Liver Detoxification & Required Nutrients

Toxins (fat soluble)



Phase I



Intermediary Stage

(less fat soluble)

substances

Highly reactive

Required Nutrients

Riboflavin (Vit B2)
Niacin (Vit B3)
Pyridoxine (Vit B6)
Folic Acid
Vitamin B12
Glutathione
anched-chain amino aci

Branched-chain amino acids Flavonoids Phospholipids

Toxin List

Endotoxins: end products of metabolism, bacterial endotoxins

Extotoxins: drugs (prescription, OTC, recreational), agricultural chemicals, food additives, household, microbial, pollutants/contaminants

Antioxidant Protective Nutrients

Carotenes (Vit A)
Coenzyme Q10
Ascorbic Acid (Vit C)
Thiols (found in garlic, onions, cruciferous vegetables)
Tocopherols (Vit E)
Selenium
Copper
Bioflavanoids
Zinc
Silymarin
Manganese

Pycnogenol

Required Nutrients

Amino Acids

Phase II

N-acetylcysteine
Glycine
Taurine
Glutamine
Cysteine
Methionine

Eliminated from the body via:

Waste Products

(water soluble)





