# HCP TAILORED EXPERIENCE

(SAMPLE REPORT)



## [PATIENT NAME]

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Weight Management

**Cognitive Health and Memory** 

Immune Health

Energy & Fitness

Cardiovascular Health

Gastrointestinal Health

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## [PATIENT NAME]'S REPORT



## THE SCIENCE BEHIND THIS REPORT

This report uses **traits** to build personalized diet, lifestyle and supplement recommendations based on genetic characteristics.

A **trait** is a specific characteristic—like blood type, right or left-handedness, and the ability to digest the lactose in milk—based on the interactions between a person's genes and the environment. Variation in genetic traits can be attributed to **SNPs** (single nucleotide polymorphisms), which are differences in a single building block in the DNA sequence.

# HOW TO READ THIS REPORT

1 TRAIT	2 SNP	RISK VARIANT	PATIENT VARIANT	PATIENT RESULT	6 IMPLICATIONS	SCIENTIFIC RATING	ASSESSMENT RECOMMENDATIONS	DIET & LIFESTYLE RECOMMENDATIONS	SUPPLEMENT RECOMMENDATIONS
Vitamin A (Retinol)	BCM01 rs7501331	CT,TT	СТ	<ul><li>!</li><li>Consider</li></ul>	Individuals with this genotype	* * * * * * 1/5	Serum retinol Adults: 32.5-78.0 mcg/	Eat more foods with vitamin A, such as	Vitamin A + Carotenoids

- 1 TRAIT: A genetic factor that determines various characteristics like how they process nutrients and toxins, how they respond to exercise, and factors impacting their brain, heart, and immune system health.
- 2 SNP (single nucleotide polymorphism): Differences in a single DNA building block that, along with the environment, influence a person's traits.
- 3 **RISK VARIANT:** Specific genetic variations where a dietary or lifestyle recommendation may improve health.
- PATIENT VARIANT: Which of the different genetic options a person has.
- PATIENT RESULT: Results will fall into 1 of 3 categories:
  Consider Action, Enhanced Benefit, or No Action. "Consider Action" appears for traits where diet and lifestyle recommendations that may improve health. "Enhanced Action" appears for traits where a dietary or lifestyle factor may lead to greater health benefits. "No Action" appears for traits that are not associated with increased needs.

- 6 **IMPLICATIONS:** Details the impact of specific traits on the body.
- SCIENTIFIC RATING: Level of scientific evidence supporting the associated effect. 5 is the highest level of evidence, 1 is the lowest (see Scientific Rating breakdown below).
- 8 ASSESSMENT RECOMMENDATIONS: Investigations that can inform the clinical picture for a specific trait.
- DIET & LIFESTYLE RECOMMENDATIONS: Nutrition advice and behavior changes that may provide a health benefit based on an individual's results.
- **SUPPLEMENT RECOMMENDATION:** A list of supplements tailored to an individual's results.

#### **SCIENTIFIC RATING BREAKDOWN**

\*\*\*\*

Based on a study of 5000 or more subjects; findings have been replicated in at least 1 additional study.

\*\*\*\*

Based on a study of 2000-5000 or more subjects; findings have been replicated in at least 1 additional study.

\*\*\*\*

Based on a study of 800-2000 or more subjects; findings have been replicated in at least 1 additional study.

Based on a study of 200-8000 subjects without replication; or 1 smaller human study (> 200 subjects) with findings that have been replicated in at least 1 additional small study.

Based on 1 smaller study without replication.



# [PATIENT NAME]'S

#### GENETIC REPORT SUMMARY:

This summary highlights the key findings of your personalized report. Based on your individual results, traits will fall into 1 of 3 categories:



**Consider Action** 



**Enhanced Benefit** 

No Action

**Consider Action** traits will appear in the High Priority Actions table. These are traits where your patient can choose to act on diet and lifestyle recommendations that may improve their health.

**Enhanced Benefit** appears for traits where they may experience greater health benefits from a dietary or lifestyle factor.

No Action appears when their trait is not associated with increased needs.

# ! HIGH PRIORITY ACTIONS

This table identifies a list of traits where a patient can make diet and lifestyle modifications that may benefit their health. Further details about each category can be found under "HOW TO READ THIS REPORT" on the previous page. "YOUR RESULT" is the same as "PATIENT VARIANT", and indicates which of the different genetic options a person has.

#### For example:

TRAIT	YOUR RESULT	SCIENTIFIC RATING*	ACTIONABLE SNPs
Folate	Consider Action	<b>★ ★ ★ ★</b> 5/5	MTHFR 1801133
Vitamin B12 (Cobalamin)	! Consider Action	* * * * * 3/5	TCN2 rs1801198

<sup>\*</sup> Level of scientific evidence supporting the associated effect. 5 is the highest level of evidence, 1 is the lowest.





# SUPPLEMENT RECOMMENDATIONS

A list of recommended supplements would display here based on a patient's High Priority Action items.

#### For example:

Folate 1000

PureGenomics® Multivitamin

PureGenomics® UltraMultivitamin

Results may continue on additional pages.

• Eat plenty of leafy green vegetables and legumes (like beans, lentils, chickpeas, and peanuts) which provide folate in a form your body can easily use.



This is a rundown of all the trait categories that are assessed. Consider Action items based on a patient's unique results will be identified by the exclamation point icon.

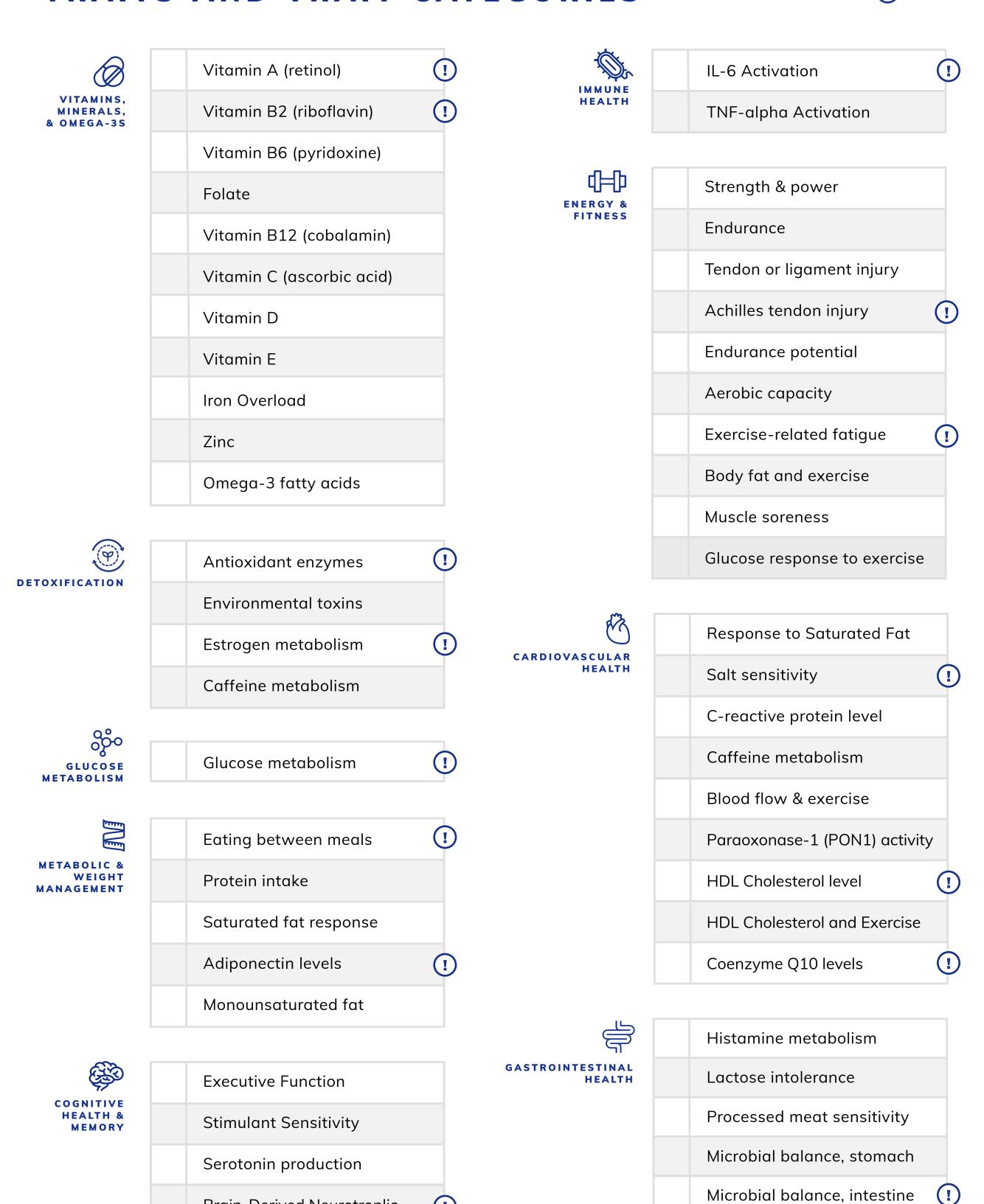
### TRAITS AND TRAIT CATEGORIES

Brain-Derived Neurotroplic

Dopamine activity status

Cannabis response

(!) = Consider Action





This is the full genetic report for all traits that are assessed. It includes "ASSESSMENT RECOMMENDATIONS"—investigations that may be helpful in determining the clinical impact of certain traits. Further details about each category can be found under "HOW TO READ THIS REPORT".

#### **GENETIC ANALYSIS**



#### **VITAMINS, MINERALS & OMEGA-3S**

These traits are responsible for the body's ability to make and/or use certain nutrients.

TRAIT	SNP	RISK VARIANT	PATIENT VARIANT	PATIENT RESULT	IMPLICATIONS	SCIENTIFIC RATING	ASSESSMENT RECOMMENDATIONS	DIET & LIFESTYLE RECOMMENDATIONS	SUPPLEMENT RECOMMENDATIONS
Vitamin A (Retinol)	BCMO1 rs7501331	СТ,ТТ	СТ	Consider Action	Individuals with this genotype may have a reduced capacity to convert betacarotene to vitamin A (retinol). This may increase the need for directly consuming vitamin A.	<b>★</b> ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★	Serum retinol Adults: 32.5-78.0 mcg/dL  Serum beta-carotene Men: 4-51 mcg/dL; Women: 6-77 mcg/dL  Both assays are useful as vitamin A status may be low and serum beta-carotene levels may be elevated due to poor conversion to retinol.	Eat more foods with vitamin A, such as organ meats (liver, kidney, etc.), eggs, cod liver oil, and dairy products. If these foods are not part of your regular diet, your health care provider may recommend a supplement.	Vitamin A + Carotenoids
Vitamin B2 (Riboflavin)	MTHFR 1801133	TΤ	СТ	No Action	This genotype has no effect on response to vitamin B2 (riboflavin).	**** 2/5	No recommendations	No recommendations	No recommendations
Folate	MTHFR 1801133	СТ,ТТ	СТ	Consider Action	Individuals with this genotype have a reduced capacity to convert folic acid and other precursors to its activated form, folate.	**** 5/5	Plasma homocysteine Normal homocysteine levels generally reflect an adequate folate, vitamin B6, and vitamin B12 status. Men: <11.4 µmol/L Women: <10.4 µmol/L RBC folate Adults: >280 ng/mL RBC	Eat plenty of leafy green vegetables and legumes (like beans, lentils, chickpeas, and peanuts) which provide folate in a form your body can easily use.	Folate 1000  PureGenomics® Multivitamin  PureGenomics® UltraMultivitamin  PureGenomics® B Complex



#### **DETOXIFICATION**

These traits are responsible for the body's ability to render toxic substances harmless and/or remove them from the body.

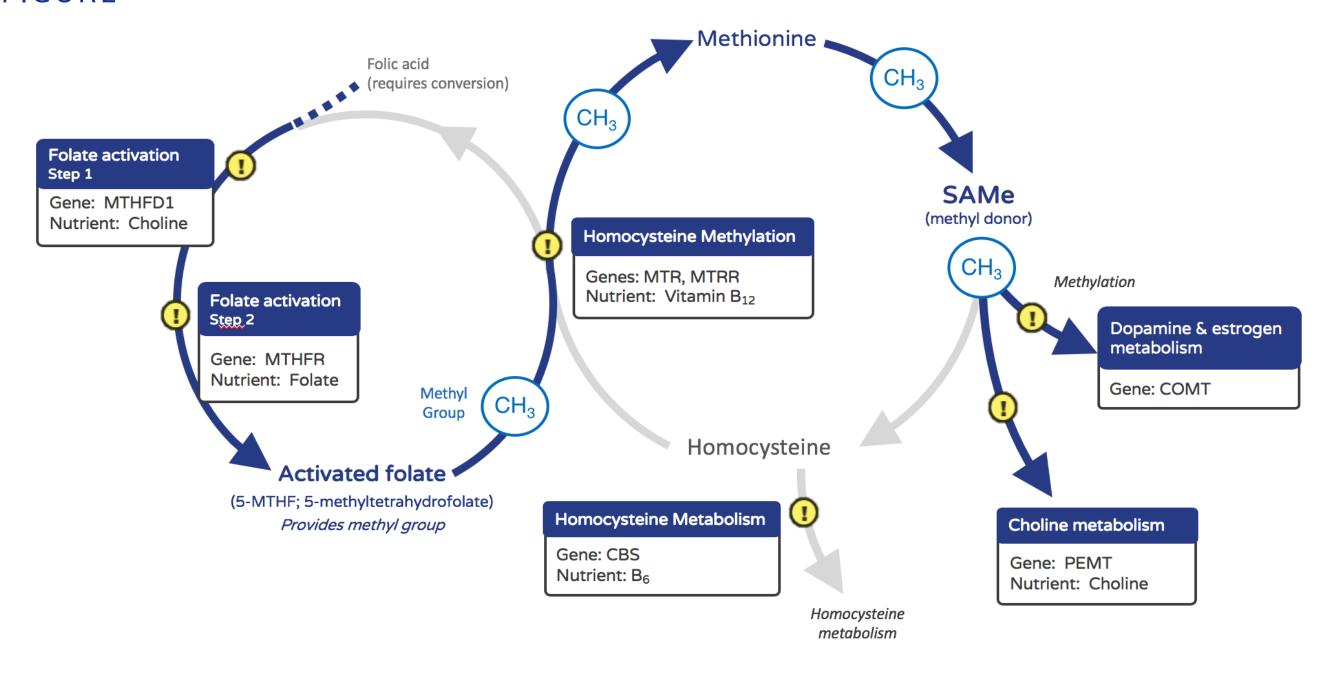
PROCESS	SNP	RISK VARIANT	PATIENT VARIANT	PATIENT RESULT	IMPLICATIONS	SCIENTIFIC RATING	ASSESSMENT RECOMMENDATIONS	DIET & LIFESTYLE RECOMMENDATIONS	SUPPLEMENT RECOMMENDATIONS
Antioxidant enzymes	GPx1P1 rs1050450	CT,TT	TT	Consider Action	The GPX1P1 enzyme is a member of the glutathione peroxidase family of enzymes. It detoxifies hydrogen peroxide, a reactive oxygen species formed during mitochondrial energy metabolism.  This genotype is associated with reduced GPX1P1 enzyme activity.	**** 5/5	NutrEval® FMV (Genova Diagnostics®) includes an analysis of antioxidant status as part of the comprehensive evaluation.  The Oxidative Stress Analysis 2.0 (Genova Diagnostics®) provides a more in-depth assessment of antioxidant defenses.  Urinary F2- isoprostanes are also useful in assessing and monitoring systemic antioxidant status.	Eat lots of fruits and vegetables. Cruciferous vegetables such as broccoli, brussel sprouts, arugula, kale, and cauliflower are best. Eat them raw or avoid overcooking them. Too much heat can destroy the vegetable's antioxidant benefits. Regular exercise can also boost your body's natural antioxidant level.	Selenomethionine Liposomal Glutathione DIM Detox Ascorbic Acid or Buffered Ascorbic Acid (capsules or powder) Nrf2 Detox



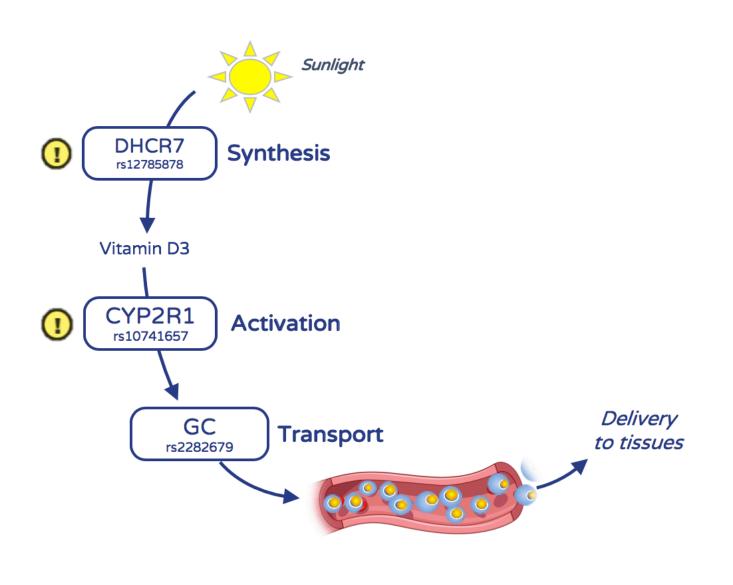
#### **DIAGRAMS**

#### **METHYLATION PATHWAY**

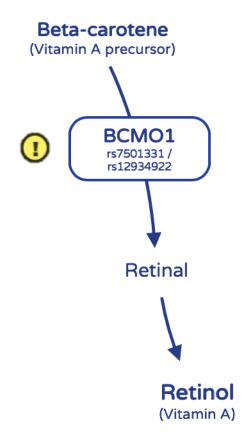
#### **FIGURE**







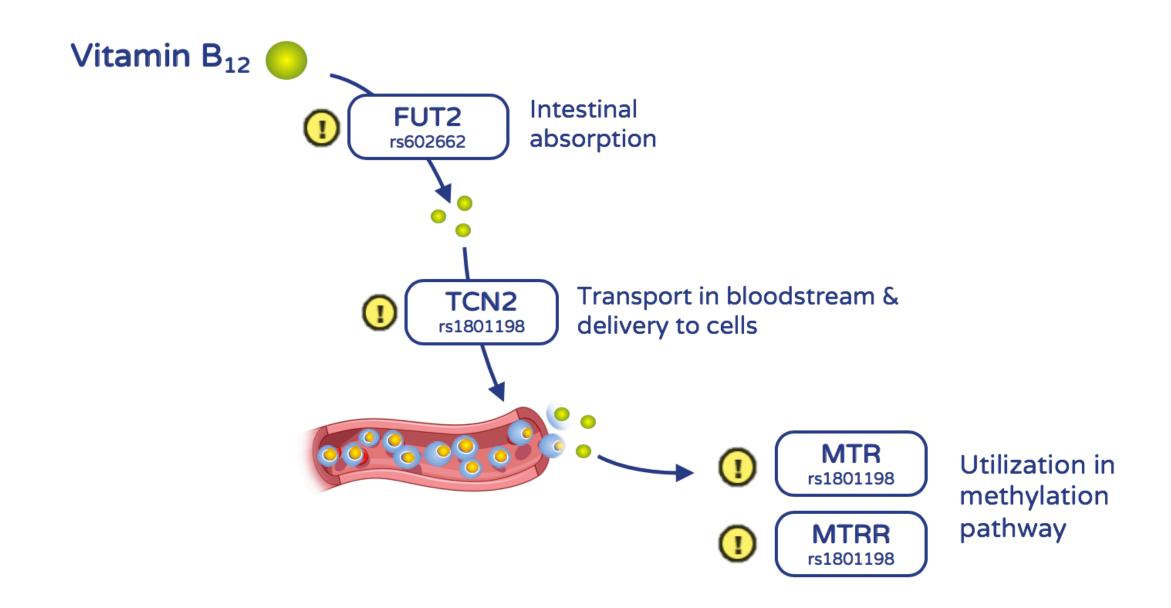
#### VITAMIN A FIGURE



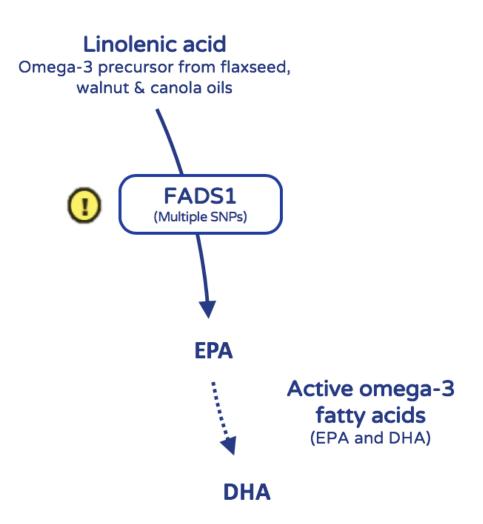


#### $\begin{array}{cccc} \textbf{VITAMIN} & \textbf{B}_{12} \end{array}$

#### **FIGURE**

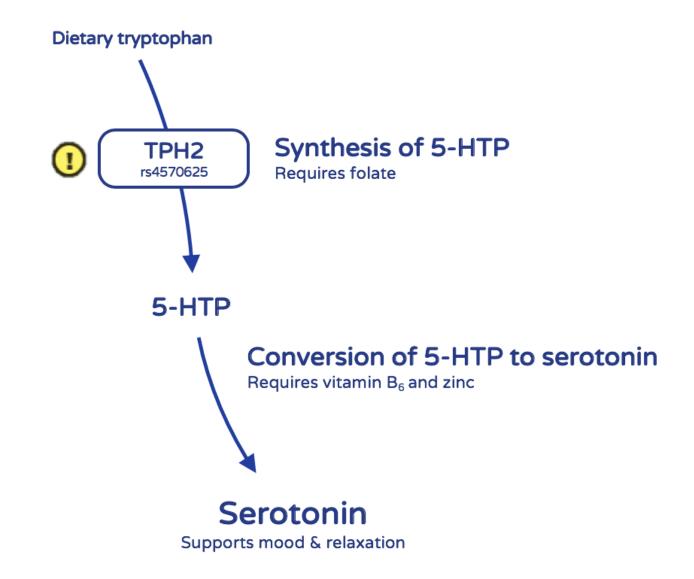


#### OMEGA-3 FIGURE



#### **SEROTONIN PRODUCTION**

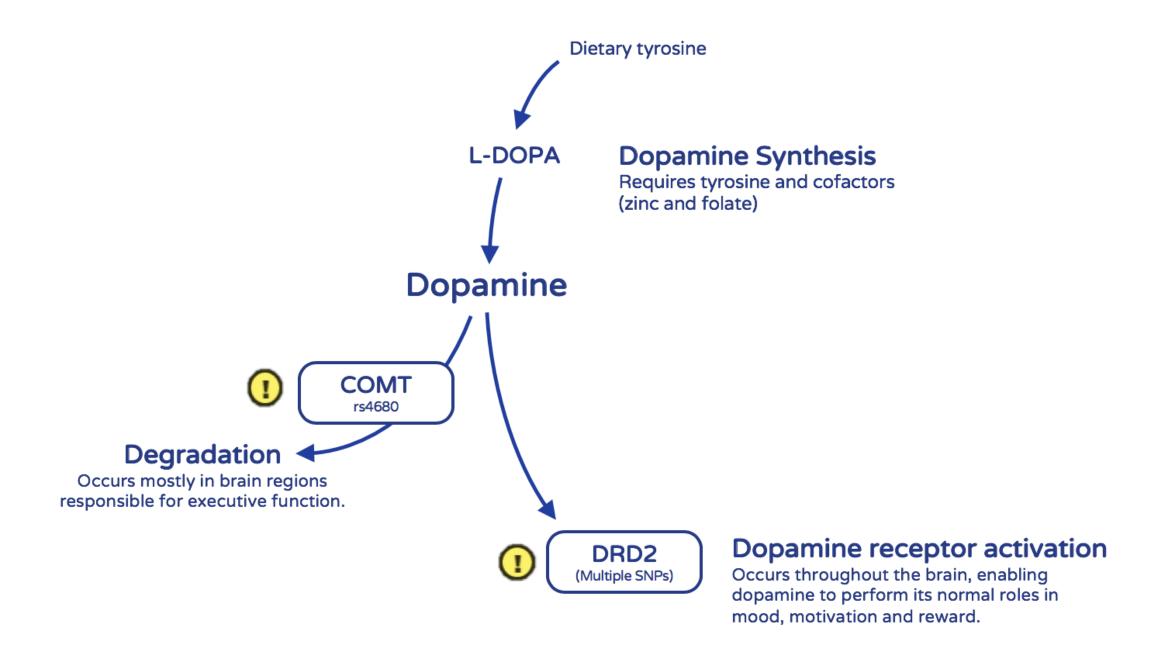
**FIGURE** 





#### **DOPAMINE SYNTHESIS & FUNCTION**

#### **FIGURE**



# PATIENT REPORT

(SAMPLE REPORT)



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Immune Health

Energy & Fitness

Cardiovascular Health

Gastrointestinal Health



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A **traits** is a specific characteristic—like blood type, right or left-handedness, and the ability to digest the lactose in milk—based on the interactions between a person's genes and the environment. Variation in genetic traits can be attributed to **SNPs** (single nucleotide polymorphisms), which are differences in a single building block in the DNA sequence.



### HOW TO READ THIS REPORT

**TRAIT:** A genetic factor that determines various characteristics like how they process nutrients and toxins, how they respond to exercise, and factors impacting their brain, heart, and immune system health.

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# [PATIENT NAME]'S GENETIC REPORT SUMMARY:

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**Enhanced Benefit** 

No Action

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**Enhanced Benefit** appears for traits where you may experience greater health benefits from a dietary or lifestyle factor.

No Action appears when your trait is not associated with increased needs.

Your healthcare provider may also recommend supplements during your genetic consultation based on your individual results.

# ! HIGH PRIORITY ACTIONS

This table identifies a list of traits suggesting where a patient can make diet and lifestyle modifications that may benefit their health. Further details about each category can be found under "HOW TO READ THIS REPORT" on the previous page. "YOUR RESULT" is the same as "PATIENT VARIANT", and indicates which of the different genetic options a person has.

#### For example:

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<b>Vitamin B12</b> (Cobalamin)	① Consider Action	* * * * * 3/5	TCN2 rs1801198

<sup>\*</sup> Level of scientific evidence supporting the associated effect. 5 is the highest level of evidence, 1 is the lowest.

# DIET & LIFESTYLE RECOMMENDATIONS

This section of the report provides nutrition advice and behavior changes that may provide a health benefit based on a patient's results.

**For example**, if folate was a High Priority Action, diet and lifestyle recommendations would be:

• Eat plenty of leafy green vegetables and legumes (like beans, lentils, chickpeas, and peanuts) which provide folate in a form your body can easily use.



A list of recommended supplements would display here based on a patient's High Priority Action items.

#### For example:

Folate 1000

PureGenomics® Multivitamin

PureGenomics® UltraMultivitamin

Results may continue on additional pages.



This page provides a patient with a more detailed analysis of their High Priority Action Traits including their genetic results (specific variants and SNPs), trait descriptions, and the implications of their results.

# [PATIENT NAME]'S GENETIC ANALYSIS GENETIC REPORT:





SNP	RISK VARIANT	YOUR VARIANT	
BCM01 rs7501331	СТ, ТТ	СТ	
BCMO1 rs12934922	AT, TT	TT	

A nutrient that maintains healthy vision, growth, cell growth, reproduction, and immune system function



#### **IMPLICATIONS**

Individuals with this genotype may have a reduced capacity to convert beta-carotene to vitamin A (retinol). This may increase the need for directly consuming vitamin A.



Eat more foods with vitamin A, such as organ meats (liver, kidney, etc.), eggs, cod liver oil, and dairy products. If these foods are not part of your regular diet, your health care provider may recommend a supplement.



Vitamin A + Carotenoids





SNP	RISK VARIANT	YOUR VARIANT	
MTHFR 1801133	тт	TT	

A nutrient that supports energy production by helping to break down the carbohydrates, proteins, and fats in the food you eat, and supports healthy blood vessel function



#### **IMPLICATIONS**

Individuals with this genotype are more likely to respond well to vitamin B2 (riboflavin) supplementation.



Foods that contain riboflavin (vitamin B2) should be part of your diet. Good sources include leafy green vegetables, lean meats, eggs, and dairy products. You are likely to benefit from supplements if you do not eat these foods regularly.



PureGenomics® B-Complex

PureGenomics® Multivitamin

PureGenomics® UltraMultivitamin