

Nutrition and inflammation

INFLAMMATION



Working mechanism	Ratio ↑, LA↑: -Lipoxins/resolvins/protectins↓ -Pro-inflam. cytokines↑ like IL6, TNFα, CRP -via P450 → leukotoxins/diols → ROS ↑, AP-1 ↑ -Cell wall EPA, DHA↓ -Desaturase/elongase↓	Hypoglycaemia, stress via SAM/HPA↑↑ Low grade inflammation Immune suppression Hyperinsulinemia - Androgens↑, IGF↑ GH↓, IL-6↑ etc Empty calories	Body fat (VAT,SAT)↑ Insulin resistance↑ ROS↑ IL6↑ CRP↑ Leptin↑ Resistin↑	Bind to gut, gut permeability ↑ -IMS activation -Low grade inflammation -Auto-immune diseases, via molecular mimicry
Nutrition	Vegetable oils (not olive,coconut, cocoa) Margarine, Dairy, Cereals, Meat (not wild) Nuts: peanuts, cashew	Refined carbs (bread,potatoes, rice, etc) Sugar (sweeties, cookies)	High calorie diet: Calorie intake > Energy expenditure	Harmful Saponins (legumes, cereals, soy, tomatoes, etc) Lectins (cereals, legumes) Gliadin (gluten)
Factors	Ratio Ω6:Ω3	Glycemic index/load	Calories	Anti-nutrients

RESOLUTION



Nutrition	Fish Walnuts Flaxseed Chloroplast –green leaves vegetables	Slow carbs: vegetables, nuts GL ↓: fruit Fibers↑	Low calorie diet: Calorie intake < Energy expenditure	Avoid harmful saponins, lectins and gliadin
Working mechanism	Ratio ↓, ALA↑: -Lipoxins/resolvins/protectins↑ -Block pro-inflammatory cytokines production -Cell wall EPA, DHA↑	-Regulation of blood sugar and insulin levels: Inflammation markers↓ -Micro nutrients↑	Body fat (VAT,SAT)↓ Insulin resistance ↓ ROS↓ IL6↓ CRP↓ Leptin↓ Resistin↓	Repair gut, avoid intestin permeability: Foreign proteins in periphery ↓, IMS↓