

Chlorophyllin: The Power of Nature on Your Side

A recent blockbuster movie, Iron Man 2, depicts the struggle of an ego-centric genius who saves the world from destruction using a near-indestructible power suit that is powered by a micro-nuclear reactor embedded in his chest. Our hero desperately tries to thwart the crippling effects of the reactor's radiation by consuming large amounts of Chlorophyll.

While the story is pure fiction, the detoxifying powers of chlorophyll are not. Iron Man using it to protect himself from radiation poisoning is not far-fetched. Though limited, studies conducted on mice in China in 2003 found that supplemented Chlorophyll greatly reduced that amount of oxidative damage suffered from chemical carcinogens as well as radiation.

Back in the 40s and 50s, chlorophyll was used for two purposes, mainly to reduce internal body odor in hospital patients with bowel disorders and as a topical wound healer. While being somewhat effective in these two areas, the more recently discovered powers of chlorophyll dwarf these in comparison.

Chlorophyll is a unique molecule. Its shape makes it very effective in binding with particular types of molecules, predominantly those that are toxic and carcinogenic. These substances target and damage DNA and other parts of the cell, often resulting in an increased risk on cancerous mutation. In order for these toxins to be able to do this kind

of damage, they must first be metabolically 'activated'. If chlorophyll is bound to these toxic molecules, it effectively interferes with the metabolic process preventing the activation. When this was discovered and proven in various animal studies throughout the world during the 1980s, it sparked the hopes of many medical researchers looking for ways to reduce the incidences of cancer, not only in the Western world, but also in the developing world especially.

In the late 1990s, Dr. Thomas Kensler of Johns Hopkins University traveled to the Yangxi delta region of rural China where ten percent of the adult population died of liver cancer. This cancer had two factors: hepatitis B, an endemic illness that causes inflammation in the liver, and the other cause is aflatoxin B1, a mold that forms on improperly stored grains and legumes, namely corn, peanuts, soybeans and other staple foods in the hot and humid regions of Asia and Africa. The aflatoxin is ingested daily and unavoidably for the people of this region.

Dr. Kensler and his team began a 16 week double-blinded, placebo-controlled trial where 180 healthy adults were given a dose of chlorophyllin, a water-soluble and more stable form of chlorophyll. The 180 adults were divided into two groups of 90. One group was given chlorophyllin with each meal and the other placebo tablets. Regular blood and urine analysis was conducted.

Needless to say, one cannot conclude from a mere sixteen weeks if a person will never develop liver

cancer, such a study would require 20 years of research over a lifetime to determine. What the team could monitor, however, was the metabolic byproduct of aflatoxin-induced DNA damage. The team monitored a well-known biomarker that was excreted in urine within hours of aflatoxin consumption. This particular biomarker is the result of aflatoxin B1 that has come into contact with, and damaged, DNA.

In 2001, the results of the study were revealed. The results were incredible. Chlorophyllin reduced the incidence of the biomarker by over 50% compared to placebo! The implications were incredible. This meant that chlorophyllin alone; a non-toxic, inexpensive food-coloring agent could hold the key to reducing the liver cancer death rate in China by half!

Since that time, more and more studies have been done to test the protective properties of chlorophyllin against other types of toxins.

Chlorophyllin has been shown to help neutralize and eliminate toxins and carcinogens in such substances as:

- Cigarette Smoke
- Airborne particles
- Gas and diesel fumes
- Heterocyclic amines (toxins in cooked and fried meats)
- Mold aflatoxins

When toxins are neutralized in the intestines and passed harmlessly through the body to excretion, they not only are prevented from damaging the body, the overall toxic

load of the body is decreased and the burden on the body's natural detoxification system, i.e. the liver, kidneys, etc. is greatly reduced and can be more effective any trace toxins that the chlorophyllin did not bind with. Chlorophyllin has actually been shown to actually modulate the liver's detoxification enzymes, an additional benefit for reducing the toxic burden on the body.

Chlorophyllin is not a cure for cancer, or the treatment for a disease. It is the first, and possibly strongest, defense against toxins that are the source of diseases and disabling conditions, like cancer. It is an easy, inexpensive, and effective method of protecting yourself against some of the most common and abundant toxins that currently plague our society. So until the time comes when we no longer eat deep fried foods, drive gasoline-powered cars, or smoke anywhere, chlorophyllin is a very welcome friend.



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