**WEIGHT MANAGEMENT**

**Vitamin K**
Poor vitamin K status linked to excess fat tissue; Vitamin K helps metabolize sugars.  

**Vitamin E**
Inhibits pre-fat cells from changing into mature fat cells, thus reducing body fat.  

**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.  

**Vitamin A**
Enhances expression of genes that reduce a person’s tendency to store food as fat; Reduces the size of fat cells.  

**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.  

**Asparagine**
This amino acid increases insulin sensitivity which helps the body store energy in muscle instead of storing it as body fat.  

**Biotin**
Boosts metabolism by improving glycemic control (stabilizes blood sugar) and lowering insulin, a hormone that promotes fat formation.  

**Carnitine**
Carries fatty acids into the cell so they can be burned for fuel; Helps reduce visceral adiposity (belly fat).  

**Calcium**
Inhibits the formation of fat cells; Also helps oxidize (burn) fat cells.  

**Lipoic Acid**
Improves glucose uptake into cells, which helps a person burn carbohydrates more efficiently.  

**Chromium**
Makes the body more sensitive to insulin, helping to reduce body fat and increase lean muscle.  

**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.  

**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.  

**Zinc**
Deficiency of zinc reduces leptin, a beneficial hormone that regulates appetite, which is reversed by zinc repletion.  

**Inositol**
Supplementation may increase adiponectin levels.  

**Cysteine**
Supplementation with this antioxidant reduced body fat in obese patients.  

**Glutamine**
Reduces fat mass by improving glucose uptake into muscle.  

**Asparagine**
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