


Vitamin A



More likely to have
higher plasma
retinol levels

Likely to have
moderate plasma
retinol levels

More likely to have
lower plasma
retinol levels

Know your gene:

The Beta Carotene Oxygenase 1 (BCO1) gene is associated with the synthesis of beta carotene oxygenase 1, an enzyme that converts precursor vitamin A into active retinol. People with certain variants of the gene were found to convert beta carotene 69% less efficiently than people without this variant.

Provitamin A carotenoids found in fruits, vegetables, and other plant-based products are turned into vitamin A by your body, having variation in BCO1 gene could result in lower plasma retinol levels.

Interpretation:

Your gene indicates you have lower BCO1 enzyme activity. Your body cannot efficiently convert provitamin A (beta-carotene) into active vitamin A (retinol).

