

## Optional Tests

### Homocysteine

Homocysteine is generated when methionine an amino acid primarily found in animal products is metabolized. Studies have shown that excess Homocysteine in the blood can damage the arteries, cause blood-clotting problems, and increase the risk of coronary artery disease, peripheral artery disease, and stroke. Heightened risk of Alzheimer's disease, dementia, and kidney disease. Depression can also be made worse in persons with high homocysteine. The drug Metformin can increase the amount in your blood. Consider getting the MTHFR genetic test if your levels are high.

### Reference Ranges for Homocysteine

Homocysteine ( umol/L )	Category
>29	Very High Risk
15 - 29	High Risk
11 - 15	Intermediate Risk
< 11	Normal
Target Range 6 - 8 mol?L	

### Supplemental Support for lowering Homocysteine

B-Complex vitamin ( co-enzymated if possible ) containing at least 50mg of B6 ( if taking the co-enzyme form P-5-P less is needed. Methyl Folate, Methyl B-12 are the best forms. Aged Garlic extract, Probiotics, SAM-E w/B-Complex

### C-Reactive Protein - CRP or hsCRP ( Highly sensitive CRP )

This test measures inflammation levels in the body. You should only get this test run if you don't have a cold or a virus or a bacterial infection. Have not had a recent injury or surgery. These will artificially raise your number.

### Supplemental Support for elevated CRP

Curcumin, Grape Seed extract, Aged Garlic extract, Green Tea, Magnesium, Fish Oils, Vitamin C, Vitamin D

### Vitamin D - 25OH Vitamin D ( Your vitamin D bank account - stored vitamin D ) ,

125 Vitamin D ( Circulating D in your blood )

Vitamin D is not actually a vitamin but a regulatory hormone. It is fat soluble so supplements need to be taken with fats. There are 2,700 binding sites for vitamin D in the body.

### Reference Ranges for Total Vitamin D

Target range 40 - 85

Below 25 Low

When you get tested every 1,000 iu's ( 25mcg's ) you supplement will generally for most people raise their vitamin D levels 8 to 10 points ( *So if your level is 25 and you want to raise it to 55 supplement with 3,000 iu's 75mcgs* )

**Vitamin D3 is the best form to use**

*All information on this paper came directly from*

*Your Blood Never Lies - How to read a blood test for a longer, healthier life*

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