Vitamin K  Poor vitamin K status linked to excess fat tissue; Vitamin K helps metabolize sugars.\(^{35,36}\)

Vitamin E  Inhibits pre-fat cells from changing into mature fat cells, thus reducing body fat.\(^{10,31,32}\)

Vitamin D  Deficiency strongly linked to poor metabolism of carbohydrates; Genes that are regulated by vitamin D may alter the way fat cells form in some people.\(^{8,33,34}\)

Vitamin A  Enhances expression of genes that reduce a person's tendency to store food as fat; Reduces the size of fat cells.\(^{10,29,30}\)

Vitamin B3 (Niacin)  Treatment with B3 increases adiponectin, a weight-loss hormone secreted by fat cells; Niacin-bound chromium supplements helped reduced body weight in clinical trials.\(^{26,27,28}\)

Asparagine  This amino acid increases insulin sensitivity which helps the body store energy in muscle instead of storing it as body fat.\(^{1,2}\)

Biotin  Boosts metabolism by improving glycemic control (stabilizes blood sugar) and lowering insulin, a hormone that promotes fat formation.\(^{34,35}\)

Carnitine  Carries fatty acids into the cell so they can be burned for fuel; Helps reduce visceral adiposity (belly fat).\(^{6,7}\)

Calcium  Inhibits the formation of fat cells; Also helps oxidize (burn) fat cells.\(^{8,9,10}\)

Lipoic Acid  Improves glucose uptake into cells, which helps a person burn carbohydrates more efficiently.\(^{11,12,13}\)

Chromium  Makes the body more sensitive to insulin, helping to reduce body fat and increase lean muscle.\(^{14,15,16,27,28,4}\)

Vitamin B5  Taking B5 lowers body weight by activating lipoprotein lipase, an enzyme that burns fat cells. One study linked B5 supplementation to less hunger when dieting.\(^{17,18}\)

Magnesium  Low magnesium in cells impairs a person's ability to use glucose for fuel, instead storing it as fat; Correcting a magnesium deficiency stimulates metabolism by increasing insulin sensitivity. Magnesium may also inhibit fat absorption.\(^{19,20,21}\)

Inositol  Supplementation may increase adiponectin levels.\(^{25}\)

Cysteine  Supplementation with this antioxidant reduced body fat in obese patients.\(^{24}\)

Glutamine  Reduces fat mass by improving glucose uptake into muscle.\(^{22,23}\)
REFERENCES


