

5 Things You Need To Know **BEFORE** Getting Genetic Testing

And How To Maximize Your Genetic Potential



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*Don't look for someone who will solve all
your problems; look for someone who will
face them with you*

~Anonymous

Congratulations on taking the next step towards better health and wellness! I am honored to be a part of your journey and look forward to connecting with and supporting you.

This guide contains the foundations of creating health with an emphasis on how our genetics play a role in creating or restoring health. As you go through each section look for opportunities to improve and build on the good things which are part of your current health. I realize sometimes this can be overwhelming! That is why I am here to help you along the way and am passionate about empowering you to take charge of your health. Just as it can be overwhelming to learn how to ride a bicycle, with love, encouragement, and guidance we are off to the races and have a hard time remembering when we *couldn't ride*! That is what I want for your health, to be able to look around at your health overflowing with life and vitality where it is difficult to imagine a life without it

Of all the information in this guide, the most important is this: There is hope, our body is amazing at healing! Follow your instinct that says, yes, I can heal, there is something more to the picture and I will not stop until I find all the pieces. I believe in you and that powerful inner voice of yours, so let us dive in and put the pieces of your health back together!

In peace, love, and wellness!

Salena

The Best Kept Secret In Modern Medicine

Let me let you in on one of the best kept secrets of modern medicine...

Your body has the ability to heal itself and prevent nearly ALL diseases of aging.

Too good to be true, right?

You've already been to a number of practitioners, and nobody seems to have an answer to actually fix your chronic ailments. Conditions like asthma, thyroid problems, diabetes, arthritis and autoimmunity are commonly considered permanent. Doctors work to treat them... to medicate you.

You might think your health is failing. But it's really our modern medical system that's failing you.

Modern medicine has essentially turned into big industry. Patients are pushed through the system like parts on an assembly line. Medical specialists focus their attention squarely upon the reason for your visit, with little (or no) regard to your overall state of health. ***What they fail to realize is that it's your overall health that provides a clear road map to the source of the majority of your health problems.***

When we take a holistic, natural approach to health then we open the door to achieving optimal health that allows us to do the things that you love every day, for the rest of your life. At the core of this approach is the understanding that our body was designed to repair itself and the symptoms which manifest are warnings pointing us to where the body has an internal battle to restore balance. Our role is to support the body through nutrition and lifestyle so that our body is victorious.

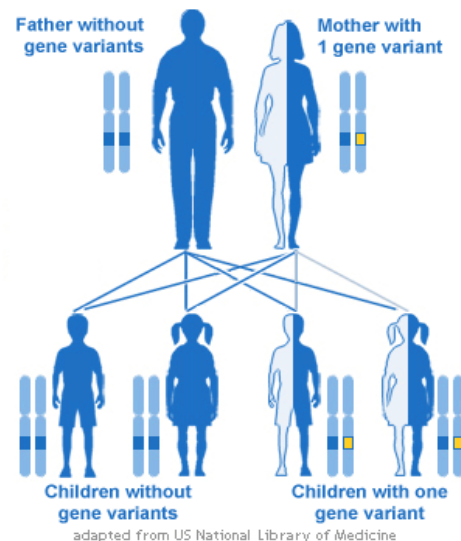
Genetics 101

When we consider your entire health and every ailment and condition you have, patterns begin to emerge. But deciphering these patterns and getting to their root cause requires detective work and an understanding of the building blocks our body has at its disposal. Which leads us to our genes.

99.9% of all genes are the same for all humans. SNPs (single nucleotide polymorphisms) are variations in our genes and account for everything about us from our physical features to how our body functions:

- Eye color, height, hair color, etc.
- How we make nutrients
- How we clear toxins
- How we make anti-oxidants

We inherit our genes from our parents – one part from each parent. Our DNA, genes, and chromosomes are our blueprint for life. They are the plans which tell our body how to make things. Our genes are recipes and the ladder for making specific proteins. They are comprised of sugar, phosphate and 4 different nitrogen bases: adenine, thymine, cytosine, and guanine.



Adenine(A) binds with Thymine(T) and Cytosine(C) binds with Guanine(G). These form the “rungs on the ladder” of our DNA.



A SNP is where a rung is swapped in our ladder. They can occur in a variety of regions and have a variety of implications. Similar to typographical errors. SNPs can have no to significant effect to completely changing the meaning. When it comes to our body and those significant SNPs, we have to realize this does not mean that pathway no longer works, rather it may have speedbumps, or turns that must be navigated where those without a SNP would have a smooth, straight road. Or, it may mean things are sped up like a car going down a hill vs. going up a hill. Essentially it just means there are nuances which apply to us individually and that a one-size-fits-all approach is rarely going to work to restore health and function in everyone.

An **allele** is one of two or more versions of a gene that is expressed. An individual inherits two alleles for each gene, one from each parent. If each allele is the same it is considered **homozygous**, if they are different, they are considered **heterozygous**. **When we have a SNP, it is important to understand this just means we are susceptible to having difficulty, not an absolute.**



Some change the meaning but not the function:

Dr. Jay Scott	Dr. Joy Scott
	

Most are of no consequence:

Are you coming too ?	Are you two coming?
	

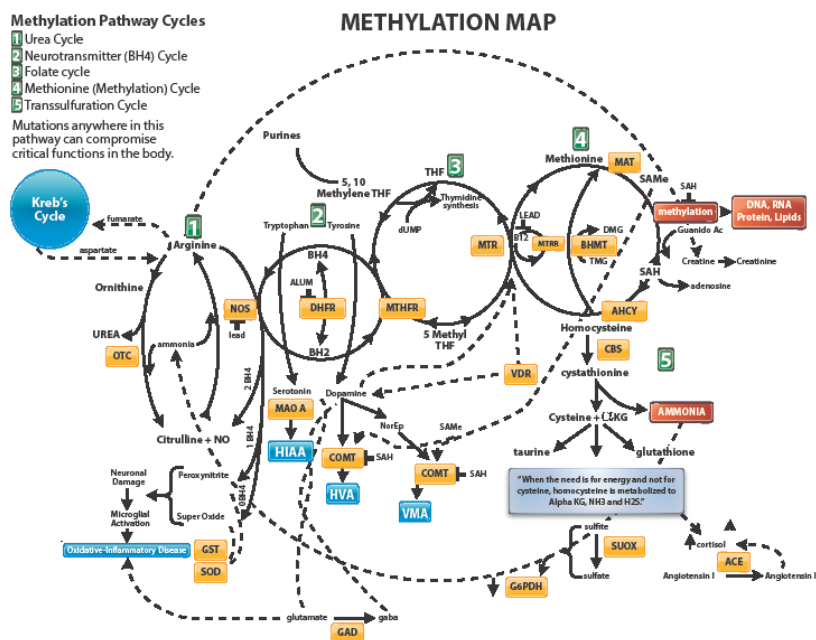
Others change the meaning entirely:

Cut	Cat
	

Methylation – Master of our Genes!

Methylation is the addition of a methyl group to a molecule. The adding and subtracting of methyl groups causes profound changes to occur at the core of our life processes. This process continually repairs DNA so that our body's trillions of molecules remain 'young' and 'perfect'. When looking at our genetics it is important to understand this concept and the areas of health this process is connected to. For instance, methylation is involved in:

- Turning on and off genes
- Processing chemicals and toxins
- Building neurotransmitters such as dopamine, serotonin, melatonin, or epinephrine
- Processing hormones such as estrogen
- Building immune cells such as T cells or NK cells
- Producing energy such as CoQ10, carnitine, or ATP
- Producing coating which protects our nerves
- Reducing homocysteine
- Helping the thyroid in producing hormones



There are hundreds of processes methylation is involved in and the body is in a constant battle to maintain balance and equilibrium. This is where it is vital to look beyond a single or handful of genetic SNPs. There is a biochemical symphony going on inside our body that we should examine all parts of that internal orchestra to allow it to reach it's potential.

Which leads to the first thing to know when it comes to genetic testing:

Just because we have a SNP does not mean a pathway is compromised, and just because we do NOT have a SNP does not mean that pathway is working optimally.

The Numbers Game

Remember how we talked about the different genes and the different things they code for such as physical attributes or bodily functions. When it comes to genetic testing one needs to decide what type of information they are after? Ancestral info which gives us insights to who we descended from? Or are we looking to the information related to the biochemical symphony, nutrigenomics?

If one is looking for information to determine who their ancestors were there are several options for that sort of information. Many of those also offer testing for nutrigenomics, but they are missing many of the key genes vital for analyzing from a nutrigenomic perspective. So, when looking for a test that is compatible with nutrigenomics some of the SNPs to ensure are in that test are:

• AHCY	• GAD1	• MTR
• APB1	• GAMT	• MTRR
• APOE	• GPX	• NOS (1, 2, 3)
• BCMO1	• GST	• NQO1
• BHMT	• HFE	• NRF
• CBS	• HLA	• PEMT
• COMT	• HNMT	• PON1
• CYP	• MAOA	• SHBG
• DHFR	• MAOB	• SLC
• FADS1 & FADS2	• MTHFD1	• SOD
• FOL	• MTHFR	• TNFA
• FUT2	• MTOR	• VDR

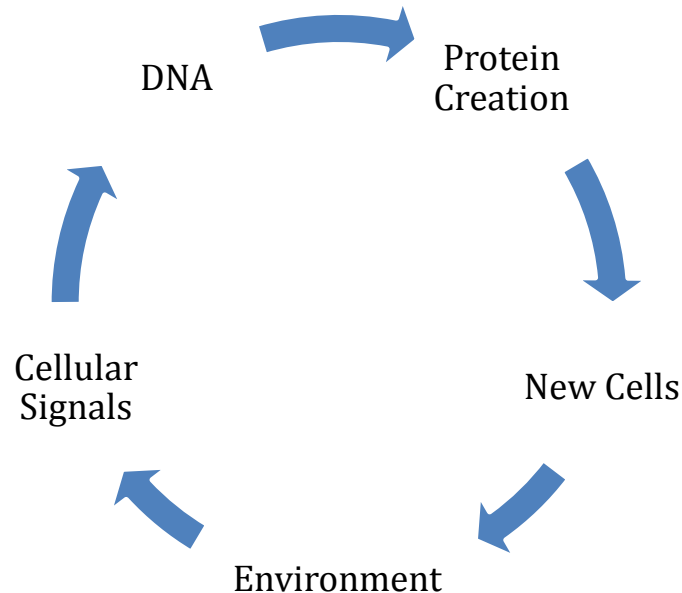
Note that there are a variety of each of these for instance MTHFR. The two most commonly talked about versions of MTHFR SNPs are MTHFR C677T and MTHFR A1298C but there are more. Different genes can have different impacts on that biochemical symphony. Which is why it is important to find a test that is going to give you the greatest amount of the genes pertinent to nutrigenomics if you are looking at genetic testing as a tool in creating health and vitality.

For instance, an ancestry-based test may offer 600,000 genes tested, but most of those are geared towards ancestry and only report 6,000 towards nutrigenomics, where a nutrigenomic test may test 200,000 genes and report 15,000 towards nutrigenomics. Which leads to the second important thing to know when it comes to genetic testing:

Determine if you want ancestor information or nutrigenomic information.

Epigenetics vs. Genetics

Epigenetics is a feedback loop between our environment and our genes. Our biochemical symphony never stops playing and is in a constant need of our genetic recipe to be put into play. It is a constant two-way communication where each side is influenced by how the other responds.



Basically, our body responds to the surroundings and the surrounding influence how our body responds and can influence future responses. Much like if we are driving down the road and swerve to miss hitting a deer and run against the curb instead knocking our wheels out of alignment. Now our tires will wear differently, and other parts of the vehicle may be affected. There is collateral damage, but it saved us from totaling our vehicle!

When it comes to our body the response to danger is very similar, it will take action to keep us protected but nearly always there is collateral damage of some kind. If we do not repair that damage then the next time danger comes around then we will be working with materials that are already compromised and it usually results in multiple damage, such as 5×5 instead of $5 + 5$. Overtime our genes are expressing as pathways under stress. This happens whether there are SNPs or not.

When we add SNPs to the equation, we are much more predisposed to extra collateral damage and usually more sensitive to damage. This is why it is important that we look at our genes in context of our environment and those epigenetic factors.

The environment can be broken down into five main components: Activity, Food, Sleep, Stress, and Toxins. Each of those are at the core of how we influence our genes for better or worse. Just like the feedback loop regarding our genetics, these five areas also are interrelated and affect one another. On the following pages are worksheets to delve into these areas to look for opportunities of healing. Before you get to those let us dig a little deeper into things which compromise each component.

1) Activity

It's no surprise that exercise is important to your overall health. But what kinds of exercise promote the body's natural ability to heal?

Certain aerobic and resistance exercises can improve or prevent various conditions. We're just beginning to understand how certain activities can alleviate and suppress many chronic ailments. A common misconception is more activity is better, this is just not the case when our biochemical pathways are overburdened.

In the chronic ailments our body is in a catabolic mode - it is the 'fight/flight' mode – sympathetic state. That 'run from a lion and escape death at all costs' mode. Did you catch that? Running at all costs... When we exert a significant amount of energy biochemical co-factors which are needed for growth, healing and restoration are diverted to other pathways.

Don't get me wrong, regular vigorous exercise can promote health - key is in a healthy individual.

2) Food

What you eat and drink plays a critical role in your overall health. Yet, most Americans are overweight and undernourished. This point is worthy of repeating...most Americans are overweight and undernourished.

When it comes to supporting our genes, we cannot overlook what all is involved in the digestive process which makes the nutrients we eat available for our body to use. For instance, a healthy microbiome is critical when it comes to accessing nutrients, not to mention the role it plays in our immune system. With our hurry up and go lifestyles we are very susceptible to getting into a catch 22 scenario where our GI tract is out of balance because it is not getting the nutrients it needs and it cannot get the nutrients it needs because it is out of balance! Genetic SNPs can compound the matter once that pathway is no longer getting nutrients to run optimally.

So, as you create your strategy and consider genetic testing to gain more insights, I want to caution you about running out and getting supplements because your test comes back that a pathway has a SNP. This can create a LOT of problems – I have lost count how many times I have seen this happen. Especially when it comes to SNPs in the methylation cycle. That cycle is like a clock with many gears – they all need to work in harmony or the clock will no longer keep accurate time. Taking supplements without knowing the bigger picture and delving into why there is a problem puts one at risk of even more health challenges.

Note, I am a huge fan and advocate of natural medicine and using herbs to support healing, but I do not recommend using natural methods unless one has a good understanding of the biochemistry involved. We have spent too many decades ignoring how all our systems are connected and being sold a pill for our ill. If one is going to use natural approaches to support their genes it must be done through a holistic lens.

3) Sleeping Habits

The healing properties of sleep are legendary. Likewise, the perils of a lack of it. Do you remember as a child asking your parents why you had to take a nap?

The answer your parents may have given you was 'because that is when your body grows' (well, besides because I told you to :) Science has only recently begun to unravel the myriad of health effects of sleep and shed light on the mechanisms that underlie the dual-edged sword of sleep. As with many biological properties, sleep seems to follow an inverted-U-shaped curve. Optimal effects are experienced at intermediate levels of sleep. Either too much or too little can be problematic. This is an area where awareness of what our body is telling us is invaluable.

In a nutshell, our bodies need time to rest. We have a lot of demands for our time and energy. Just as we don't leave our vehicles running all the time, we shouldn't keep our bodies running all the time. They need time to repair from the daily toils of our day to day life. If we continually 'burn the candle at both ends', the wick is going to burn out and our genes will suffer.

4) Managing Stress

Excessive stress is one of the most salient contributors to poor gene function and is unquestionably associated with increased rates of cardiovascular disease, cancer, autoimmune disease, diabetes, and death.

The simplest illustration is regarding our vehicles. What happens when you continuously drive your vehicle off the pavement in the ditch? Now what happens when you do that at 70 miles an hour? Hour after hour? How long will it hold up? How long will YOU be able to keep a hold of the steering wheel?



Stress kills.

Too often conventional providers fail to acknowledge and delve into areas of stress in our lives, let alone testing. Such as cortisol, a hormone without which we are unable to survive. As with all hormones, excess or deficiency leads to stress on other systems. On the flip-side, laughter will always be seen on a recommendation for achieving optimal levels of stress.

5) Toxins

The environment of your day to day life has a profound effect on your health. Most think of the environment as the location they live, toxin exposed to and other obvious locations such as where you work. These do play a vital role, but there is so much more to our environment than physical locations.

Relationships - family, friends, co-workers and any other people you surround yourself with have an influence on your health - for better or worse.

Atmosphere - again, more than the air we breathe. A home, work, and/or school environment which has an atmosphere of tension will curtail efforts of healing faster than a speeding bullet and with more power than a hydrogen bomb.

Maintaining toxic relationships with certain individuals in your life can affect your health – which can have a stark impact on your body's ability to heal itself. Do not overlook this. Also note that all toxins, whether from chemicals or from excess hormones, are dependent on our genes functioning optimally. The more things they are given to handle the greater they will be burdened. When SNPs are present those burdens have the potential to be magnified and have multiplying effect.

Putting our symptoms into context

Now that you understand what epigenetic factors are, the next step is to put our genetics and epigenetics into context. There are two parts to this – one is our potential risk factor – what our genes are. Our genes are that recipe which tell us what we have a predisposition for. The epigenetics determine how those genes function and the result of that either leads to health and vitality or symptoms and health challenges.

To determine if we need to support a SNP, we need to look at all areas of our health. Are there opportunities of healing in the foundational areas that were previously mentioned? Are you having symptoms that your body is having difficulty maintaining health in some way? There is a Five-Minute Symptom Checker on one of the following pages. This can help you get a general snapshot of potential challenges your body is facing. One of the beauties of our symptoms is they can tell us a lot about which pathways are having difficulty and a way for our body to tell us what it is that it needs. When we connect that to our genetic SNPs we can begin to determine if those SNPs are expressing in that way which we are predisposed or not.

When it comes to nutrigenomics, having the ability to connect symptoms, lab results, and the genetic pathways is vital. Much like a detective has tools to look for clues and put the pieces of the mystery together, having the ability to find and connect the dots is vital if one is going to utilize nutrigenomics. So, when you are looking at genetic testing our third important thing to know is:

Be on the lookout for whether or not the information can easily interweave genetics, symptoms, and lab results.

NOTES

- ☐ Quality of Sleep
- ☐ Quantity of Sleep
- ☐ Quality of Food
- ☐ Quantity of Food
- ☐ Activity Balanced
- ☐ "Self" time
- ☐ Toxic Exposures
- ☐ Chemicals?
- ☐ Molds?
- ☐ Pathogens?
- ☐ Relationships/Emotional?
- ☐ Laughter
- ☐ Permission to make mistakes?

- ☐ Put together a timeline
- ☐ Compile history and symptoms
- ☐ Identify patterns



Quick Strategy Guide: Opportunities for Regaining Health

SLEEP STRATEGY

FOOD STRATEGY

ACTIVITY STRATEGY

TOXIN STRATEGY

STRESS STRATEGY



The Toxicity and Symptom Screening Questionnaire identifies symptoms that help to identify the underlying causes of illness, and helps you track your progress over time. Rate each of the following symptoms based upon your health profile for the past 30 days. If you are taking after the first time, record your symptoms for the last 48 hours ONLY.

POINT SCALE

0 = Never or almost never have the symptom

1 = Occasionally have it, effect is not severe

2 = Occasionally have, effect is severe

3 = Frequently have it, effect is not severe

4 = Frequently have it, effect is severe

DIGESTIVE TRACT

- ☐ Nausea or vomiting
- ☐ Diarrhea
- ☐ Constipation
- ☐ Bloating feeling
- ☐ Belching, or passing gas
- ☐ Heartburn
- ☐ Intestinal/Stomach pain

Total _____

EARS

- ☐ Itchy ears Total
- ☐ Earaches, ear infections
- ☐ Drainage from ear
- ☐ Ringing in ears, hearing loss

Total _____

EMOTIONS

- ☐ Mood swings
- ☐ Anxiety, fear or nervousness
- ☐ Anger, irritability, or aggressiveness
- ☐ Depression

Total _____

ENERGY/ACTIVITY

- ☐ Fatigue, sluggishness
- ☐ Apathy, lethargy
- ☐ Hyperactivity
- ☐ Restlessness

Total _____

EYES

- ☐ Watery or itchy eyes
- ☐ Swollen, reddened or sticky eyelids
- ☐ Bags or dark circles under eyes
- ☐ Blurred or tunnel vision (does not include near-or far-sightedness)

Total _____

HEAD

- ☐ Headaches
- ☐ Faintness
- ☐ Dizziness
- ☐ Insomnia

Total _____

HEART

- ☐ Irregular or skipped heartbeat
- ☐ Rapid or pounding heartbeat
- ☐ Chest pain

Total _____

JOINTS/MUSCLES

- ☐ Pain or aches in joints
- ☐ Arthritis
- ☐ Stiffness or limitation of movement
- ☐ Pain or aches in muscles
- ☐ Feeling of weakness or tiredness

Total _____

LUNGS

- ☐ Chest congestion
- ☐ Asthma, bronchitis
- ☐ Shortness of breath
- ☐ Difficult breathing

Total _____

MIND

- ☐ Poor memory
- ☐ Confusion, poor comprehension
- ☐ Poor concentration
- ☐ Poor physical coordination
- ☐ Difficulty in making decisions
- ☐ Stuttering or stammering
- ☐ Slurred speech
- ☐ Learning disabilities

Total _____

MOUTH/THROAT

- ☐ Chronic coughing
- ☐ Gagging, frequent need to clear throat
- ☐ Sore throat, hoarseness, loss of voice
- ☐ Swollen/dyscolored tongue, gum, lips
- ☐ Canker sores

Total _____

NOSE

- ☐ Stuffy nose
- ☐ Sinus problems
- ☐ Hay fever
- ☐ Sneezing attacks
- ☐ Excessive mucus formation

Total _____

SKIN

- ☐ Acne
- ☐ Hives, rashes, or dry skin
- ☐ Hair loss
- ☐ Flushing or hot flushes
- ☐ Excessive sweating

Total _____

WEIGHT

- ☐ Binge eating/drinking
- ☐ Craving certain foods
- ☐ Excessive weight
- ☐ Compulsive eating
- ☐ Water retention
- ☐ Underweight

Total _____

OTHER

- ☐ Frequent illness
- ☐ Frequent or urgent urination
- ☐ Genital itch or discharge

Total _____

GRAND TOTAL _____

KEY TO QUESTIONNAIRE

Add individual scores and total each group. Add each group scores and give a grand total.

- Optimal is less than 10
- Mild Toxicity: 10-50
- Moderate Toxicity: 50-100
- Severe Toxicity: over 100

Choosing Supplements

The most common question I am asked is – *What supplement should I take for _____?* I cannot stress enough the importance of moving away from the concept of taking a pill for an ill. When looking at our genetics this is yet one more area we need to look at the big picture and look at supporting what the body is needing at that particular time.

If you are looking to get genetic testing so you can know which supplements you need to be purchasing, I would encourage you to move forward very cautiously. The purpose of the genetic information is to give clues, but do not provide a definitive answer. Again, it goes back to the biochemical symphony and connecting the dots and identifying the core areas our body is needing help to restore balance.

With all of that, there are a few guidelines when it comes to choosing supplements.

1. Quality
2. Support the foundation pathways first
3. Ensure detox pathways are working before pushing the body to detox
4. Temporary support to get the body back in balance – maintain with diet and lifestyle
5. Some support may be needed on an ongoing basis, this is the exception, not the norm
6. Less is often best
7. Do not run out and get methyl vitamins just because of a MTHFR or other snp in the methylation cycle
8. Do not run out and get any vitamins just because of a snp
9. Look for zero to very very few extra ingredients
10. Avoid folic acid
11. Be cautious getting from online resources such as Amazon due to lack of quality control, unknown storage, etc. Best to get from a trusted source
12. Always know why a supplement is being taken
13. Be cautious of protocols which are the same for everyone
14. Keep a diary of symptoms and be sure to share any reactions with your provider

The next most common question I get asked regarding supplements is – *Which brand should I get?* There are more and more choices for supplements which can be used in natural healing. I use several brands and generally speaking – *note there are exceptions* – I primarily use formulations which are made from herbs or the extract. I tend to shy away from nutraceuticals as many of them process and strip away components from the whole plant and we are left with a formulation not found in nature. Where whole plant-based formulas are what our body was designed for, recognizes, and we get the synergy from all components of that plant. This is something you will need to consider when discussing with your practitioner which supplement is the best choice for you. With all of that, our fourth most important thing to know is:

***Choose supplements based on the big picture,
with an emphasis on supporting the body in its
battle to restore health.***

Interpreting the Results

So, you have your genetic report, now what? Most genetic tests give you your 'raw data' which is a list of the genes and which alleles, variants, you have. And many will give a commentary on what pathways, or what that gene does in the body. But, knowing what they do is just one piece to the puzzle. This is where it is vital to ask questions about whether the genes are expressing, functioning, in a way which promotes health or is continuing to perpetuate the immune, self-defense, response.

There are three main components when it comes to approaching health using nutrigenomics.

Genetics	Symptoms	Lab Results
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Genetics are the building blocks, our symptoms the warning lights, and lab results provide the information on what is going on biochemically. Remember earlier we talked about the feedback loop involved between genetics and epigenetics? The things which are important for optimal health and for taking preventative measures are looking at the clues that our body is needing help. It was designed to protect us and maintain balance and harmony. Each process is connected to another and they are all interconnected in some form or fashion. Relying on just one symptom to guide us, or only symptoms to guide us, can not only leave us on an endless merry-go-round but can create more challenges.

Just as we need to look at the big picture when choosing a supplement, we need to look at the big picture when interpreting our genetic results. This also goes for any lab test we get back, it is about putting the results into context. We put them into context by doing the things we have mentioned in the previous sections. But it is not as simple as checking things off a list or getting a diagnosis. To maximize our genetic potential and to get the most out of the information from our genetics we need to delve into the biochemical symphony and look at all the pieces to the puzzle.

This is where it is important to be working with someone who can teach you and guide you in taking charge of your health. They will not be with your body 24/7, only you will. We must become masters of our bodies just as we have professionals in different industries. If your goal is to restore vitality, then it will require a mentor to help guide and teach you what you need to know to reach that goal. What is interesting is every industry, from the basic entry level job to high level executive, a person is taught how to perform that task. When it comes to our health, we have been trained to get a pill and to ignore the 'check engine lights' on our body. This method has proved that it will not help us heal – over half of our children have a chronic illness and almost half of those multiple chronic illnesses. Until we change the way we approach health and wellness we will continue on that downward spiral. Until you are empowered to take charge of your health you are left guessing what choices to make. If you get your genetic test with the intention of optimizing your health you **will** need a mentor, whether a provider or enroll in classes where someone teaches you how to find the pieces to your health and put them back together in a way which promotes healing and vitality, a teacher and guide is necessary. Which leads to the fifth, and final, important thing to know is:

Everyone needs a health mentor, everyone.

Taking your Journey Beyond

We covered a lot today! There is so much more to know about genetics and our health that would take pages and pages and pages to cover with you. As with anything, we must start with the foundation. These five things are at the core of understanding what our genes are and how to use them to promote health. The next step is connecting with a mentor to help you reach optimal health! If you are eager to take your health to the next level, there is no better way to start than by exploring our Comprehensive Functional Health Plan.

The Functional Health Mama's Comprehensive Functional Plan can evaluate your unique situation and get to the root of your systems imbalances. It begins with in-depth history gathering by your personal health detective, through comprehensive questionnaires based on the functional health model. Included is access to an in-depth methylgenomic nutritional analysis which provides insights to how your genes are functioning. (You can find more information about that analysis here: thefunctionalperspective.com/functional-genomic-nutritional-analysis/)

The next step is to meet with us, as we, including you, lay out the pieces of your health, then we begin the exciting journey of putting those pieces together.

Some of the recommendations you can expect are addressing opportunities for change in lifestyle, food, activity, stress, and rest. In addition, we will explore which functional testing is appropriate for you to help you uncover those deep hidden clues.

Throughout the process you can connect with us anytime through your individual client portal. You can access tools and guides we share at any time and access to your results at your convenience.

If you are ready to hop on a no-obligation call to find out how we can help you embrace your body's innate healing system, call us at 936.463.0272 or schedule here: functionalhealthmama.com/schedule

Perhaps you are looking for more in-depth information, we have that too! You can visit us at thefunctionalperspective.com/pastclasses here you will find webinars on a variety of health topics.

One last note, you can take charge of your health and have power over your genetics!

In peace, love, and wellness!

Salena

About Salena Rothenberger, D.PSc, CFMP, CHC

Born in Urbana, Illinois, Salena grew up with two sisters on a small farm in central Illinois. Salena learned the qualities and skills needed to become a good health detective long before her career in the health and wellness community. Her parents embraced and nourished her inquisitive nature. She was taught the importance of compassion, discernment, critical thinking and to approach challenges with an open mind.

She spent much of her academic years pursuing math and science. Outside of school her time was spent with horses. Following high school, she attended Parkland College in Champaign, Illinois majoring in pre-veterinary medicine. She put that on hold to pursue her love with horses and went to work on a Thoroughbred farm in southeastern Connecticut. This led to meeting her new love and now husband of 23 years, Eric. Since then she has spent most of those years growing a family.

She experienced many years of infertility challenges and lost four children prematurely. In 2005 she and her husband welcomed their now oldest child into the world. What was a blessing then has brought her full circle to her passions as a child, and as she puts it "is becoming a blessing to others". In 2014 her eldest son was diagnosed with Type 1 Diabetes following DKA (diabetic ketoacidosis). During that hospitalization Salena became overly aware of the limitations of the conventional medicine model. While it excelled at helping her son recover quickly from DKA, it was lacking in providing a long-term resolution to her child's adverse health. As a response Salena delved back into her previous passion and became consumed with studying biochemical pathways, immune responses and holistic oriented methods along with herbs and supplements which are known to support and improve health.

With support and nurturing from family, friends and her local family physician, Salena graduated from Functional Medicine University, a nationally recognized leader in functional medicine education for healthcare professionals and CEUs and certificates of completion provided by Southern California University of Health Sciences. She also received certification as a Certified Health Coach upon completing Dr. Sears Wellness Institute Program. During school she studied advanced training in nutrition and functional health and medicine.

Asking the question "Why" is at the heart of her 'detective' work to identify the underlying cause, for not only her son but, clients whose health systems are suffering distress. When faced with the conventional model of symptom management she explores 'why' the body is responding in a way that results in adverse health. Doing so in a way which empowers her clients through sharing, her so they, too, can take charge of their health.

The root of her philosophy for investigating health, especially autoimmune diseases, lies in a comprehensive approach that combines supporting both physical and mental-emotional systems. In addition to utilizing strategies to effectively support the body's innate ability to heal, she also strives to teach clients that their health can be changed through natural healing methods.

She is proud her passion and knowledge led to the founding of [The Functional Perspective](#), [FunctionalHealthMama.com](#) and contributor to Transcending Wellness a Healthy Living Journey. She is exceedingly grateful for the nurturing of her passion by the founder of MyMD Select, [Dr. Jeremy Smith](#).

She resides with her husband, two children and their family dog, Chocolate, in the Deep Piney Woods of East Texas, in Texas' oldest town – Nacogdoches.