



5 Weight Loss Insights
**Hidden in
Your DNA**

 plainsmart™
Wellness and Weight Management Clinic

We live in exciting times, when the most current science combines with proven processes to make our lives better. Wellness and weight loss are no exceptions.

5 Weight Loss Insights

Hidden in Your DNA

Scientists and nutritionists are now able to understand – at the genetic level – what’s right for your personal genetic predispositions when it comes to food and fitness. And these insights are hiding in your DNA!

Your unique genetic makeup affects your metabolism, your ability to absorb vitamins and minerals, and even your relationship with coffee and heart health.

Want to know more? Read on for five weight loss insights hidden in your DNA that can help you achieve a lifetime of wellness, and the best and most healthy you!



1 How many calories should I cut to lose weight?

Reducing calories – without sacrificing your day-to-day energy levels and your long-term health – for your weight loss goals is a major balancing act for many people. What works for your spouse, or your sister, or your coworker might not be right for your own personal genetics.

By examining your UCP1 gene – as well as considering your age, weight, and muscle mass – Registered Dietitian Nutritionists (RDNs) are able to determine how many calories a day you should eat, and then expend through physical activity, to keep your body functioning properly while you lose weight safely.

Your other genetic markers tell us what percentage of those calories should come from carbs, protein, and healthy fats. Your personal genetic equation for lifelong weight management helps you balance your calories, your fitness, your energy levels, and your overall metabolism.

2 Should I be taking supplements?

The right levels of vitamins and minerals are essential to your health and wellness. Vitamin A, for example, contributes to sharp vision and a robust immune system. Many people reach their daily values by converting beta carotene, found in foods such as carrots and squash, into Vitamin A.

But do *you* need to supplement your Vitamin A because you don't get enough from the foods you eat? Your BCMO1 gene is responsible for producing the enzyme that makes this conversion possible, and one variant of the gene produces too little of the enzyme. If you have this variant, your body has trouble producing Vitamin A, which means you may benefit from supplements, in addition to a diet more rich in Vitamin A.

This is just one example why knowing how your genetic predispositions can help you take positive steps towards a healthier you!

3 How do I know if I'm likely to have a food intolerance?

We've all heard about lactose intolerance, and now many people are considering going gluten-free, too. Should you consider such a shift in your own diet? The answer is in your DNA! We now know that your MCM6 and HLA genes contribute to your risk of developing lactose and gluten intolerances, respectively.

Lactose is a naturally occurring sugar found in dairy products. When lactose is properly digested, the enzyme lactase breaks the sugar into two different molecules, glucose and galactose. In people who don't produce enough lactase, the lactose is not digested normally. Some people with lactose intolerance cannot tolerate any milk products while others can only tolerate small amounts of lactose.

Gluten is a protein found in wheat, barley, rye, and some oats. For some people, gluten can cause severe digestive problems leading to nutrient malabsorption, anemia, and other serious health problems. The good news is that gluten-free foods include all unprocessed vegetables, fruit, dairy products, meat, fish, poultry, nuts, legumes, seeds, fats, and oils. Gluten-free grains include rice, quinoa, corn, buckwheat, amaranth, and millet.

RDNs can use your DNA to help determine if you're at risk, and, you can switch to a diet that's healthier for you, both right now and for a lifetime.

4 There are so many “expert” opinions about caffeine... how do I know what to believe?

Yes, we love our coffee and, yes, there is a lot of conflicting information out there about caffeine, but your unique genetics determine what’s actually true for you.

Your CYP1A2 gene produces an enzyme responsible for breaking down caffeine in your body. One variant of this gene produces too little of this enzyme, which means that excessive caffeine builds up in your bloodstream, increasing your risk of high blood pressure and heart attack. Another variant, however, actually indicates a lower risk of heart disease with moderate caffeine consumption than with no caffeine at all!

As much as you might love the boost that extra cup of coffee provides, when you know whether you are at risk, you can choose to modify your habits and live your healthiest life.

5 But what if I've had trouble sticking to exercise or a diet before?

Some people do have a more difficult time choosing healthy foods, some others have more trouble controlling the quantities they consume, and some people just don't feel motivated to exercise. The answers are probably in your BDNF, CYP19A1, and LEPR genes. And if you're having trouble staying away from sweets, it may be because your GLUT2 gene turns on your "sweet tooth."

The tendency to develop and maintain healthy eating and activity habits derive from your genetics, as do your past experiences and your present environment. Knowing your genetic tendencies can help you choose the best strategies for your healthy eating behavior and preferences. The good news is that you can always take steps to maintain healthy eating behaviors, no matter what your genetic predispositions might be!

Your unique health and weight loss needs are no longer a mystery with insights from your own unique DNA!

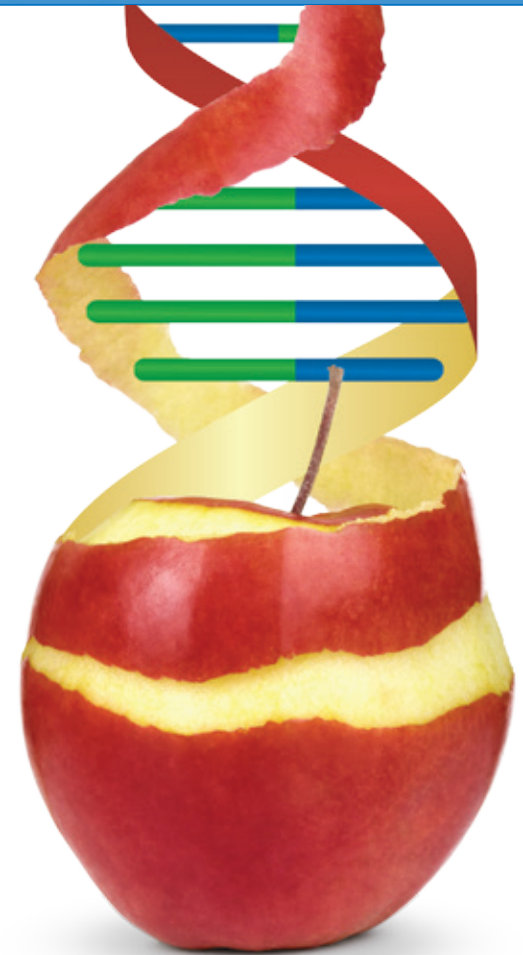
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DNA diagnostics allow Registered Dietitian Nutritionists (RDNs) to pinpoint solutions for your specific needs, whether it's weight loss, low energy, food intolerance, or simply your desire for a healthy lifestyle.

Thanks to the most current and evidence-backed scientific research in the respected field of nutrigenomics, RDNs can offer healthy weight loss programs based on results from 45 of your genetic markers.

Decode your own personal DNA insights to manage your nutrition and metabolism, to boost your health and athletic performance, and to develop everyday habits for a lifetime of wellness!



About PlainSmart Wellness and Weight Management

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Hidden in **Your DNA?**

We'd love to tell you more!

At PlainSmart Wellness and Weight Management, Registered Dietitian Nutritionists (RDNs) develop a customized approach to nutrition and fitness for your own genetic blueprint, developed from DNA test results and based on the most current evidence-backed scientific research.

As you learn what your unique DNA reveals about your health and wellness needs, our RDNs are here to help you make the most of this information. Armed with your genetic report and your body composition analysis results, we also consider your lifestyle, medical history, food and fitness preferences, and any additional health and wellness needs to develop a program unique to you.

You are embarking on a path to a healthier life and we would be honored to partner with you on this journey.

