25-(OH) Vitamin D

1-alpha-hydroxylase

1,25-(OH)2 Vitamin D

Low
Middle
High

Low calcium absorption
Osteoporosis
Poorly formed granulomas

Possible associations
Cancer
Diabetes
Hypertension
Multiple sclerosis

High calcium absorption
Hypercalcemia
Hypercalcuria
Osteoporosis??

Enzyme activated by:
Sun light
Hypocalcemia
Sarcoidosis granulomas