GeneCore

Complete Health Screening · 130+ Genes · 6 Health Categories · Your 45-Page Health Roadmap

PATIENT	DATE OF BIRTH	SAMPLE TYPE	SAMPLE ID
Sarah Mitchell	1986-05-14 (Age 38)	Buccal (Cheek) Swab	GM-GC-2024-03210
REPORT ID	**COLLECTION DATE**	**REPORT DATE**	**LABORATORY**
GC-2024-78392	2024-04-02	2024-04-09	Gene Matrix CLIA Lab, Chicago, IL
CLIA / NPI	**ORDERING PROVIDER**	**METHOD**	
14D2276402 / 1225729312	Self-Ordered (DTC)	Next-Generation Sequencing (NGS)	

130+	6	12	45+
GENES ANALYZED	HEALTH CATEGORIES	VARIANTS DETECTED	REPORT PAGES

/ Executive Summary

Your GeneCore screening analyzed 130+ genes across cardiovascular health, metabolic function, immune system, detoxification, bone health, and cognitive function. The headline finding is an APOE ε3/ε4 genotype, which carries increased risk for cardiovascular disease and Alzheimer's disease — most people discover this too late, and early detection changes your prevention strategy. You also carry an MTHFR variant that reduces enzyme activity affecting homocysteine metabolism, and an ACE I/D genotype indicating balanced ACE enzyme activity.

The APOE gene — carried by 25% of the population — significantly raises cardiovascular and Alzheimer's risk. GeneCore analyzes 25 cardiovascular genes and gives you a personalized prevention plan years before symptoms appear.

/ Genetic Findings

GENE	VARIANT	GENOTYPE	IMPACT	RECOMMENDATION
APOE	ε3/ε4	ε3/ε4	INCREASED RISK Increased risk for cardiovascular disease and Alzheimer's disease; altered cholesterol metabolism.	Mediterranean-style diet, omega-3 emphasis, daily exercise, and a lipid panel every 6 months. Begin cognitive-health prevention habits now.
MTHFR	C677T (rs1801133)	C/T	MODERATE IMPACT Reduced enzyme activity affecting homocysteine metabolism — can cause low energy, brain fog, and poor recovery. About 1 in 3 people carry this variant and don't know it.	Switch to methylated B vitamins (L-methylfolate 400–800 mcg + methylcobalamin) — the exact supplement form your body can actually use. Monitor homocysteine annually.

ACE	`Insertion/Deletion (I/D)`	I/D	BALANCED Balanced ACE enzyme activity — no significant increased risk for hypertension or cardiac events from this gene.	Maintain standard cardiovascular practices: regular exercise and routine blood-pressure monitoring.
FTO	`rs9939609`	A/T	MODERATE IMPACT One copy of the fat-mass-and-obesity risk allele — hunger signals and fat storage are modestly amplified on high-carbohydrate diets.	Favor a higher-protein, moderate-carbohydrate diet matched to your DNA; pair with resistance training for weight management.
CYP1A2	`rs762551`	A/C	MODERATE IMPACT Intermediate caffeine metabolism — caffeine clears your system more slowly than fast metabolizers.	Limit caffeine to 1–2 cups before noon to protect sleep quality.
VDR	`rs2228570 (FokI)`	F/f	MODERATE IMPACT Vitamin D receptor functions at reduced efficiency — standard D3 intake may not maintain optimal blood levels, affecting bone density over time.	Supplement vitamin D3 + K2 and check 25(OH)D levels annually; prioritize dietary calcium for bone health.

/ Category Overview — 6 Health Areas

How your 130+ genes distribute across the six GeneCore health categories, with your overall status in each area.

CATEGORY	RESULT	CLINICAL IMPLICATION
Cardiovascular Health	ATTENTION	APOE ε4 carrier — prevention plan indicated; all other cardiac markers within expected range.
Metabolic Function	REVIEW	FTO variant — diet-type matching recommended for weight management.
Immune System	OPTIMAL	No significant immune-risk variants detected.
Detoxification	REVIEW	CYP1A2 intermediate — moderate caffeine and medication clearance.
Bone Health	REVIEW	VDR variant — vitamin D optimization recommended.
Cognitive Function	ATTENTION	APOE ε4 — elevated long-term Alzheimer's risk; proactive brain-health protocol included.

/ Personalized Recommendations

Your Nutrition Blueprint

- Mediterranean diet pattern — olive oil, fish twice weekly, leafy greens, nuts, whole grains.
- Omega-3 supplementation (2–3 g daily EPA/DHA) to support cardiovascular and cognitive health.
- Limit saturated fat; your APOE ε4 genotype makes dietary fat management especially effective.

Supplements & Monitoring

- Methylfolate (not folic acid) 400–800 mcg daily + methylcobalamin (B12) 1,000 mcg daily for your MTHFR variant.
- Vitamin D3 + K2 daily; check 25(OH)D, homocysteine, and a full lipid panel every 6–12 months.
- Share the medication-compatibility section of your full 45-page report with any prescriber.

Long-Term Brain & Heart Health

- 150+ minutes of moderate aerobic exercise weekly — the single strongest evidence-based intervention for APOE ε4 carriers.
- Prioritize 7–9 hours of quality sleep and lifelong learning activities for cognitive resilience.
- Keep this report as your baseline; premium members receive quarterly reinterpretation as new research emerges.

Laboratory: Gene Matrix LLC · 1375 W Fulton St STE 545, Chicago, IL 60607 · CLIA ID: 14D2276402 · NPI: 1225729312 · (847) 302-9668 · support@genematrix.io · Mon–Fri 8AM–5PM CT. Testing performed in a CLIA-certified, CAP-accredited laboratory using next-generation sequencing. Analytical accuracy 99.9%. All findings reviewed by board-certified geneticists.
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