Carnitine
Boosts dopamine, which is directly related to testosterone levels; May prevent testosterone decline after intense physical stress.21,22,23,24

Folate
Deficiency reduces circulating testosterone; Evidence suggests testosterone may regulate folate metabolism.1,2,3

Vitamin B6
Regulates sex hormones; Vitamin B6 reduces prolactin which stimulates hypothalamus to increase testosterone; B6 also a cofactor for dopamine synthesis which influences testosterone levels.4,5,6,7

Vitamin D
Actually a hormone, vitamin D regulates the synthesis of testosterone; Supplementation can significantly increase total, free and bioactive testosterone levels.8,9,10,11,12

Vitamin E
Long term administration of some forms of vitamin E may reduce testosterone levels.16,17

Vitamin K
Deficiency reduces testosterone production because the rate-limiting enzyme for testosterone synthesis (Cyp11a) is vitamin K dependent.13,14,15

Vitamin C
Studies suggest it protects prostate from testosterone induced tumors.18,19,20

Zinc
Deficiency lowers testosterone levels; Inhibits prolactin secretion (testosterone inhibiting hormone); Supplementation increases testosterone depending on baseline levels.28,29,30,31

Magnesium
Makes testosterone more biologically active in the body; Raises free and total testosterone levels in men.25,26,27

Vitamin K
Deficiency reduces testosterone production because the rate-limiting enzyme for testosterone synthesis (Cyp11a) is vitamin K dependent.13,14,15

Testosterone

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REFERENCES


5Ren S, Melmed S, Pyridoxal phosphate inhibits pituitary cell proliferation and hormone secretion. Endocrinology 2006;147:3936-3942.


23Auble T, Kritzer M. Androgen influence on prefrontal dopamine systems in adult male rats: localization of cognate intracellular receptors in medial prefrontal projections to the ventral tegmental area and effects of gonadectomy and hormone replacement on glutamate-stimulated extracellular dopamine level. Cereb Cortex 2012;22:1799-1812.


