



Patient: **SAMPLE**
REPORT
DOB: January 12, 1978
Sex: F

Order Number: **B123456**

Genova Diagnostics Europe
Parkgate House
356 West Barnes Lane
New Malden
Surrey, KT3 6NB
Great Britain and Northern Ireland

Blood Tests

Reference Range

		Reference Range
Coenzyme Q10, Ubiquinone (plasma)	0.35	0.43-1.49 mcg/mL
Vitamin A, Retinol (plasma)	3.24	1.05-2.97 micromol/L
Vitamin E, γ -Tocopherol (plasma)	1.98	0.50-4.70 micromol/L
Vitamin E, α -Tocopherol (plasma)	26.01	13.90-47.00 micromol/L
Lycopene (plasma)	0.92	0.11-0.80 micromol/L
Lutein (plasma)	0.92	0.14-0.74 micromol/L
β -Carotene (plasma)	1.48	0.07-0.88 micromol/L

Commentary

The performance characteristics of all assays have been verified by Genova Diagnostics, Inc. Unless otherwise noted with * as cleared by the U.S. Food and Drug Administration, assays are For Research Use Only.

Commentary is provided to the practitioner for educational purposes, and should not be interpreted as diagnostic or treatment recommendations. Diagnosis and treatment decisions are the responsibility of the practitioner.

Coenzyme Q10 (CoQ10), also known as Ubiquinone, is a powerful antioxidant which functions mainly within the mitochondria. Low plasma levels of CoQ10 are found in thyroid diseases. Exercise induces statistically lower levels of CoQ10 in the plasma. Patients with severe coronary artery disease also have lower levels than normal. Therapeutic monitoring is best utilized after at least 14 days of therapy.

Vitamin A (Retinol) is elevated. If significant elevations occur, there are three toxic situations that may occur: acute, toxic, and teratogenic. Acute symptoms occur following a large dose taken over a short period; chronic symptoms occur by the recurrent ingestion of smaller, but still large doses, over a long period; and teratogenic effects occur from toxic doses taken in early pregnancy. Patients with levels above the expected range should not supplement their diet with retinol.

Luteins are hydroxycarotenoids found in dark green vegetables. They appear to help in providing protection against atherosclerosis in populations with a high intake. Additionally, supplementation with luteins reduces the incidence of macular degeneration associated with aging.