

The Actionable SNP Cheat-Sheet

The genetic variants that actually change what to take and eat — each cited to a real study.

If we can't cite it, we don't say it. Every line below links to a named PubMed study. A single SNP is never the whole story — treat this as an educational starting point, not a diagnosis.

I Nutrition & supplements

MTHFR · rs1801133 Methylation & B-vitamins

Prefer L-methylfolate (5-MTHF) over folic acid. It's pre-activated, so MTHFR's slow step doesn't matter.

[PubMed 38892484](#) · MTHFR genotype & methylfolate homocysteine response

CYP1A2 · rs762551 Metabolism

Slow metaboliser? Keep caffeine to the morning and cap the total — that's the lever that actually works.

FADS1 · rs174546 Nutrition & fats

Less-efficient converters benefit most from preformed EPA/DHA (fish oil, or algae oil if vegan).

PEMT · rs7946 Nutrition & liver

Prioritise choline-rich foods (eggs, liver) or a choline supplement if your intake is low.

[PubMed 37513629](#) · PEMT rs7946 modifies choline's effect on hepatic steatosis

MTRR · rs1801394 Methylation & B-vitamins

Favor methylcobalamin (the active B12 form) over cheap cyanocobalamin if you supplement.

[PubMed 37917901](#) · MTRR A66G & B12 / homocysteine status

APOA5 · rs662799 Nutrition & fats

Preformed omega-3 (EPA/DHA) is a proven triglyceride lever — more valuable for your genotype.

[PubMed 19159622](#) · APOA5 -1131T>C (rs662799) & plasma triglycerides

TCF7L2 · rs7903146 Metabolism

Diet and post-meal movement target the exact mechanism — the highest-leverage levers.

LCT · rs4988235 Nutrition & digestion

Non-persistent? A lactase enzyme with dairy, or lactose-free products, solves most of it.

GC · rs7041 Nutrition & vitamins

Test 25(OH)D rather than guessing — genetics raise risk, but your number is what counts.

CYP2R1 · rs10741657 Nutrition & vitamins

Check 25(OH)D — genetics raise risk, your blood level is the truth.

[PubMed 30120973](#) · CYP2R1 rs10741657 & 25(OH)D / deficiency risk

TMPRSS6 · rs855791 Nutrition & minerals

Don't supplement iron on genetics alone — check ferritin + iron labs first.

[PubMed 39991164](#) · TMPRSS6 rs855791 & iron status / hepcidin

II Safety flags — when the honest advice is to avoid

HFE · rs1800562

Safety

Default to avoiding iron supplements unless labs say otherwise.

[PubMed 29620054](#) · HFE C282Y & iron overload

G6PD · rs1050828

Safety

Keep vitamin C to dietary/RDA amounts — skip the megadoses and IV vitamin C.

[PubMed 38898838](#) · G6PD deficiency & vitamin C hemolysis

ALDH2 · rs671

Safety

If you flush, the dependable move is to limit or skip alcohol — there's no supplement workaround.

[PubMed 37795758](#) · ALDH2 rs671, alcohol & esophageal squamous cell carcinoma

See your result for every one of these — free.

[curaen.co](#)

Upload your 23andMe or AncestryDNA file · cited line by line · your DNA never stored.

Educational use only — not medical advice. Genetics raise or lower risk; they don't diagnose. Confirm anything that matters with a clinician and a real lab test. © Curaen · [curaen.co](#)