

Phases of Liver Detoxification

Toxins

Pesticides
Heavy Metals
Factory Chems
Pollutants
Fire Retardant
Plastic
Pathogens
Drugs
Alcohol

Phase 1

Break Down:
Cytochrome
P450 Enzymes
(Use chemical
processes to
break down
toxic
chemicals)

Phase 2

Conjugation:
(Glutathione
Cysteine
Glycine
Sulphur)
Bind to Toxins
for
Elimination

Elimination

Kidneys
Stool
Perspiration

This Entire Process is Called Biotransformation

Broccoli

Like kale, broccoli is also a rich source of antioxidant glucosinolates.

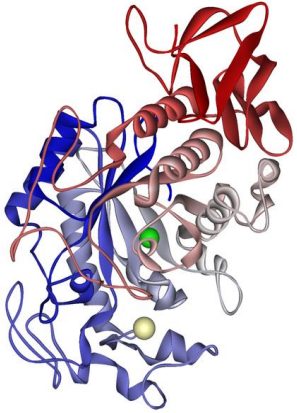
Glucosinolates are hydrolyzed to form a **highly bioactive antioxidant called sulforaphane**.

Sulforaphane has been studied extensively over the years, and it has consistently demonstrated a wide range of health promoting benefits.

For instance, a 2008 randomized, placebo-controlled dose escalation trial found that eating a little less than 1 cup of broccoli sprouts **“increases Phase II antioxidant enzymes” in inflamed human airway cells**.

Other recent studies have found that “breast cancer risk in premenopausal women is **inversely associated** with consumption of broccoli.”

Broccoli's antioxidant sulforaphane provides the human body with fuel to conduct a powerful detoxification process called **liver enzyme induction**.



Liver enzyme induction can give your body a boost by making your liver detoxification processes **more effective** against **mutagenic chemicals** that can harm our DNA.

The development of cancer “is a complex and protracted multistage process,” however a **single mutagenic event** can begin the entire process of cancer.

Liver enzyme induction is a weapon that our body can use to hopefully protect our cells from events that can trigger cancer growth in the first place.