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**Agenda**
- Introduce DNA Genetique Weight and Wellness Profile
- Briefly review science behind report
- Show report results in detail
- Review collection procedure
- Discuss clinical implications
Introducing **DNA Genetique**:

**Overview**

- What is it?
- How does it help me help my patients?
- What information is included?
- Why is it different from other reports?

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**Remember!**

- Many different environmental factors affect genetic expression.
- Just because someone is genetically inclined toward obesity or another condition (vitamin deficiency) does NOT mean that person has that condition.
- Knowledge that one is genetically prone to a condition allows that person to change behaviors to possibly overcome the condition (change diet, add supplements, etc.).

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**The Birth of DNA Genetique**

- Fat deposition depends on two things, food intake and genetics.
- Many twin studies have confirmed that weight gain is 70% genetic.
- Scientists are continually looking for markers in the genome related to weight gain: Evaluated 48 SNPs from 36 published, peer-reviewed studies.
- We read through scientific literature to find SNPs identified as associated with increased BMI and/or fat deposition.
The Birth of **DNA Genetique**

- The **DNA Genetique Weight and Wellness Report** doubles the number of obesity SNPs over the leading competitor.
- We have reanalyzed many known important SNPs to help clarify how they impact you directly.

What the **DNA Genetique Weight and Wellness** Patient Report Contains

- Simple and easy “Genetics 101”
- Clear and concise “How to Read This Report”
- Summary of individualized most Significant Findings
- General Obesity Index
- Optimal Food Choices
- Best Choices for Exercise and Activity
- Personalized Recommendations for General Health
- Insights into Behavior Motivation
- Individualized Vitamin and Supplement Recommendations
- Published, Peer-reviewed Study References

Genetics 101 • How to Read This Report

What the Report Contains
DNA contains genetic information from mother and father and determines physical appearance and function of body systems. Each of the 3 billion base pairs in human DNA is made up of one of four molecules:

- Adenine (A)
- Thymine (T)
- Guanine (G)
- Cytosine (C)

Base pairs instruct the body on how to perform certain actions (e.g., creating enzymes for digestion, creating skin cells, etc.).

DNA replication sometimes introduces “mistakes”—changes in the base molecules from original to copy (e.g., C → G). These changes (SNPs) change the instructions DNA gives to the body; sometimes the effect is noticeable, sometimes not. Environmental and behavioral factors can influence gene expression—a specific SNP might indicate a predisposition, but this can be countered by other SNPs or by changes in environment or behavior.

**Genetics 101: Definitions**

- **DNA**: Deoxyribonucleic Acid; carries genetic information in each cell, inherited from both mother and father
- **SNP**: Single Nucleotide Polymorphism; the “mistakes” or variations in an individual base pair
- **Genotype**: The genetic makeup of an organism
- **Phenotype**: The expression of a trait based on genetic and environmental influences
This score lets you know how your body should react to food intake and fat deposition.

Given the size of the human genome and complexity of the human body, there are many factors that contribute to how your body responds to food processing.

Many known SNPs contribute to weight gain. Some affect fat processing, others affect ability to lose weight, others affect our perception of food and desire to eat unhealthy food.

The General Obesity Index takes all this important data and combines it into one number to show how strong or weak your body is at combating obesity. This should tell you how hard you might need to try to achieve your fitness goals.
Other Significant Findings

Selected “Most Interesting” findings and recommendations related to:
- Food Choices
- Exercise
- Behavior
- General Health
- Vitamins

Detailed SNP Information & Recommendations

What the Report Contains

Detail: General Obesity Index

Details on each SNP that contributes to the index
Your food choices affect the way your genes are expressed

Your choice of exercise and level of activity can affect how your genes are expressed

Even the way our body absorbs vitamins and other nutrients is related to our genes
Your Health

Gene expression, affected by diet and exercise, can have major effects on your health.

Your Behavior

How we behave in ways that affect our food choices is related to our genes.
What the Report Contains
- References and abstracts of scientific studies
- Every SNP included is based on a published, peer-reviewed study

Based on Scientific Data: Example
- Study found increased risk of obesity for AA and AT genotypes
- Also found that exercise can significantly counter this risk
- Our finding: Reduce heightened risk of obesity with regular exercise

Staff Member Stories
- Vitamin deficiencies: Started taking multi-vitamins (several staff members did this!)
- Increased ability to taste bitterness (and thus add salt): Took salt shaker off the table for whole family
- Fast-twitch muscles: Changed exercise routine to involve power exercises, began interval training
- Changed diet due to high obesity index, even though currently not overweight
1. Rinse mouth three times with water
2. Uncap both halves of swab holder
3. Collect tissue with swab by rolling on the inside of both cheeks, 30 seconds per cheek
4. Insert swab into holder, and repeat with second swab
5. Allow swabs to dry for 15 minutes, then cap holders
6. Attach Patient ID stickers—one per half of swab holder, and third on permanent office file for the patient
7. Attach swab holders together
How to do the Cheek Swab

8. Place foam piece on swab holder and insert into tube
9. Insert signed consent form
10. Insert second foam piece
11. Cap and ship—use appropriate courier service to guarantee DesBio receives within 7 days of sampling

How to do the Cheek Swab: IMPORTANT

- Tests submitted without a signed form CANNOT BE PROCESSED
- Swab must be received by DesBio within 7 days
- Test/Report Fee charged when swab received

HIPPA Compliance

- DesBio strictly complies with HIPPA
- Always use the patient number (never name or any other identifying information) when contacting DesBio for clinical support or customer service
Clinical Follow-Up

How to use these results clinically

DesBio products are available only through healthcare practitioners

DNA Genetique Weight and Wellness Profile now available!

- Practitioner Pricing:
  - DNA Genetique Kit: $30
  - DNA Genetique Test and Report: $265 ( billed when swab is received)

- MSRP: $495 (Kit + Test/Report)

- "Quick Start" Deal for live webinar attendees:
  - Get five kits for $110 (save 30%)
  - Includes printed sample report to show patients
  - Includes five printed copies of the patient information flyer

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