

# Heavy Metals<sup>1</sup>

Have you noticed that practically every day a new story comes out in the media about the toxic side effects of living in the modern world? Chemical and heavy metal dangers seem to be lurking everywhere you turn in the 21<sup>st</sup> century!

Pesticides coat much of our fresh food supply, chemical by-products from manufacturing are routinely dumped into our air and water, and mercury amalgam fillings in your teeth may be releasing mercury into your body with every bite of food you take!



The seafood in our oceans are laden with heavy metals and mercury and pass these poisons up the food chain until potentially massive doses of both wind up on your dinner plate disguised as a healthy meal.

Underground water supplies have been tainted by chemical and pesticide run off from farms, factories and high technology industries. In fact, acceptable levels of many poisons are allowed to come into your home through your drinking and bathing water, including fluoride, chlorine and low levels of many heavy metals.

It doesn't take much imagination to see that your body too is under attack from environmental pollution every single day. You can seek to protect yourself and combat this hazard by eating foods that are free of pesticides and chemicals, but you simply cannot entirely remove all sources of toxins from your environment. The damage to our world is just too widespread and pervasive.

You have to take it upon yourself to take measures to protect you and your family from this toxic world, and one of the best natural sources for moving these toxic materials out of your body is a whole-food based, green algae called chlorella.

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<sup>1</sup> Article taken from <http://www.mercola.com/>

## *How You Can Fight Systemic Pollution?*

To address the harmful and unwanted chemicals your body picks up through the food you eat, the air you breathe, and the water you drink, it is wise to develop a proactive plan. One of the most powerful parts of this plan is detoxification of the toxins you may have already built up inside your body. Your body is naturally able to remove many of the harmful pathogens, chemicals and poisons you may come into contact with in the environment. That's how we are all designed.

But in the 21<sup>st</sup> century, we're seeing an explosion of accumulated toxin-related diseases like cancer, auto-immune dysfunction, brain disorders like autism, Alzheimer's and Parkinson's, nerve disorders and more common ailments like depression, learning disabilities and fatigue. It can become relatively easy to overwhelm your body's ability to remove many of these toxins from your body.

Symptoms of toxic build-up due to chronic metal exposure include:

- Fatigue
- Digestive distress, and reduced ability to properly assimilate and utilize fats
- Aching joints
- Depression
- Impaired blood sugar regulation
- Female reproductive problems

Mercury is also a potent toxin in its own right that can damage your brain, central nervous system and kidneys, and is especially dangerous for children, fetuses, pregnant and nursing women and people who have high levels of mercury bioburden.

So it clearly pays dividends to detoxify your body of accumulated toxins these built up , to get yourself to a healthier state where your body can more effectively remove the toxins you're exposed to every day.



## *Infrared Sauna*

There are ten to 100 times more toxins in your fat than on in your blood, so one of the best ways to remove toxins is to decrease your body fat. That really is your first defense. Choosing the right foods and exercise are key here.

After that, one of the most effective detoxification strategies I know of is the use of an infrared sauna. This can be done for about one hour daily for a month. Remember, it's important to hydrate well before and during the sauna treatment to avoid dehydration.

Additionally, you can exercise for 30-60 minutes immediately prior to help liberate some of the toxins from you fat. Some clinicians have also found the use of NON timed release niacin useful, as it helps liberate toxins from the fat. However, relatively high doses of 5,000 mg are needed.

These high doses need to be slowly worked up to as niacin will cause flushing. However, about one fourth of people are simply unable to tolerate the niacin flush. Please avoid timed release niacin as it can lead to chemical hepatitis.

## Chlorella as a Powerful Detoxification Tool



One of the most exciting nutritional resources available today to help your body naturally fight environmental pollution is a whole-food based supplement called chlorella. Chlorella is actually one of the most widely used supplements in Japan, where over 10 million people use it regularly. The Japanese use of chlorella is more widespread than the North American use of vitamin C, our most popular supplement.

Do the Japanese know something we don't? One of the reasons the Japanese value chlorella so highly is its natural detoxification abilities.

Chlorella is a "green food," a single-celled, micro-algae that is about two to ten microns in size. It's very small. It is this small size and combined with its unique properties that make it such a useful detoxification tool. Its molecular structure, allows it to bond to metals, chemicals and some pesticides.

When chlorella is taken into your body, its natural action will bind it to lingering heavy metals, chemicals and pesticides found in your digestive tract, which is your body's pathway to your bloodstream where these harmful toxins are delivered and deposited into your body's cells.

So chlorella first and foremost will help your body eliminate unwanted metals and toxins. But it does more than that.

Chlorella is uniquely designed to not bind to the minerals your body naturally needs to function optimally. It does not bind to beneficial minerals like calcium, magnesium, or zinc. It's almost as if chlorella knows which metals belong in your body and which chemicals need to be removed.

Supplementing with chlorella is like unleashing a tiny army inside your body to fight the battle of removing toxins from your tissues and ushering them back outside your body where they belong.

## The History of Chlorella

Chlorella is one of the most widely studied food supplements in the world. Aside from being the subject of medical research in the USA, USSR, Germany, Japan, France, England and Israel, chlorella has been extensively studied as a food source since it is made up of a whopping 50 percent protein and is considered a complete amino acid-based food.

Even NASA has studied using chlorella as the one of first whole foods in space on the international space station! Studies in Japan have shown chlorella may help reduce body fat percentage and may be useful in fighting obesity and weight related diabetes. It may also help reduce both cholesterol and hypertension.

Chlorella's cleansing action on your bowel and other elimination channels, as well as its protection of your liver, also helps promote clean blood. And clean blood helps assure metabolic waste get efficiently carried away from your tissues.

Chlorella is such a powerful detoxifier because it is rich in chlorophyll, which is known to:

- Aid you in processing more oxygen
- Cleanse key elimination systems like your bowel, liver, and blood
- Help purify your blood and clean away toxins
- Aid you in promoting optimal blood pressure
- Support elimination of molds in your body
- Help neutralize bad air you might breathe in
- Promote growth and repair of your tissues

Chlorella is actually very useful even beyond detoxification, and its range of health benefits includes:

- Boosting your immune system
- Improving your digestion, especially if constipation is a problem
- Provide B vitamins from an animal source
- Enhancing your ability to focus and concentrate
- Increasing your energy levels
- Balancing your body's pH

- Normalizing your blood sugar and blood pressure
- Reducing your cancer risk
- Freshening your breath

[A three-year double-blind metal detoxification study with over 350 people participating was undertaken at a Russian metal foundry](#), where more than 20 natural compounds were used in trials to remove heavy metals from people who had been exposed at very high levels to four main metals -- antimony, lead, cadmium and arsenic. What were the results of testing chlorella as a heavy metal detoxification agent?

The Russian trial using Broken Cell Wall chlorella combined with cilantro eliminated ALL heavy metals, including mercury! With no side-effects! In fact, [the heavy metal binding power of chlorella was first discovered in the mining industry](#). Mixed with water, they pumped chlorella into mine shafts to collect the residual metals after bulk mining was completed.

## Not All Chlorella is Created Equally

Unlike many food supplements, chlorella has one unique feature that makes the manufacturing process one of the primary concerns when considering a source of supplementation. Chlorella is completely indigestible by humans, we simply do not have the enzymes to break down its cell wall.

Unlike other green foods, chewing and digesting chlorella will not release the powerful health benefits contained within this green algae. This is because chlorella's tough outer cell wall, which is also chemically responsible for binding with the toxins inside your body, cannot be broken down by your biology,

Therefore, it is imperative that the manufacturing process break down the tough outer cell wall for you, as this is the only way to make the chlorella biologically available to remove toxins from your body. This is why I only recommend supplementing with Broken Cell Wall chlorella, because this is the only form that your body can use this powerful detoxification agent.

Another concern when choosing your chlorella is that the source waters where it is grown and harvested be free of any contamination. Since chlorella is a natural green food, it will be affected by polluted water and will retain environmental toxins if it's grown in contaminated waters. So be certain any chlorella you supplement with comes from a naturally clean water source.

One other aspect of chlorella you need to be aware of is some people tolerate it better than others. You should always start any detox with chlorella gradually, taking just a small amount at first to see how your body tolerates this powerful detoxification tool.

Some people also report benefits from beginning a detoxification by first eating small amounts of cilantro for a few days. Cilantro also promotes a detoxification response in your body, but at a less intense level -- which may help your body ease into a smoother detoxification response from chlorella.

The best results of using broken cell wall chlorella for detoxification have also been documented as coming from mixing chlorella with the green plant cilantro, so this might be another consideration for you when undertaking your detoxification program.

I recommending finding an organic source of cilantro, to insure you are not putting more unwanted chemicals into your body as you try to detoxify your body's already existing heavy metal burden.

## Too Much Iron?

One other thing to be aware of when using chlorella is that this green algae does contain large concentrations of iron. Iron levels in women should not be a problem due to the loss of iron related to the menstrual cycle, but for men, or postmenopausal women, too much iron can become a problem.

So for men using chlorella, you want to have your blood iron levels checked regularly to ensure the iron in your blood is staying within healthy levels. The simple best screen is ferritin. Ideally it should be between 20 and 80 ng/ml. Levels over 150 or higher become problematic and should be treated by blood donations or therapeutic phlebotomies.

## *Chlorella for Vegetarians and Vegans*

Chlorella is also a great source of complete amino acid protein, and is made up of 50 percent protein. So vegans and vegetarians can benefit not only from the detoxification properties of chlorella, but can also enhance their B vitamin and protein intake as well through chlorella supplementation.

Many claim that it can also be a useful source of vitamin B12. While chlorella does contain this vitamin most people develop deficiencies because they lose the ability to absorb it. So swallowing it will not provide the same benefit as injecting it or using it in a sublingual drop or spray.

To the best of my knowledge, chlorella is not an effective alternative to animal sources of vitamin B12 which can be an issue for vegans as there are a number of reports of strict vegans going blind after seven years due to vitamin B12 deficiency.

## *Final Thoughts on Chlorella ...*

Sometimes living in the modern world can feel like you're at war with the environment around you, and sources of pollution are often silent and unavoidable.

You can do your best to avoid pollution and toxins, eat only the healthiest organic foods, drink only filtered water, avoid exposure to harsh man-made chemicals, and yet still find yourself exposed daily to massive amounts of harmful pollutants that are totally outside of your control.

Maintaining optimum wellness includes creating defensive mechanisms to fight back against these pervasive and unavoidable environmental assaults on your good health.

By implementing a detoxification program now you can help your body naturally remove the unwanted and harmful heavy metals, chemicals and pesticides you may unknowingly taken into your body.

And lessening your toxic burden has been shown to improve many common health ailments, from lack of energy and insomnia, to sluggish digestion, lack of immune response and mental fatigue.

In fact, almost everything inside your body, including all of your organs, function better with reduced loads of systemic toxins.

And by removing the toxins now and not letting them accumulate to dangerous levels, you may be helping your body ward of such killers as cancer, diabetes, and hypertension, along with all of the now too common neurological disorders that may not manifest for decades to come.

Just remember to start slowly, perhaps using cilantro first, and gradually increase your intake of chlorella at a pace your body can tolerate. It took a long time for your body to accumulate these toxins and it will probably take you many weeks and even months to effectively remove them from your system. So if you experience any indigestion or discomfort from chlorella supplements, you're probably taking too much too fast.



It will be crucial to lower your body fat as low as possible as this will remove large amounts of toxins from your body that are stored there. You can also use the infrared sauna in conjunction with exercise and niacin as described above.

Additionally one of the best defenses and one of the supplements (more like a whole green food) that I highly recommend in your battle against toxins is chlorella.

Be patient, stick with chlorella supplementation, and in a few weeks you'll most likely begin to notice an overall improvement in your health as you naturally start to remove these heavy metals, chemicals and pesticides from your body.