

This result is found in 40% of the population. People with this result have been shown to be sensitive to oxidative damage from environmental effects. Oxidative stress in skin plays a major role in the aging process. Consider using serums, creams, masks and products that contain anti-oxidant compounds such as:

1. Vitamin E
2. Vitamin C
3. Green Tea extracts
4. Peptide blends
5. Retinol
6. Resveratrol
7. Peptide blends

Consider consulting at a minimum an in store beauty consultant for products that match the above descriptions or a licensed esthetician or dermatologist for recommendations on the appropriate course of action.

People with GG:

This result is found in 50% of the population. This gene is involved in the protection from oxidative stress caused by environmental factors. Research has shown that with this result, you may have a genetic advantage in maintaining youthful skin because of the ability of your cells to counter damaging environmental factors.

Since you have an advantage in maintaining a youthful look you may consider investing your money in areas where you can have a larger impact with skin and beauty products.

Comments

This SNP is in the NQO1 (NADPH dehydrogenase quinone 1) gene and is related to generation and reduction of iron-mediated reactive oxygen species (ROS). NQO1 is a protein found in mitochondria, which are the energy source of the cell. Therefore, NQO1 has a role in energy use and oxidation in the cell. As we age, our mitochondrial function naturally declines, so activity in genes such as NQO1 is important. Variants in the NQO1 gene have been identified that are associated with the rate of skin aging.

References

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Genes in this category:

NQO1 **FOXP2** DRD4 MTHFR TERC CYP1A2

Gene		Your Result
FOXP2	Language Ability	AG

People with AA:

This is the most common type found in 50% of the population and studies have shown that Individuals with this genotype can take an average amount of time to learn new languages.

People with AG:

This type is found in 35% of the population and similar to AA, studies have shown longer time is needed for skills required for language learning.

People with GG:

This type is rare with about 15% of the population. Individuals with GG are found to display the type of learning strategies that indicate better language learning.

Comments

Scientists believe that the FOXP2 gene is key to the development of human speech and language. Gene association studies have found a variant in the FOXP2 gene that was associated with the improved ability to learn new speech. This gene is believed to be fundamental in our unique ability to produce and understand speech and language.

References

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Genes in this category:

NQO1 FOXP2 **DRD4** MTHFR TERC CYP1A2

Gene		Your Result
DRD4	Risk Behavior	CT

People with CC:

Like CT, people like you have an Increased susceptibility to risk seeking behavior. You are more likely to be an extrovert and may seek out novel and thrilling experiences.

People with CT:

People like you have an Increased susceptibility to risk seeking behavior. You are more likely to be an extrovert and may seek out novel and thrilling experiences.

People with TT:

With this type, you are in the majority of the population and in the normal range and therefore not overly impulsive and do not show thrill-seeking behavior.

Comments

Are you an extrovert? Scientists have studied aspects of human behavior such as how out-going and impulsive you are and how motivated you are to seek novel experiences. These behaviors seem to go together and the brain chemical called dopamine is largely responsible for this group of behaviors.

References

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Genes in this category:

NQO1 FOXP2 DRD4 **MTHFR** TERC CYP1A2

Gene		Your Result
MTHFR	Folate Levels	GG

People with AA:

This is the rare result found in 10% of the population. You have much reduced levels of the enzyme (30% of normal). This will give you lower levels of folate, Vitamin B12, and higher levels of homocysteine. Therefore you should actively seek food such as lentils, beans, asparagus, spinach, turnip greens, broccoli, and beets that are rich in folate and may consider an additional folate supplement, as needed and discussed with your doctor.

People with GA:

35% of the population are GA. You may have reduced levels of folate (65% of normal) and therefore should make sure you eat enough folate rich foods such as lentils, beans, asparagus, spinach, turnip greens, broccoli, and beets and may consider an additional folate supplement, as needed and discussed with your doctor.

People with GG:

You have a variant found in 55% of the population and is associated with normal levels of folate. You should continue to eat a well balanced diet including foods rich in folate. You may consider discussing with your Doctor additional folate supplementation if you are a female of child-bearing age.

Comments

Individuals will learn if they are likely to have reduced levels of folate with the results of the analysis of this gene. This gene makes an enzyme that changes the folate you eat in your diet to an active form your body can use. Folate is extremely important during the development of the brain and therefore important during pregnancy. Folate, one of the B vitamins, is also found to be protective of heart disease. Folate is essential for the body to make DNA, RNA, and metabolize amino acids which are required for cell division. Humans cannot make folate and therefore is required from the diet. Folate is most commonly found in nutritional supplements, vitamin-fortified cereals, wheat germ, legumes, green leafy vegetables, seeds and liver.

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Genes in this category:

NQO1 FOXP2 DRD4 MTHFR **TERC** CYP1A2

Gene		Your Result
TERC	Longevity	CC

People with CC:

You are among the 25% of the population with this type. People like you with this variant have a high probability of longer telomerase length and therefore a good chance of living past 80 years old. (with no accidents or diseases)

People with CG:

You are among 45% of the population. The person with this variant is prone to aging slightly faster than those with "CC" and it is advisable to take extra effort to stay healthy to live a long life.

People with GG:

You are among 30% of the population with this variant. The person with this variant is prone to aging faster than those with "CC" or "CG" and it is advisable to take extra effort to stay healthy to counter the effects of aging and age-related disease.

Comments

How long will you live? Scientists have found that the length of your chromosomes (where your DNA is packaged) has an impact on the length of your life. The end region on the chromosome is called a telomere and its length can reflect longevity. If your telomere is shortened, this can lead to premature aging. Scientists did a study of mean telomere length in 2917 Europeans with a follow-up repeat study. They found the G allele was significantly associated with a reduction in telomere length, equivalent to ~3.6 years of age-related telomere-length attrition.

References

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Genes in this category:

NQO1 FOXP2 DRD4 MTHFR TERC **CYP1A2**

Gene		Your Result
CYP1A2	Caffeine Metabolism	AA

People with AA:

You are among the 40 percent of people who are fast metabolizers. Your body may metabolize caffeine four times faster than slow metabolizers. This means that caffeine can have a stronger effect on athletic performance. If you are an adult that consumes caffeine, it is considered safe to do so in amounts smaller than 400mg per day (approximately 16-24 oz daily). If you use caffeine to enhance athletic output, studies have shown approximately 3mg of caffeine per kg of body weight consumed one hour before exercise may improve performance by 12 percent, especially in endurance events.

People with AC:

You are among about 45 percent who have both a slow and a fast copy of the variant. You are more similar to those with the CC variant and likely a slow metabolizer of caffeine. Slow metabolizers of caffeine may want to limit their caffeine intake to under 200mg of caffeine per day. Having a consistent higher intake of caffeine may increase symptoms of nervousness, increased heart rate, irritability, insomnia and possibly increase the risk of cardiovascular disease.

People with CC:

You are in the rare group of 15 percent of the population who carry two copies of the slow allele so you are a slow metabolizer of caffeine. This also means that if you have a caffeinated drink too late in the day, it could affect your sleepiness at night. Slow metabolizers of caffeine may want to limit their caffeine intake to under 200mg of caffeine per day. Having a consistent higher intake of caffeine may increase symptoms of nervousness, increased heart rate, irritability, insomnia and possibly increase the risk of cardiovascular disease.

Comments

Caffeine acts as a stimulant to the central nervous system, heart and respiratory system. Genetic analysis can determine if you are a fast or slow metabolizer of caffeine. Caffeine may have a longer-lasting effect on slow metabolizers, and may be unhealthy if consumed in large amounts. Fast metabolizers of caffeine process caffeine four times faster than slow metabolizers and may also benefit in athletic performance when following performance recommendations. Sources of caffeine: Coffee, tea, chocolate, energy drinks, kola, guarana and some pain relievers.

References

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