

GeneDiet

Nutrigenomics Analysis · 120+ Genes · Your Ideal Diet, Macronutrients, Sensitivities & Supplements

PATIENT Sarah Mitchell	DATE OF BIRTH 1986-05-14 (Age 38)	SAMPLE TYPE Buccal (Cheek) Swab	SAMPLE ID GM-GD-2024-05634
REPORT ID GD-2024-41587	COLLECTION DATE 2024-07-01	REPORT DATE 2024-07-08	LABORATORY Gene Matrix CLIA Lab, Chicago, IL
CLIA / NPI 14D2276402 / 1225729312	ORDERING PROVIDER Self-Ordered (DTC)	METHOD Next-Generation Sequencing (NGS)	

120+ GENES ANALYZED	6 NUTRITION CATEGORIES	21 WEIGHT-MANAGEMENT GENES	16 FOOD SENSITIVITIES TESTED
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/ Executive Summary

Your GeneDiet profile explains why generic nutrition advice may never have worked for you. You carry two copies of the FTO risk variant — your body is genetically wired to store fat differently than average, particularly on high-carbohydrate diets. Your MCM6/LCT result indicates complete genetic lactose intolerance, your VDR variant blunts vitamin D receptor response, and an MTHFR variant reduces your ability to convert standard folic acid. Your DNA-matched plan: a higher-protein, lower-carb ratio, full dairy elimination, and methylated supplement forms.

Variants in the FTO gene are found in about 44% of Europeans and raise obesity risk by up to 70%. Your genes don't make it impossible to lose weight — but they change which dietary strategy actually works for your biology.

/ Genetic Findings

GENE	VARIANT	GENOTYPE	IMPACT	RECOMMENDATION
FTO	rs9939609	A/A (two risk copies)	HIGH IMPACT Your body is genetically wired to feel hungrier and store more fat on high-carbohydrate diets — no matter what you do, willpower alone fights your biology.	Shift to a higher-protein, lower-carb macronutrient ratio. Prioritize protein at every meal to manage satiety signaling.
MCM6/LCT	rs4988235	C/C (lactase non-persistent)	HIGH IMPACT Your MCM6 gene completely shuts off lactase production after childhood — complete genetic lactose intolerance. This isn't an intolerance you developed; you were born with it.	Eliminate dairy entirely, including hidden sources like protein powders and medications. Use lactose-free or plant-based alternatives; supplement calcium and vitamin D.

VDR	rs2228570 (FokI)	f/f	MODERATE IMPACT Your vitamin D receptors don't respond properly to standard D3 — even sunny climates and standard supplements can leave you chronically deficient.	Switch to a vitamin D3 + K2 combo with a cofactor protocol (magnesium). Test 25(OH)D every 6 months until levels normalize.
MTHFR	C677T (rs1801133)	C/T	MODERATE IMPACT Reduces conversion of folic acid to its active form by 30–70% — taking the wrong form of this vitamin is a waste of money and health.	Use methylated forms only: L-methylfolate 400–800 mcg daily. Emphasize natural folate from leafy greens, legumes, and asparagus.
HLA-DQA1/DQB1	Celiac-associated haplotype	Not detected	LOW RISK No genetic predisposition to celiac disease detected; gluten sensitivity risk is low.	Gluten can remain in your diet; no restriction needed based on genetics.
CYP1A2	rs762551	A/C	MODERATE IMPACT Intermediate caffeine metabolism — an afternoon coffee can still be circulating at midnight, disrupting deep sleep.	Keep caffeine to 1–2 cups, all before noon. Avoid caffeine within 10 hours of bedtime.

/ Nutrition Category Summary

Your GeneDiet results across the six analyzed nutrition categories.

CATEGORY	RESULT	CLINICAL IMPLICATION
Macronutrient Metabolism	PERSONALIZED	Higher-protein (30%), lower-carb (35%), moderate-fat (35%) ratio matched to your FTO/PPARG profile.
Vitamin & Mineral	ATTENTION	VDR + MTHFR variants — D3+K2 and methylfolate in bioavailable forms required.
Food Sensitivities	AVOID DAIRY	Complete genetic lactose intolerance confirmed; gluten and other sensitivities negative.
Weight Management	DNA-MATCHED PLAN	FTO A/A — protein-forward eating + resistance training outperforms calorie counting for your genotype.
Taste & Behavior	NORMAL	No extreme sweet-tooth or bitter-sensitivity variants detected.
Detoxification	REVIEW	Moderate caffeine clearance — timing matters more than quantity for you.

/ Personalized Recommendations

Your Personalized Nutrition Plan

- Macronutrient targets: ~30% protein / 35% carbohydrate / 35% fat, built around lean protein, olive oil, vegetables, and low-glycemic carbs.
- Eliminate all dairy — check labels on protein powders, baked goods, and medications for hidden lactose.
- Front-load carbohydrates around workouts; keep dinners protein-and-vegetable focused.

Supplement Plan (Bioavailable Forms Only)

- Vitamin D3 + K2 with magnesium cofactor, daily with a fat-containing meal.
- L-methylfolate 400–800 mcg daily — never standard folic acid, which your MTHFR variant converts poorly.
- Calcium citrate 500 mg daily to offset dairy elimination; omega-3 (EPA/DHA) 1–2 g daily.

Sample Day on Your DNA-Matched Plan

- Breakfast: Greek-style coconut yogurt (lactose-free) with berries, walnuts, and chia seeds.
- Lunch: Grilled salmon over leafy greens with quinoa and olive-oil dressing.
- Dinner: Herb-roasted chicken with roasted vegetables; caffeine-free herbal tea after 2 PM.

Important: This is a SAMPLE REPORT provided for demonstration purposes only. It does not constitute medical advice, diagnosis, or treatment. Genetic results identify predispositions and risk factors; they do not diagnose disease. Results should be discussed with a qualified healthcare provider before making any medical, dietary, supplement, training, or medication decisions. Do not start, stop, or change any medication without consulting your prescribing physician.

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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