



# International Journal of Pharmaceuticals and Health care Research (IJPHR)

IJPHR | Vol.12 | Issue 3 | Jul - Sept -2024

www.ijphr.com

ISSN: 2306-6091

DOI : <https://doi.org/10.61096/ijphr.v12.iss3.2024.215-219>

## Review

**NUDETOX CAPSULES: A blend of food ingredients, nourishing herbs, antioxidants, amino acids and minerals helps to support the intensive cleaning of body's toxins from internal organs and tissues.**



**Govind Shukla<sup>1</sup>, Dr. Chandramauli<sup>2</sup>, Dr. Balaswamy N.G<sup>3</sup>, Dr. Rajkumar<sup>4</sup>, C.J. Sampath Kumar<sup>5</sup>**

*Pugos Nutrition Research Centre, A unit of PUGOS Products Pvt. Ltd.*

*42, 2<sup>nd</sup> Floor, Leelavathi Mansion, 6<sup>th</sup> Cross, Margosa Main Road Malleshwaram Bangalore-56003, India.*

\*Author for Correspondence: Govind Shukla

Email: [lactonovaresearch44@gmail.com](mailto:lactonovaresearch44@gmail.com)

|   |   |
|---|---|
|    | <b>Abstract</b>   |
| Published on: 26 Sept 2024  | <p>The body's ability to rid itself of toxic substances is largely dependent upon the liver. Overexposure to environmental toxins in the air and in our diet can put excessive strain on the liver's detoxification systems and can rob us of our health. Detoxification in the liver occurs in two general phases: Phase I and Phase II. Depending upon the availability of many critical nutrients, the activity of either phase may be reduced or enhanced. Adequate nutritional supplement like Nudetox capsules helps to insure proper functioning of both phases of detoxification. Scientific research has revealed that Nudetox capsule is helpful in detoxification &amp; cleansing of our Toxic metabolic products. This review summarises the current available scientific literature regarding the Nutritional detoxification &amp; Cleansing of body's toxins from internal organs and tissue.</p> |
| Published by:<br>DrSriram Publications  |   |
| 2024  All rights reserved.<br><br><a href="https://creativecommons.org/licenses/by/4.0/">Creative Commons Attribution 4.0 International License.</a> |   |
|   | <b>Keywords:</b> nudetox capsules, amino acids  |

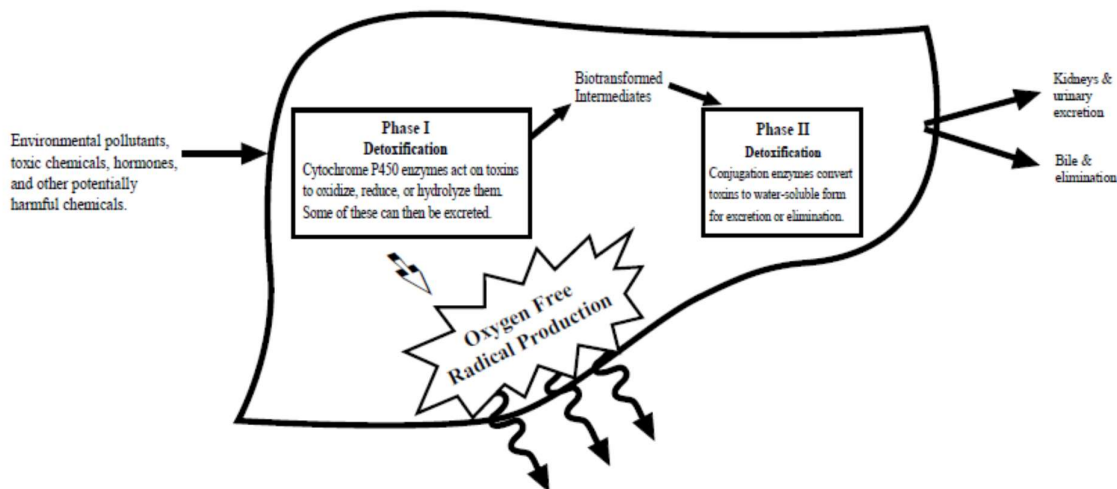
## INTRODUCTION

The liver is the most important organ in the body involved in detoxification. It is in the liver where toxic substances, such as drugs, alcohol, and environmental toxins, undergo a process called biotransformation which renders them less harmful and helps to facilitate their removal from the body.[1]

Liver detoxification involves a number of enzymatic systems which are divided into two general phases: Phase I and Phase II. Phase I involves the activation of a series of enzymes called the cytochrome P450 mixed-function oxidases. These enzymes begin the process of biotransformation by oxidizing, reducing, or hydrolyzing toxins, creating biotransformed intermediates. Phase II enzymes perform conjugation reactions which help to convert the biotransformed intermediates from Phase I into less toxic, water-soluble substances that are easily

excreted or eliminated from the body. Phase II enzymes may also catalyze reactions independent of Phase I activity, acting directly upon a drug or toxin that does not require biotransformation.

In some instances, Phase I enzymes can actually transform a non-toxic foreign substance into a harmful, toxic substance. For example, a relatively harmless component of cigarette smoke is biotransformed during Phase I into a carcinogenic compound. A properly functioning Phase II system should, however, act to detoxify the metabolically activated carcinogen. To effectively eliminate biotransformed intermediates, Phase II enzyme activity must be in balance with Phase I, otherwise toxins may accumulate in the body. Another potentially damaging effect of Phase I is the production of oxygen free radicals that occurs as a result of cytochrome P450 activity. As a person's toxin load increases, so does cytochrome P450 activity, which can expose the liver to greater oxidative stress. Adequate intake of Natural antioxidants in Nudetox capsules naturally occurring phytochemical compounds present in Nudetox capsules helps to protect the liver against free radical damage thus played effective role in Detoxification & Cleansing Program in Human body.



### BALANCED NUTRITION SUPPORT BY NUDETOX CAPSULES IN DETOXIFICATION ENZYME ACTIVITY

Adequate nutritional Support by Nudetox capsules helps to insure proper functioning of both Phase I and Phase II detoxification and to reduce the risk of free radical damage produced during the detoxification process. Several nutrients in Nudetox capsules are required for cytochrome P450 activity. Glutathione and the amino acid cysteine help to regulate Phase II conjugation reactions. The activity of each phase may be reduced or enhanced depending on the availability of critical nutrients.[2,3]

### PHYTOCHEMICAL COMPOUNDS IN NUDETOX CAPSULES SUPPORT DETOXIFICATION

Nudetox capsules helps to protect the liver against free radical damage thus played effective role in Detoxification & Cleansing Program in Human body.

Population studies from around the world have consistently shown that diets rich in fruits and vegetables are associated with lower risks of cancer.[4] These findings suggest that the antioxidant activity of several vitamins and minerals present in fruits and vegetables plays a protective role against cell damage or mutation caused by free radicals. But what may also be beneficial are the multitude of nonnutrient compounds (phytochemicals) that are present in plant foods.[5-9] Some compounds may act as blocking agents: they prevent, or *block*, carcinogens from reaching or reacting with critical target sites in tissue. Others may act as suppressing agents, compounds which suppress the growth and change of cells that have been exposed to carcinogens and would otherwise cause cancer. [10]

Mechanisms by which Nudetox capsules played effective role in Detoxification & Cleansing Program in Human body.

- Inhibit the biotransformation of noncarcinogenic compounds into carcinogenic compounds.
- Induce detoxification enzyme pathways-including Phase II enzymes which facilitate the removal of carcinogens from the body.
- Scavenge free radicals.

**Table 1: List of phytochemicals that have been identified as blocking agents**

| COMPOUND               | SOURCE   |
|------------------------|--|
| isothiocyanates        | cruciferous vegetables (broccoli, cabbage, kale) |
| glucosinolates         | cruciferous vegetables                           |
| organosulfur compounds | <i>Allium sp.</i> (garlic, onions)               |
| curcumin               | turmeric   |
| flavonoids             | numerous plants                                  |
| monoterpenes           | citrus peel                                      |

Table 1 Shows list of some of the phytochemicals that have been identified as blocking agents.

#### CLINICAL STUDY DATA ON INGREDIENTS IN NUDETOX CAPSULES

In several studies, laboratory animals fed a crude, unrefined diet composed of natural constituents containing both nutrients and nonnutrients developed fewer carcinogeninduced tumors than animals fed the same diet, but refined and devoid of the nonnutrient components of food.[11-13] Higher levels of Phase II enzyme activity were also reported.[14,15] Phytochemicals in Nudetox capsules may thus offer support for liver detoxification of foreign chemicals and carcinogens.

#### COMPOSITION OF NUDETOX CAPSULES

| <b>Supplement Facts</b>      |                             |
|------------------------------|-----------------------------|
| Serving size : 1 Capsule     | Servings per container : 60 |
| <b>Each Capsule Contains</b> |                             |
| Silymarin Extract            | 50mg                        |
| N-Acetyl-L-Cysteine          | 40mg                        |
| Alpha Lipoic Acid            | 50mg                        |
| L-Leucine                    | 30mg                        |
| L-Valine                     | 27mg                        |
| L-Isoleucine                 | 27mg                        |
| L-Glycine                    | 27mg                        |
| Grape Seed Extract           | 34mg                        |
| Sodium Molybdate             | 3mcg                        |
| DL-Methionine                | 27mg                        |
| Taurine                      | 27mg                        |
| L-Glutamine                  | 27mg                        |

#### WHY BODY DETOXIFICATION IS IMPORTANT?

- Due to pollution, tens of thousands of toxic chemicals have been introduced into our environment. Added to this, use of alcohol, tobacco, prescription and illicit drugs has made it a challenging task for the body to get rid of these chemicals.
- Removal of these toxic elements or body detoxification becomes very important for a healthy living.
- The Liver carries the greatest burden of detoxifying the foreign substances that are toxic to the body. It plays a major role in the detoxification of numerous substances in the body, whether these substances come from the environment, from food or formed within the body (from hormones) and other substances).

#### WHAT IS NUDETOX?

- Nudetox is a blend of food ingredients, nourishing herbs, antioxidants, amino acids and minerals together are mainly required for liver detoxification.
- These beneficial ingredients help to support the intensive cleaning of the tissues.
- The unique combination promotes healthy detoxification.

## **PHARMACOLOGICAL ACTION OF NUDETOX CAPSULES**

### **GRAPE SEED EXTRACT**

Antioxidant with its flavonoid phytonutrients helps to detoxify liver from toxins, drugs and supports immunity.

### **N-ACETYL CYSTEINE**

It is a precursor of L-glutathione and eliminates xenobiotics and intestinal endotoxins.

### **ALPHO LIPOIC ACID**

Powerful antioxidant that helps to remove toxins and byproducts of fat metabolism.

### **SILYMARIN EXTRACT**

A natural herb that has antioxidant and anti-inflammatory properties. It helps to protect the liver functions against environmental toxins.

### **TAURINE AND GLYCINE**

Helps to support healthy metabolism and elimination of xenobiotics. They help to support the metabolic integrity of mitochondria.

### **MINERALS**

To neutralize the toxins involved in protein metabolism.

### **AMINO ACIDS**

Helps to eliminate heavy metals such as mercury and arsenic and also helps to support glutathione production and healthy cell cycling activity. They help to manufacture phase I detoxification enzymes.

### **INDICATIONS**

NUDETOX CAPSULES are indicated for Nutritional Detoxification & Cleansing of body's toxins from internal organs and tissues.

### **CONTRA-INDICATIONS**

Known contraindications to any ingredients of the supplement.

### **DOSAGE AND DIRECTIONS FOR USE**

Take 1-2 Nudetox capsules daily for up to three months.

It is taken preferably with meals or as directed by a physician, licensed nutritionist. or certified trainer

### **SAFETY**

Nudetox capsules has an excellent safety record in both animal & human investigations, should be considered as a supplement of choice.

Nudetox capsules is generally regarded as safe when taken in the recommended doses; however, mild reactions can include gastrointestinal problems, such as nausea.

Nudetox capsules is generally well tolerated. Because of lack of long-term safety data, it should be avoided by pregnant women and nursing mothers.

### **SIDE-EFFECTS**

Epigastric pain/tenderness, heartburn, diarrhea and nausea, flushing.

### **SPECIAL PRECAUTIONS**

Take Nudetox capsules with or directly after meals to lessen the possibility of gastrointestinal upset.

It should be avoided by pregnant women and nursing mothers.

### **STORAGE CONDITIONS**

Store in a cool & dry place, protected from light.

Keep out of reach of children.

### **STORAGE LIFE IS 2 YEARS**

The preparation should not be used after the expiry date.

## SUMMARY AND CONCLUSION

Good nutraceutical supplement like Nudetox capsules which is rich in Bioavailable Natural essential nutrients, helps to ensure a healthy, properly functioning detoxification system. In addition, recent research suggests that many of the phytochemicals found in Nudetox capsules supports liver detoxification and are associated with a reduced risk of cancer. Several of these plant compounds appear to induce Phase II enzymes which may inhibit carcinogenesis by detoxification. Induction of Phase II enzymes, such as quinone reductase and glutathione S-transferase, appear to have a protective effect in a number of experimental animal studies. Clinical studies further support the health promoting effects of Nudetox capsules.

## REFERENCES

1. Hilleman B. Multiple chemical sensitivity. *C&EN* July 22, 1991:26-42.
2. Rooney PF, et al. A short review of the relationship between intestinal permeability and inflammatory joint disease. *Clin and Exper Rheumatol* 1990;8:75-83.
3. Smith MD, et al. Abnormal bowel permeability in ankylosing spondylitis and rheumatoid arthritis. *J Rheumatol* 1985;12:299-305.
4. Steventon GB, et al. Xenobiotic metabolism in Alzheimer's disease. *Neurology* 1990;40:1095-98.
5. Steventon GB, et al. Xenobiotic metabolism in Parkinson's disease. *Neurology* 1989;39:883-87.
6. Vander AJ, Sherman JH, Luciano DS. Nonimmune metabolism of foreign chemicals. *Human Physiology the Mechanisms of Body Function*. 1994:738-740.
7. Anderson KE, Kappas A. Dietary regulation of cytochrome P450. *Annu Rev Nutr* 1991;11:141-167.
8. Bland JS. Detoxification and rejuvenation. The 20-day rejuvenation diet program. 1997:105-120.
9. Block G, et al. Fruit, vegetables, and cancer prevention: a review of the epidemiological evidence. *Nutr Cancer* 1992;18(1):1-29.
10. Wattenberg LW. Chemoprevention of cancer. *Cancer Res* 1985;45:1-8.
11. Goud VK et al. Effect of turmeric on xenobiotic metabolizing enzymes. *Plant Foods Hum Nutr* 1993;44(1):87-92.
12. Maltzman TH, et al. Effects of monoterpenoids on in vivo DMBA-DNA adduct formation and on phase I hepatic metabolizing enzymes. *Carcinogen* 1991;12:2081-2087.
13. Elegbede JA et al. Effects of anticarcinogenic monoterpenes on phase II hepatic metabolizing enzymes. *Carcinogenesis* 1993;14:1221-1223.
14. Azuine MA, Bhide SV. Chemopreventive effect of turmeric against stomach and skin tumors induced by chemical carcinogens in Swiss mice. *Nutr Cancer*. 1992;17:77-83.
15. Susan M, Rao MNA. Induction of glutathione S-transferase activity by curcumin in mice. *Arzneim-Forsch/Drug Res* 1992;42:962-964.
16. Goud VK, et al. Effect of turmeric on xenobiotic metabolizing enzymes. *Plant Foods Hum Nutr* 1993;44:87-92.