ULTAGENOMICS

DECODE YOUR DNA. GUIDE YOUR HEALTH.

Weight & Appetite Regulation

GENETICS REPORT

1	4	35
Report	Report Panels	Gene Variants

Example Client
Prepared for

November 9, 2026
Report Date

Our genetic test provides insights into how your unique genetic profile influences health areas. By understanding these genetic tendencies, you and your healthcare provider can make more informed lifestyle and wellness choices to support long-term health goals.

THESE GENE RESULTS MIGHT TELL YOU

- ✓ How your body may respond to certain nutrients
- ✓ Dietary patterns and environmental factors
- ✓ Potential predispositions in detoxification, metabolism, and physical performance
- ✓ Why some wellness strategies may work differently for you

THESE GENE RESULTS WILL NOT TELL YOU

- ✕ Any medical diagnoses
- ✕ Cancer diagnoses or clinical cancer risk assessments
- ✕ Predictions about future health conditions
- ✕ How lifestyle factors outside of genetics impact health outcomes

This report is intended for informational purposes only and does not constitute medical advice. Results reflect genetic predispositions, not guarantees of health outcomes. Always consult a qualified healthcare practitioner before making changes to your health regimen.

A typical or decreased result does not mean there is no risk, and an increased result does not mean a condition will develop. Environment, lifestyle and family history also play a role. Any result that mentions cancer reflects a genetic tendency only. It is not a clinical cancer risk assessment and does not replace recommended cancer screening.

Talk with a healthcare provider before starting any supplement, especially if pregnant or breastfeeding, taking prescription medications, or managing a medical condition. Do not start, stop or change any medication based on these results without first talking with the prescribing provider.

Statements about supplements in this report have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

Research on how genes relate to health is still developing. Some recommendations are based on limited evidence and may be updated as new research becomes available.

Testing is performed by a CLIA-certified, CAP-accredited laboratory. Genotyping is highly accurate, but no laboratory test is completely error-free. Results that will change clinical decisions may warrant confirmatory testing.

OVERVIEW

Results at a Glance

This report covers 4 panels and 9 individual results. The summary below shows where the genetic profile indicates areas worth focusing on, areas to monitor, and areas where results are favorable. The Moderate results are where targeted support may have the most impact.

0

NEEDS ATTENTION

3

MODERATE

- Appetite/Fullness Sensing
- Weight Loss from Exercise
- Weight Loss from Low-Carb Diet

6

OPTIMAL

- Snacking/Emotional Eating Risk
- Weight Regain Propensity
- Weight Gain from Dairy Fat
- Obesity Risk Overview
- Stress Adaptation
- Stress Phenotype

1 Hunger and Fullness Sensing

11 variants analyzed

In plain terms: Understanding the body's hunger and fullness signals is crucial for maintaining a healthy relationship with food and managing appetite effectively.

Hunger and fullness sensing refers to the body's ability to detect and respond to its nutritional needs. Some individuals may have a genetic propensity for heightened hunger sensitivity, experiencing more intense feelings of hunger and a stronger drive to eat. Others may have a genetic predisposition for reduced appetite sensing, meaning they may be more prone to eating past the point of fullness before satiety signals register.

Additionally, emotional eating, which is the tendency to turn to food for comfort or as a response to emotional triggers, can also be influenced by genetic factors. Some individuals may have a higher genetic predisposition for emotional eating, making them more susceptible to using food as a coping mechanism for emotional stressors.

By understanding genetic tendencies related to hunger and fullness sensing, as well as emotional eating patterns, strategies can be developed to manage appetite, make informed food choices, and develop healthier relationships with food.

It's important to note that while genetics play a role in hunger and fullness sensing, other factors such as lifestyle, stress levels, and eating habits also contribute to appetite control. By adopting a balanced and nourishing diet, practicing mindful eating, and seeking support from healthcare professionals or coaches, it is possible to develop healthier habits and achieve more balanced relationships with food.

YOUR RESULTS

Snacking/Emotional Eating Risk



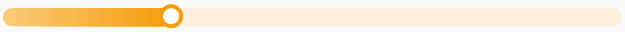
TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical snacking and emotional eating genetics have a tendency to snack in response to stress or emotion that is similar to the general population. Eating patterns are more likely to be shaped by routine, environment, and stress levels than by genetics. Regular balanced meals and mindful eating habits can help keep snacking in check.

YOUR RESULTS

Appetite/Fullness Sensing



DECREASED

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with decreased appetite and fullness sensing genetic results may have slightly below-average sensitivity to hunger and fullness cues. Monitoring food intake and paying attention to portion sizes may help manage appetite, and nutrient-dense foods may help ensure adequate nutrition despite decreased satiety signaling.

RECOMMENDATIONS

SUPPLEMENT

Omega-3 Fatty Acids (EPA/DHA)

1,000 to 3,000 mg daily

Suppresses hypothalamic inflammation and restores leptin receptor signaling.

SUPPLEMENT

Magnesium

200 to 400 mg daily (threonate preferred)

Reduces hypothalamic oxidative stress and improves leptin receptor function.

DIET

Anti-Inflammatory Diet

Leptin resistance is driven by hypothalamic inflammation; anti-inflammatory foods help restore sensitivity.

DIET

Protein-Rich Diet

~25% of calories

Adequate protein increases leptin sensitivity and reduces hunger-driven overeating from leptin resistance.

LIFESTYLE

Adequate Sleep

7 to 8 hours/night

Sleep deprivation is the fastest way to induce leptin resistance; just one poor night alters leptin levels.

LIFESTYLE

Reduce Stress

Chronic cortisol elevation worsens hypothalamic inflammation disrupting leptin signaling.

FURTHER TESTING

Fasting Insulin

Insulin resistance and leptin resistance commonly co-occur and should be assessed together.

FURTHER TESTING

Waist Circumference and Body Composition

Leptin rises with body fat, so these measures help interpret leptin results and track progress.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
COMT C186T	rs4633	**TC**	**ANKK1 G2137A**	rs1800497	**GG**
COMT G597A	rs769224	**GG**	**PER2 T-159+3520C**	rs4663302	**CC**
APOA2 A-265G	rs5082	**AG**	**PER2 G-12C**	rs2304672	**—**
MC4R (T>C)	rs17782313	**TC**	**ARNTL T671-305G**	rs11022778	**GG**
FTO T46-23525A	rs9939609	**TT**	**CLOCK A*213G**	rs1801260	**AA**
COMT G472A	rs4680	**AG**			

2 Weight Gain and Weight Loss

0 variants analyzed

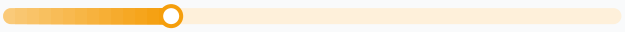
In plain terms: Weight management is influenced by a combination of genetics, diet, activity, and lifestyle habits. Some people find that their body responds especially well to a lower-carbohydrate approach, where cutting back on breads, pastas, and sugary foods leads to more steady weight loss and better appetite control. Others may notice that certain foods, like full-fat dairy, contribute more easily to weight gain compared with other fat sources. These patterns don't mean that carbs or dairy are "good" or "bad," but rather that metabolism may be more sensitive to certain foods, making moderation and balance especially important.

Another piece of the puzzle is how the body responds after weight loss. For some, weight tends to return more easily, often because of changes in hunger hormones and metabolism that make the body work to restore lost pounds. This is why sustainable approaches, rather than restrictive crash diets, are key to long-term success. Regular physical activity also plays an important role, although genetics can influence how strongly exercise affects the number on the scale. While some people lose weight quickly with consistent workouts, others may see more benefits in energy levels, body composition, and overall health than in pounds lost.

The most effective strategy combines awareness of these tendencies with practical lifestyle choices. Building meals around lean proteins, colorful vegetables, healthy fats, and the right amount of carbs for the individual may make weight management more natural. Choosing lighter or fermented dairy options, keeping consistent activity in the daily routine, and focusing on habits that feel sustainable rather than extreme all help create long-lasting balance. Understanding how the body uniquely responds to food and exercise may help in designing an approach to weight that supports both health and enjoyment.

YOUR RESULTS

Weight Loss from Exercise



DECREASED

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with decreased weight loss from exercise genetic results may see less weight loss from exercise than the general population, even with consistent training. Exercise may still provide important heart, metabolic and mental health benefits regardless of the number on the scale. Pairing regular exercise with dietary strategies, and working with a healthcare provider or coach, may help optimize body composition.

RECOMMENDATIONS

SUPPLEMENT

Psyllium Husk Fiber

5 to 10 g daily before meals with water

Soluble fiber may increase fullness after meals and modestly support weight and blood sugar control.

SUPPLEMENT

Whey Protein

20 to 30 g after training or with a low-protein meal

May help reach daily protein targets and preserve lean mass when weight loss relies more on diet than exercise.

DIET

High-Protein, High-Fiber Meals

Protein and vegetables at every meal

Protein and fiber may increase satiety and help preserve lean mass during weight management.

DIET

Limit Ultra-Processed Foods and Sugary Drinks

Ultra-processed foods and sugar-sweetened drinks are linked to higher calorie intake and weight gain.

LIFESTYLE

Aerobic Activity Plus Resistance Training

150+ min/week aerobic, 2 to 3 strength sessions

Combining aerobic and strength training may support fat loss, lean mass and insulin sensitivity even when scale changes are smaller.

LIFESTYLE

Increase Daily Movement

7,000 to 10,000 steps daily

Everyday movement outside of workouts may add meaningful energy use and support weight management.

FURTHER TESTING

HbA1c and Fasting Glucose

Tracks blood sugar, which may improve with exercise even when weight changes slowly.

FURTHER TESTING

Resting Metabolic Rate Test

Indirect calorimetry

Measures daily calorie needs so diet targets can be set more accurately.

YOUR RESULTS

Weight Regain Propensity



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical propensity for weight regain genetic results have genetic markers that align with the average population's likelihood of regaining weight after losing it. This indicates that their genetic makeup does not significantly sway their risk either way, making lifestyle choices and behavior modifications crucial in maintaining long-term weight loss. Maintaining weight loss typically requires continuous adherence to a balanced diet, regular physical activity, and ongoing behavior changes. Individuals are encouraged to monitor their eating habits, engage in consistent exercise, and perhaps seek support from nutrition and fitness professionals to help sustain weight loss.

YOUR RESULTS

Weight Gain from Dairy Fat



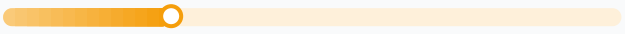
TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical dairy fat response genetic results process dairy fat in a manner consistent with the general population. Dairy fat contributes to overall calorie intake, so portion awareness supports weight management regardless of genetic profile.

YOUR RESULTS

Weight Loss from Low-Carb Diet



DECREASED

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with decreased low-carb response genetic results may be less likely to see significant weight loss from a low-carbohydrate diet. Other dietary approaches, such as a calorie-controlled balanced diet, may yield better results. A registered dietitian may help identify the most effective strategy.

RECOMMENDATIONS

SUPPLEMENT

Glucomannan

1 g before meals, up to 3 times daily, with water

A viscous fiber that may promote fullness and modest weight loss when paired with a calorie-appropriate diet.

DIET

Mediterranean-Style Eating Pattern

Vegetables, legumes, whole grains, fish, olive oil

A balanced pattern that may support weight loss and heart health without strict carbohydrate limits.

DIET

Portion-Controlled Balanced Plate

Half vegetables, a quarter protein, a quarter whole grains

Moderate calorie reduction across all food groups may work better than cutting carbohydrates alone.

LIFESTYLE

Limit Late-Night Eating

Finish eating 2 to 3 hours before bed

Eating late in the evening may be linked to higher body weight and poorer blood sugar control.

LIFESTYLE

Track Food Intake

2 to 4 weeks with a food-logging app

Logging meals may show which eating patterns support weight loss best.

FURTHER TESTING

Lipid Panel

Tracks cholesterol and triglycerides, which may shift with dietary changes.

3 Obesity Risk

12 variants analyzed

In plain terms: This section focuses on understanding the complex interplay between genetic predispositions and environmental factors that contribute to the risk of developing obesity. This condition, characterized by excessive fat accumulation, poses significant health risks, including heart disease, diabetes, and hypertension.

Genetic Influences: Genetics play a crucial role in determining an individual's susceptibility to obesity. Variations in genes related to appetite regulation, energy metabolism, fat storage, and insulin signaling can significantly influence body weight and fat distribution. This segment delves into specific genetic markers that have been linked to increased obesity risk, providing insight into the hereditary aspects of weight management.

Environmental and Lifestyle Factors: While genetics set the groundwork for obesity risk, environmental and lifestyle factors such as diet, physical activity, sleep patterns, and stress levels heavily modify the expression of genetic predispositions. This section examines how external factors interact with genetic makeup to influence obesity outcomes, emphasizing the importance of a balanced lifestyle for weight management.

Personalized Prevention and Management: Acknowledging the genetic and environmental roots of obesity allows for more personalized approaches to prevention and management. Tailored dietary recommendations, customized exercise programs, and behavioral modifications can be more effectively designed with an understanding of an individual's unique genetic background and lifestyle.

YOUR RESULTS

Obesity Risk Overview



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical obesity risk genetic results may have an average likelihood of developing obesity, similar to the general population. This suggests a standard response to environmental factors such as diet and physical activity. A nutritious diet and regular physical activity may help manage this baseline risk and support overall health.

YOUR RESULTS

Weight Regain Propensity



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical propensity for weight regain genetic results have genetic markers that align with the average population's likelihood of regaining weight after losing it. This indicates that their genetic makeup does not significantly sway their risk either way, making lifestyle choices and behavior modifications crucial in maintaining long-term weight loss. Maintaining weight loss typically requires continuous adherence to a balanced diet, regular physical activity, and ongoing behavior changes. Individuals are encouraged to monitor their eating habits, engage in consistent exercise, and perhaps seek support from nutrition and fitness professionals to help sustain weight loss.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
LEP g.G2453A	rs7799039	**AG**	**ADIPOQ G-9+3481A**	rs822396	**AA**
ADIPOQ G276T	rs1501299	**GG**	**MTNR1B C223+5596G**	rs10830963	**CC**
FTO T46-23525A	rs9939609	**TT**	**PPARG C34G**	rs1801282	**CG**
APOA5 G*158A	rs662799	**AA**	**FTO G46-25592T**	rs3751812	**GG**
TCF7L2 C450+33966T	rs7903146	**CC**	**IL6/IL6-AS1 (G>C)**	rs1800795	**CC**

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
ADIPOQ G3998A	rs17300539	**GG**	**MC4R (T>C)**	rs17782313	**TC**

4 Stress Response

12 variants analyzed

In plain terms: Stress, a universal human experience, varies widely in its impact from one individual to another, influenced by a complex web of genetic, environmental, and psychological factors. This section delves into the genetic factors that underlie these individual differences in stress responses, exploring how genetic variability contributes to resilience, vulnerability, and the overall physiological and psychological impact of stress.

Key genes involved in the regulation of the hypothalamic-pituitary-adrenal (HPA) axis, which orchestrates the body's response to stress, have been identified as critical in determining individual stress resilience. Variations in these genes can influence cortisol levels, the primary stress hormone, affecting how individuals react to and recover from stress. Genes play significant roles in these processes, with certain variants linked to either heightened stress sensitivity or increased resilience.

Beyond the HPA axis, genetic variations in neurotransmitter systems, including those for serotonin, dopamine, and gamma-aminobutyric acid (GABA), also contribute to individual differences in stress response. These variations can affect mood regulation, anxiety levels, and the threshold for experiencing stress, thus influencing an individual's susceptibility to stress-related disorders.

Understanding an individual's genetic predispositions related to stress response can inform personalized interventions aimed at enhancing resilience and mitigating stress-related health impacts. This may include targeted psychological therapies, stress management strategies, lifestyle changes, and, where appropriate, pharmacological treatments designed to address specific genetic vulnerabilities. The interplay between genetic predispositions and lifestyle/environmental factors is crucial in shaping the stress response. Factors such as physical activity, diet, sleep quality, and social support can interact with genetic predispositions, either amplifying or mitigating stress impacts. Recognizing this interaction is key to developing comprehensive strategies for stress management that are tailored to an individual's genetic makeup and life circumstances.

YOUR RESULTS

Stress Adaptation



SIGNIFICANTLY INCREASED

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with significantly increased stress adaptation genetic results may have a genetic profile that strongly supports their ability to cope with stress, reflecting the highest level of natural stress resilience in these analyses. Even with this advantage, regular wellness and stress management practices may further support mental and physical health.

YOUR RESULTS

Stress Phenotype



MEDIATOR

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with mediator genetic results show a balanced approach to stress, with an average response to stressful situations. Regular physical activity, balanced nutrition and relaxation techniques can support stress management.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
COMT C186T	rs4633	**TC**	**OXTR G922+4581A**	rs53576	**AG**
COMT G597A	rs769224	**GG**	**FAAH C385A**	rs324420	**AC**
MAO-A T891G	rs6323	**TT**	**ACCN2 (C>T)**	rs685012	**—**
TCF7L2 C450+33966T	rs7903146	**CC**	**HTR1B1 C861G**	rs6296	**CG**
MGLL G263-1443A	rs604300	**AG**	**HTR1A (C>G)**	rs6295	**CC**
COMT G472A	rs4680	**AG**	**CNR1 C1359T**	rs1049353	**TT**

APPENDIX A

Supplement Recommendations

Based on your results

Supplements listed below are recommended for panels where at least one result was outside the typical range.

SUPPLEMENT	RATIONALE	PANEL
Omega-3 Fatty Acids (EPA/DHA) 1,000 to 3,000 mg daily	Suppresses hypothalamic inflammation and restores leptin receptor signaling.	Hunger and Fullness Sensing
Magnesium 200 to 400 mg daily (threonate preferred)	Reduces hypothalamic oxidative stress and improves leptin receptor function.	Hunger and Fullness Sensing
Psyllium Husk Fiber 5 to 10 g daily before meals with water	Soluble fiber may increase fullness after meals and modestly support weight and blood sugar control.	Weight Gain and Weight Loss
Whey Protein 20 to 30 g after training or with a low-protein meal	May help reach daily protein targets and preserve lean mass when weight loss relies more on diet than exercise.	Weight Gain and Weight Loss
Glucomannan 1 g before meals, up to 3 times daily, with water	A viscous fiber that may promote fullness and modest weight loss when paired with a calorie-appropriate diet.	Weight Gain and Weight Loss

APPENDIX B

Further Testing Recommendations

Based on your results

Lab tests and assessments recommended for panels where at least one result was outside the typical range.

TEST / ASSESSMENT	CLINICAL RATIONALE	PANEL
Fasting Insulin	Insulin resistance and leptin resistance commonly co-occur and should be assessed together.	Hunger and Fullness Sensing
Waist Circumference and Body Composition	Leptin rises with body fat, so these measures help interpret leptin results and track progress.	Hunger and Fullness Sensing
HbA1c and Fasting Glucose	Tracks blood sugar, which may improve with exercise even when weight changes slowly.	Weight Gain and Weight Loss
Resting Metabolic Rate Test Indirect calorimetry	Measures daily calorie needs so diet targets can be set more accurately.	Weight Gain and Weight Loss
Lipid Panel	Tracks cholesterol and triglycerides, which may shift with dietary changes.	Weight Gain and Weight Loss