

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

The information below is from many sources. Some of the sources are:

<https://www.curezone.org/forums/am.asp?i=1983851>

<https://www.cancerforums.net/threads/19040-Diatomaceous-Earth>

[https://www.dontolmaninternational.com/collections/cleasdetox/products/diatomaceous-earth-organic-food-grade?mc\\_cid=27998f9188&mc\\_eid=ab6e0459ce](https://www.dontolmaninternational.com/collections/cleasdetox/products/diatomaceous-earth-organic-food-grade?mc_cid=27998f9188&mc_eid=ab6e0459ce)

<http://www.theprairiehomestead.com/2014/01/diatomaceous-earth-homestead.html>

<https://www.backyardchickens.com/threads/diatomaceous-earth-human-use-dosage-etc-wow.99901/>

<https://www.diatomaceousearth.com/diatomaceous-earth-human/>

<http://wolfcreekranch1.tripod.com/defaq.html>

<http://www.askaprepper.com/18-reasons-stock-diatomaceous-earth-survival/>

## DISCLAIMER

As always do your own research and consult with a medical professional as you wish. This is information I have gathered for myself. I take Food Grade Diatomaceous Earth on a regular basis myself.

**Most of these statements have not been evaluated by Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease. The information provided here is not intended as a substitute for the advice of a physician or medical professional. This information is not intended as a substitute for the reader's independent judgment and personal responsibility. Health issues are far too important to delegate to anyone else. It is highly recommended you research and seek information and counsel from as wide a variety of sources as possible so you can make well informed, educated decisions about you, your child's, or your pet's health, as in the end YOU make the decisions.**

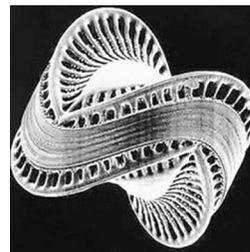
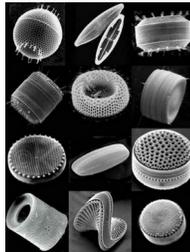
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## *Diatomaceous Earth*

**Avoid breathing the dust. It is a very fine powder and will harm the lungs.**

## ***USE FOOD GRADE ONLY***

Pool filter and industrial grade diatomaceous earth has been heat and chemically treated and will poison an animal or human who ingests it, so it is always of utmost importance to only obtain food grade diatomaceous earth to use in and around your household.



Magnified 7000x, diatomaceous earth looks like spiny honeycombs.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## **Table of Contents**

What Is Diatomaceous Earth	2, 3
General Information	3, 4
How Food Grade Diatomaceous Earth Works	5
Benefits Of Taking Internally	6-11
Hair, Skin, Nails And Teeth	12, 13
Dosage And How To Take	14
Side Effects	15, 16
How To Use Or Animals And Pets	16,17
Barns, Coops and Kennels	17
Home Yard and Garden	17, 18
Pest and Insect Control	18
Orthosilicic Acid (Organic Silica	19, 20

## **What Is Diatomaceous Earth**

A powerful abrasive, Diatomaceous Earth consists of a distinctive mixture of 33% silica, 19% calcium, 5% sodium, 3% magnesium and 2% iron and 15 other minerals including boron, manganese, titanium, copper, sodium, potassium, , zinc iron, phosphorous, selenium, and zirconium.

Diatomaceous earth forms over a long period of time as millions of single-celled organisms fossilize in lake beds. These lake beds then dry up, exposing the sedimentary deposit that we call diatomaceous earth.

The word "diatomaceous" comes from the root word "diatom" which is a single-celled organism. Diatomaceous earth is a chalk-like powder that is made up entirely of these diatoms that have fossilized over thousands of years incased in silica exoskeletons.

After Oxygen and Carbon, Silica is the most important and present compound in Nature and the human body.

Silica is the most plentiful element on earth, following oxygen and carbon. There are very few foods that contain an adequate amount to supply the quantity your body needs. Silica is crucial to bones, tendons, skin, cartilage and blood vessels. Silica is even located in the blood itself and important organs such as the liver, heart, and lungs. The average human body holds approximately 7 grams of silica, a quantity far exceeding the figures for other important minerals such as iron.

There are two general types of diatomaceous earth: food grade and industrial grade. **Only use food grade.** While industrial grade is toxic to humans and pets, food grade diatomaceous earth is non-toxic and *very* beneficial on multiple levels.

### **Diatomaceous earth exhibits some interesting properties:**

When viewed through a microscope, it looks like a hollow cylinder, with holes throughout the side.

It carries a strong negative charge. If you'll recall your science lessons, you'll remember that negatively charged ions are attracted to positively charged ions.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

Therefore, when taken internally, the diatomaceous earth attracts and absorbs positively-charged pathogens into its cylinder – it absorbs the things we want to stay away from like viruses, pathogenic fungi and bacteria, heavy metals, prescription drug residues, pesticides, parasites, radiation, and the like – and sweeps them out of our bodies.

Diatomaceous earth is also very hard. On a scale of “hardness”, if diamonds were a 9, diatomaceous earth would be a 7. This helps us too. As this powder makes its way through our digestive tract, it gently “scrubs” the packed-on residue we have there and sweeps it out of our bodies.

Also, it is very sharp. Organisms such as parasites, lurking in our intestines, are sliced up and killed, and swept away when we empty our bowels. We are left unharmed.

Food grade diatomaceous earth is 84% silica, and contains some 20 trace minerals. Did you know life can't exist without silica? It is essential for the building of healthy bones and teeth, skin, hair, and nails. As our mineral resources are getting depleted, our food is containing less and less silica.

Diatomaceous earth has an unlimited shelf life provided you keep it dry.

Diatoms (DE) are the grass of the oceans and lakes. Just as grass is the staple food of earth animals, diatoms (algae) are the food of the ocean and fresh water grazers.

## **General Information**

The main purpose of taking Diatomaceous Earth internally is detoxification. It also scrubs the intestinal walls and may even scrub out polyps.

While using Diatomaceous Earth for internal cleansing, it is ideal to also use the organic form of Silica (Orthosilicic Acid) in order to help the cells and tissues to rebuild and replicate. The detoxification and healing powers of Silica in both forms are proven to be Miracles of Nature, proven by scientific studies, over years.

The inorganic form (Diatomaceous Earth) will take care of eliminating the toxins, pathogens and heavy metals in your body in order to make room for the organic form (Orthosilicic Acid). It is ideal to take orthosilicic acid too so it can start re-building and curing harmed cells

Note: Orthosilicic Acid is explained at the end of the document.

There are some features about food grade diatomaceous earth that correspond with its ability as both a digestive aid and a colon cleanser. The honeycomb skeletal form of diatomaceous earth is found, under microscopic evaluation to reveal a tendency to become filled and clogged with hard debris such as intestinal scale and thus removes them from your body. Food grade diatomaceous earth has not been found to cause any insult to the mucosa or barrier wall.

There is actually a shortage of silica. Years ago, the silica found in our foodstuffs was adequate, but with today's hybrids and depleted soils, only about 1/3 of the silica needed is supplied in our food. DE is a simple and inexpensive way to get the silica your body needs.

Silica plays a huge role in lots of body functions and it has an immediate relationship with mineral absorption.

The typical human body holds roughly seven grams of silica, a sum far exceeding the figures for other important minerals, for example iron. Both iron and silica are essential for the human body, meaning they're required for undertaking ongoing metabolic work that's vital to existence. Both elements should be continuously provided.

Hormonal disturbances within the human organism are frequently due to a calcium- magnesium discrepancy. Several researches have proven that silica can restore this delicate balance. Silica also benefits the assimilation of phosphorous.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

Researchers think that silica is available in your body in three forms:

1. a soluble form, comprising 10 % from the body's silica.
2. an application coupled with fats and comprising 30 %.
3. an application coupled with proteins comprising the rest of the 60%. This shows how our daily dependence on silica is very high.

DE does NOT kill the beneficial bacteria in the gut.

## ***Silica, Calcium and Phosphorus***

Brittle bones are really a characteristic of aging. As calcium within our body leaches, the bones become brittle and weak.

Taking merely calcium mineral cannot correct or stop this threatening and crippling disease since the human body cannot assimilate and take advantage of the calcium without the existence of silica.

Evidence indicates that, rather than affecting healing, supplemental mineral calcium, without adequate silica and vitamin K, speeds up the draining away of bone calcium and thus hastens the degenerative procedure of brittle bones and other alike illnesses.

Silica also assists in the proper assimilation of phosphorus.

Brittle bones signs and symptoms attack women mainly after menopause, however the degenerative process begins much earlier within their more youthful days. This is also true for men.

More women are dying of fractures triggered by brittle bones than of breast, cervical and uterine combined.

In brittle bones, loss from the bones happens because of inadequate manufacture of the encompassing protein medium in which calcium salts first deposit.

Deficiencies in calcium within the bone matrix result in enlargement of waterways and spaces within the bones, giving these a porous, thinned appearance. The destabilized bone becomes fragile and might be damaged with any kind of minor injury. The bones might even fracture from normal pressure or stress. To re-mineralize bones and help broken bones heal it's suggested that a silica supplement is taken daily.

Bones comprise mainly phosphorus, magnesium and calcium. They also contain silica.

Silica boosts the healing of fracture.

Increasingly more research evidence implies that via a transmutation process, silica is converted into calcium when it's needed.

That's why some researchers make reference to silica like a precursor of calcium. Even if calcium is inadequate, the body can change silica into calcium if the bones need it.

Glenn's NOTE:

Adequate amounts of Vitamin D are also needed to absorb calcium.

Adequate amounts of Vitamin K are needed to tell the calcium where to go in the body. Without enough Vitamin K the calcium calcifies the soft tissue and glands and causes arterial plaque instead of going into the bone. Blood thinners that work by blocking Vitamin K actually cause calcification of soft tissues including glands and organs as well as causing plaque in the arteries and hardening of the arteries.

**CAUTION:** If you are taking a blood thinner, especially one that works by blocking Vitamin K, make sure you consult with your prescribing doctor before taking vitamin K.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## **How Diatomaceous Earth Works**

*When DE is taken into the body it does its work in 3 different ways:*

1. DE looks like a cylinder/honeycomb full of holes. This cylinder/honeycomb has a very strong negative charge. As the millions of cylinders move through the stomach and digestive tract, they attract and absorb bacteria, fungi, protozoa, viruses, endotoxins, pesticide, and drug residues, E-Coli, and heavy metals. These pathogens are trapped inside the cylinder and passed out of the body. Additionally, any larger parasites that happen to be in the stomach or digestive tract are "cut up" and killed by the sharp edges of the DE.

2. DE is very hard. On the hardness scale diamonds are a 9, DE is a 7. This is very important because as those millions of tiny hard and sharp DE cylinders pass through the small and large intestines, they "scrub" the walls (Note they do not harm the intestinal wall). After only a few months of taking Diatomaceous Earth, the intestine wall is no longer coated with mucus, gunk, and molds and will be CLEAN! Thus, DE helps promote regular bowel movements and a healthier colon. A clean healthy colon prevents polyps, cancers, ulcers, and continued toxification of the body that a dirty colon produces. These days many people are doing colonics and detox programs, hydro colonic therapy, etc. DE helps promote this same type of cleansing. People report increased energy, better sleep, and/or needing less sleep. This is a result of the food and nutrients that are taken into the body being better absorbed into the blood stream. A coated, toxic colon does not allow many nutrients from our food to be properly absorbed. A toxic colon and intestinal tract can also result in overweight and obesity, as people lack the proper nutrients their body needs to promote optimum health, so they, and their pets, continue to eat more food in an attempt to obtain the nutrients their bodies are lacking from being toxic.

3. A small amount of food grade diatomaceous earth is absorbed into the blood stream. As it moves throughout the body it cleans and breaks up plaque in the blood vessels and also destroys bad fats. Many have noticed their cholesterol level lowers by 40-50 points and that their high blood pressure goes down. As the DE eventually dissolves in the blood, the many health benefits of the silica content are realized.

Food grade diatomaceous earth is a natural powder that works in a purely physical/mechanical manner, not "chemical", and thus has no chemical toxicity. Bacteria, viruses and parasites cannot build up immunity to it.

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## **Benefits Of Taking Diatomaceous Earth Internally**

### *Diatomaceous Earth and Intestinal Polyps*

It has been reported that if you have polyps in the colon, DE cuts the polyps off from the colon wall. The only option for people who have many polyps in the colon is to have the entire colon removed to prevent cancer according to main stream doctors.

Glenn's NOTE: I had many polyps (thousands) and had all but one inch of my colon removed in 1981. In March, 2015 I was referred to the Mayo Clinic in Phoenix, AZ because of high grade dysplasia (abnormal precancerous cells) and Spiegelman stage IV polyps in the stomach and upper small intestines. On my first visit to the Mayo Clinic the Doctor in charge of my case told me he recommended a colostomy and a Whipple Procedure (an operation to remove the head of the pancreas, the first part of the small intestine, the gallbladder, the bile duct and sometimes part of the stomach). I listened to him and was open to the possibility of the colostomy. As soon as he said the word 'Whipple' I got a very strong intuitive "NO! I continued to listen without comment as he explained what the Whipple Procedure was. The next week I was given a meditation called "Metatron's' Meditation For Cellular Healing"(available at [http://twochoices.net/FREE\\_PDFs.html](http://twochoices.net/FREE_PDFs.html)) by a Naturopathic Doctor and cut way back on eating red meat and pork of any kind. When I went back to the Mayo Clinic a month later for a new colonoscopy by their gastroenterologist who took a sample, the dysplasia was low grade. They still recommended the colostomy and made an appointment for me to see a colorectal surgeon in two weeks (May 2015) as a pre-surgery check. There was no dysplasia and only two tiny polyps. When I came out of anesthesia he told me that even without surgery I had at least seven to 10 years as far as my colon went. He could not address the Whipple procedure and left that to another doctor I never saw.

When I researched the Whipple Procedure after already deciding not to have it I found:

A 4% to 10% mortality rate on the operating table.

According to "<https://www.webmd.com/cancer/pancreatic-cancer/whipple-procedure#1>" The Whipple procedure may extend life and could be a potential cure. Those who undergo a successful Whipple procedure may have a five-year survival rate of up to 25%.

Also, according to several sources the morbidity rate ranged from 25% to 40%. (Morbidity rate is the percentage of people who have complications and a lower quality of life after a procedure or treatment).

I decided not to have either surgery. I would heal myself or eventually die from intestinal cancer. I have only been to my Primary care doctor, who is open to my approach, since then for standard blood work and annual checkups. As of October 2019 I am still doing fine and my blood work has gotten much better.

As of October 2019, 38 years after my diagnosis and 4 years after the Mayo Clinic recommended the Whipple Procedure I am still doing fine.

I will continue taking Diatomaceous Earth and meditating, as well as prayer and dietary modification. All are part of my regular routine.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## *Other Benefits Of Taking DE internally*

### **Cancer cannot survive in cells that have the correct levels of Silica.**

Does DE therefore help prevent or even heal cancer.

### **Internal detoxification and heavy metal elimination:**

DE is negatively charged, making it able to attract and trap positively charged bacteria, viruses, toxins and heavy metals and flush them from the body. It is believed that diatomaceous earth sweeps bacteria out of the body by trapping it in its honeycomb shaped skeletal form.

### **Heavy Metal detoxification**

Since DE sweeps heavy metals out of the body, this is helpful especially to those with heavy metal poisoning and those with mercury fillings which constantly leach mercury into the body. Aluminum is also swept out, lowering the risk for Alzheimer's disease.

### **Removes Toxins and Kills Parasites**

Food grade diatomaceous earth has been reported in scientific literature to absorb methyl mercury and other heavy metals, e-coli, endotoxins, viruses (including polio virus), bacteria, organophosphate pesticide residues, drug residues, perhaps even the proteinaceous toxins produced by some intestinal infections. It also kills and allows the body to expel parasites including lungworms, Ascaris (Toxocara canis), Hookworms (Ancylostoma caninum), Tapeworms, and Whipworms (Trichuris vulpis).

NOTE, When dealing with parasites, especially worms, most detox regimens suggest taking DE for 10 days, then wait 10 days before taking it again. Follow this 10 days on, 10 days off process for 90 days. When you know you are dealing with a worm infestation, tapeworms in particular, it is best to use the higher dosage (for human adults that is two to three tablespoons per day).

According to a top cancer researcher, DE is also the best natural chelating product available for pulling heavy metals from the bloodstream.

### **Arterial and Coronary disease:**

Silica can help arterial disease by strengthening the blood vessels. Studies confirm that with age, silica disappears from the aorta, the heart's key blood vessel, thus weakening its critical connective tissue and resulting in a greater cardiac risk.

### **Blood Pressure**

Everyone is also amazed at how their high blood pressure goes down.

### **Cholesterol**

Everyone that we know that is taking DE has lowered their cholesterol by 40-50 points. It has also been reported to raise good cholesterol (HDL)

### **Digestive health:**

Since it sweeps out foreign matter, you will begin to notice better nutrient absorption and less fatigue. The presence of sufficient silica in the intestines will reduce inflammation of the intestinal tract. It can cause disinfection in the case of stomach and intestinal mucus and ulcers. Silica can prevent or clear up diarrhea and its opposite, constipation.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## **Regular bowel movements and a Healthier Colon.**

This is especially important as we get older. A clean healthy colon keeps away polyps, cancers, and ulcers. Today, many are spending thousands of dollars for colon cleaning procedures and products, to do the same thing that DE does. All the food and nutrients that are taken in are better absorbed into the blood stream. With a coated colon--many nutrients never get absorbed.

## **Stomach and Intestinal Tract**

Reduces inflammation of the intestinal tract.

It can cause disinfection in the case of stomach and intestinal mucus and ulcers. Silica can prevent or clear up diarrhea and its opposite, constipation.

## **Liver and colon function;**

Better liver and colon function

## **Kidney Stones And Infections Of The Urinary Tract**

Can help prevent kidney stones and heal infections of the urinary tract. It is a natural diuretic which can increase excretion of urine by 30 percent, thus flushing the water-excreting system and restoring normal function to these vital organs.

## **Diabetes:**

Silica can help diabetes by promoting synthesis of elastase inhibitor by the pancreas

## **Alzheimer's disease**

Silica might help prevent or relieve Alzheimer's disease by preventing the body from absorbing aluminum and other heavy metals and flushing them out from the tissues.

## **Tuberculosis**

Help prevent Tuberculosis

## **Osteoarthritis and Sclerotic**

Silica increases mobility and reduces discomfort in osteoarthritis and sclerotic conditions.

(Sclerotic is a hardening of the nervous system due to hyperplasia of the connective tissue and/or hardening of the blood vessels)

Hyperplasia is an increase in the number of cells in an organ or tissue. These cells appear normal under a microscope. They are not cancer, but may become cancer.

## **Rheumatism:**

By improving the elasticity of the joints, silica helps rheumatism.

## **Middle Ear:**

The consumption of silica functions like an encouraging strategy to reduce inflammation in the middle ear.

## **Tinnitus (buzzing or ringing of the ears)**

Decreases tinnitus (buzzing of the ears)

## **Bones**

Silica is responsible for the depositing of minerals into the bones, especially calcium. It speeds up the healing of fractures and also reduces scarring at the site of a fracture. Even when calcium is insufficient, the body can turn silica into calcium that the bones need.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## **Osteoporosis: (weak/brittle bones)**

Osteoporosis is a symptom of the aging process. As calcium in our body system depletes, our bones become brittle and weak. Taking only a calcium supplement cannot correct or stop this threatening and crippling disease because the body cannot assimilate and make use of the calcium without the presence of silica ( and Vitamins D and K according to Glenn's research). Evidence suggests that, instead of affecting healing, supplemental mineral calcium, on the contrary, accelerates the leaching away of bone calcium and thus hastens the degenerative process of osteoporosis and similar diseases that affect the supportive and connective tissues in the human body. For osteoporosis, silica can stop the pain and even restore the bodies' self repair process.

Osteoporosis symptoms attack women primarily after menopause but the degenerative process starts much earlier in their younger days. More women are dying of fractures caused by osteoporosis than of cancer of the breast, cervix, and uterus combined.

## **Stronger bones and Healthier Joints and Tendons:**

Osteoporosis is a symptom of the aging process. As calcium in our body system depletes, our bones become brittle and weak. Taking only a calcium supplement cannot correct or stop this threatening and crippling disease because the body cannot assimilate and make use of the calcium without the presence of silica. Evidence suggests that, instead of affecting healing, supplemental mineral calcium, on the contrary, accelerates the leaching away of bone calcium and thus hastens the degenerative process of osteoporosis and similar diseases that affect the supportive and connective tissues in the human body.

## **Lymphatic System and Swollen Throat**

Overall beneficial effectiveness on the lymphatic system.

Due to the advantageous effectiveness to the lymphatic system, silica can be used as an anti-swelling agent for the lymph nodes within the throat.

## **Calcium**

Even when calcium is insufficient, the body can turn silica into calcium that the bones need.

## **Collagen**

Collagen, largely made up of silica is critical to joints, nails, skin, hair and soft tissues. Without enough silica the body cannot make enough collagen.

## **Absorption of all other minerals**

Silica has a direct relation to absorption of all other minerals that the human body demands in order to keep up good health.

## **Re-mineralization**

For example bone healing, 4 to 8 times the usual amount ought to be consumed until the silica therapy has proven to be effective. This is most effectively achieved when under the supervision of a physician.

## **Silica is responsible for the depositing of minerals into the bones, especially calcium.**

It speeds up the healing of fractures and also reduces scarring at the site of a fracture. More and more research evidence shows that through a transmutation process, silica is turned into calcium when it is needed. That is why some scientists refer to silica as a precursor of calcium. Even when calcium is insufficient, the body can turn silica into calcium that the bones need.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

<p><b>Cough decreasing agent:</b></p> <p>Silica tones the upper respiratory tract (nose, pharynx, larynx) and reduces swelling because of its positive action on the lymphatic system.</p>
<p><b>Lungs, nose, pharynx, larynx</b></p> <p>Silica supplementation helps repair and maintain vital lung tissues and protects them from pollution. By maintaining or restoring the elasticity of lung tissues, silica reduces inflammation in bronchitis. It acts as a cough decreasing agent. Silica tones the upper respiratory tract (nose, pharynx, larynx) and reduces swelling because of its positive action on the lymphatic system.</p>
<p><b>Respiratory System</b></p> <p>Tones the top of the respiratory system (nose, pharynx, and larynx) and reduces swelling due to its positive action over the lymphatic system.</p>
<p><b>Anti-yeast qualities</b></p> <p>Consists of anti-yeast qualities.</p>
<p><b>Back Pain:</b></p> <p>In regulating and normalizing the bowels, silica has a pleasant side effect; it can alleviate lower back pain, which often troubles the elderly.</p>
<p><b>Cell metabolic process and division</b></p> <p>Silica can stimulate the cell metabolic process and division.</p> <p>Stimulates metabolism for higher energy levels</p> <p>Stimulates metabolism for higher energy levels.</p>
<p><b>Headache</b></p> <p>Decreases headache</p>
<p><b>Hemorrhoids:</b></p> <p>Silica will help normalize hemorrhoidal tissues.</p>
<p><b>Immune system</b></p> <p>Silica can stimulate the defense mechanisms and immune system.</p>
<p><b>Insomnia</b></p> <p>Decreases insomnia</p>
<p><b>Male menopause</b></p> <p>In males, too, the central nervous system and glandular network will progressively undergo changes that create degeneration of significant body functions</p>
<p><b>Menopause and female problems</b></p> <p>Silica supplementation helps keep menopause free of stress and helps to prevent many unwanted side effects of menopause. Silica proves effective with female discharge, abscesses and ulcers in the genital area and cervix, as well as mastitis (especially for breast feeding mothers).</p> <p>Also helps with brittle bones, which is common during and after menopause.</p>
<p><b>Odor binding effects.</b></p>

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

**Radiation**

New researchers have discovered that anti-oxidants, like organic silica, safeguard against dangerous radiation.

**Vertigo**

Decreases vertigo

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## **Hair, Skin, Nails and Teeth**

### **Internal Use as supplement and Detox agent**

Taken internally, it supplies much needed silica to the skin, teeth, hair and nails.

#### **Hair**

**Hair That Grows!:** Hair is one of nature's greatest beauty enhancer. Hair deserves to be pampered. Silica helps prevent hair loss; it encourages a healthier hair re-growth and assures beautiful shine, luster and strength.

Hair at 90 micrograms per gram is almost as rich in silica as are healthy bones, which contain 100 micrograms per gram. Silica is a major element of hair.

Silica is a major component of hair. Using a good silica supplement should be part of your ongoing hair care program for revitalizing hair.

#### **Skin and Age spots**

Helps fade age spots

Slows down facial aging lines and may even improve them.

The supporting collagen underneath skin improves elasticity and looks.

Collagen owes its beneficial qualities to silica. Collagen supplies an attractive complexion that's a lot more than skin deep.

#### **Nails**

With silica supplementation, fragile nails become normal within a short period of time.

Silica will enhance the look of your nails and increase their hardness, making them shinier and less prone to breaking.

Your nail plates are complex protein structures that grow 4 to 5 millimeters monthly.

In case of deficiency, the speed of growth slows.

Your fingernails could possibly be the first indications of silica deficiency.

Demineralization of the nails precedes the decalcification of bones.

With silica supplementation, fragile nails become normal in only a short time.

#### **Teeth and Gums**

By hardening the enamel, silica prevents cavities and preserves teeth.

Silica also prevents bleeding gums, gum atrophy, and recession that causes the loosening of teeth, which could ultimately lead to tooth loss.

Silica effectively fights ulceration and the decay of bones, teeth and also lessens inflammation.

Silica effectively fights ulceration and inflammation.

Silica fights the decay of the bone and bone loss.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## External Use

### Skin and Age spots

By penetrating the pores, the silica effectively sweeps the dirt residue and dead skin cells, allowing your skin to detoxify and breathe better

The mild abrasive quality of Diatomaceous Earth makes it an excellent scrub and exfoliant for the skin. Despite this slight abrasive feature, the silica particles are small enough that they do not tend to cause irritation or trigger allergies on the skin.

### As a Facial Mask and Exfoliant

Mix a few tablespoons of diatomaceous earth with a little water and mix to form a thick paste. You can add a drop or two of your favorite essential oil if you like.

Scrub it gently into the skin using your fingertips and a circular motion. Leave it on for 15 to 20 minutes before washing off.

It gently removes dead skin cells and soaks up oils, leaving your skin soft and glowing.

### Teeth

You can add diatomaceous earth to your name brand toothpaste to increase its cleaning power.

Step 1) Take a small container (one with an airtight lid) and add some toothpaste to it.

Step 2) Add 1 part food grade DE to 9 parts toothpaste. Mix thoroughly.

Step 3) Brush your teeth with your DE enhanced toothpaste.

Step 4) Seal the container and store for future use.

Note: If you don't have time to mix your toothpaste this way, simply dip the dampened bristles of your brush in DE before adding toothpaste and brushing.

### Deodorant

Mix 3 parts cornstarch or arrowroot powder with 1 part food-grade diatomaceous earth.

Add 2 parts melted coconut oil and stir to completely mix.

Store in container with a tight-fitting lid.

Rub a small amount on underarms using the fingertips.

As far as I know there is no external application for Hair or Nails

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## **Dosage and How to Take Diatomaceous Earth?**

*Note: Although, DE is considered safe for use during pregnancy or nursing, just as with any other detox, consideration must be made regarding the possible detox effects upon yourself and your baby. While everyone reacts differently while detoxing, it is commonly advised not to use any detox regime during pregnancy or nursing. **Unless you have already been using DE for a few months prior to becoming pregnant you may want to wait.***

Diatomaceous earth can make you thirsty – make sure and drink plenty of water while using this supplement. Since it will not dissolve, stirring several times while drinking will prevent settling

IS FOOD GRADE DIATOMACEOUS EARTH SAFE TO USE DURING PREGNANCY? Definitely! **Again, only if you are already using it.** When food grade diatomaceous earth is fed in adequate daily amounts, it eliminates all intestinal worms and parasites. This helps the human or animal better absorb the nutrients from the food they eat, which in turn benefits the expecting mom, and also greatly benefits the unborn infant or animals by passing on these nutrients to them helping to make them stronger and healthier as well. Just be sure to drink plenty of water. It is also fine for children to take in smaller doses.

Take diatomaceous earth on an empty stomach at least one hour before eating and two hours after eating. This allows diatomaceous earth time to move through and absorb toxins from ones digestive tract without interfering or absorbing nutrients from foods or liquids.

Mix with 6 to 8 ounces of water or a favorite juice FOLLOWED BY A FULL GLASS OF WATER.

Start at a small dose for the first few days while making sure to drink plenty of clean fresh pure water (not city tap water) and slowly increase the dose as your body tells you it is okay to do so. This is to make sure you don't have a heavy detox reaction.

First few days---1/4 to 1/2 teaspoon

1st Week-----1 teaspoon—AM **OR** PM

2nd Week-----2 teaspoon—AM **OR** PM

Thereafter-----1 to 2 tablespoon AM **OR** PM

No worry about getting too much (except for a possible Herxheimer Affect - explanation and chart follow), any excess silica not needed by the body is automatically eliminated through the blood stream, kidneys and intestines

Diatomaceous earth is a way to detox your body, and if you start with too much, your body will get rid of toxins too quickly and you may have temporary unpleasant symptoms. Yes, it really does work that well! If you start experiencing light headaches, you'll know you took it a little fast. But don't stop altogether, just do yourself a favor and take it slowly – no need to rush.

As your body begins to detox from the DE, you may experience what is commonly known as "die off," which sometimes gives people mild flu-like symptoms for a couple days. This is a side effect of toxins leaving your body, not a side effect of DE itself. You can counteract these symptoms by increasing your fluid consumption, as well as reducing your DE dose for a few days.

Follow this protocol off and on for a few weeks at a time to maximize the ongoing detoxification benefits. For a more comprehensive 'one-off' detox program to eliminate known toxic metals, medicinal residues or intestinal parasites. Parasites include lungworms, Ascardis (Toxacara canids), Hookworms (Anclyostoma caninum), Tapeworms, and Whipworms (Trichuris vulipis). Most detox regimens suggest taking it for 10 days, then wait 10 days before taking it again. Follow this 10 days on, 10 days off process for 90 days.

NOTE, when you know you are dealing with a worm infestation or tapeworms in particular, it is best to use the higher dosage (for human adults that is two to three tablespoons per day.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## Side Affects

Avoid breathing the dust. It is a very fine powder and will harm the lungs.

Too much can be constipating if you don't drink plenty of water.

The only two side affects I am aware of are the possibility of constipation if you don't drink enough water, and what is called the *Herxheimer Detox Reaction as explained below*.

If you are on prescription medications, check with your doctor before use. It may remove some medications as well.

The Herxheimer reaction is frequently seen during antibiotic treatments and detoxing. Common symptoms that may develop or worsen due to a Herxheimer response include those listed in the table below.

### **Remember, any of the following should be mild or unnoticeable.**

If any are severe you are detoxing too fast.

Bloating	Brain Fog
Chills	Cold Sweats
Constipation	Cramps
Diarrhea	Fatigue
Fever	Headaches
Irritability	Joint Pain
Lethargy	Muscle Pain
Nausea	Skin Irritation
Sore Throat	Mood Swings/Moodiness
Feeling 'out of sorts'	

**Symptoms should be mild unless you are detoxing too fast.** Typically, symptoms develop within a couple of hours to several days after treatment. However, depending on the location of the bacteria, virus, fungal infection, pesticide or heavy metals, symptoms may develop later.

Because of the sudden worsening of symptoms, it is common for patients to feel that the severity of their condition has increased due to the treatment. However, even though treatment causes a **temporary** increase in symptom intensity due to greater release of toxins, the condition ultimately improves. The body responding in this way usually means that the treatment is actually working effectively.

Most importantly, always keep hydrated. Drinking lots of water helps to flush toxins out faster. Putting a bit of lemon juice in your water can also expedite this process, especially in the liver.

Epsom salt detox baths are also an amazing way to pull toxins out of the body. Personally, I swear by them. A word of warning: they can increase the herx reaction at the beginning of the bath, this is followed by a period of exhaustion, but it has always brought relief in my past experience, when done correctly.

Massage is also highly recommended when the pressure is not painful. Deep tissue massage especially can help to break up any toxins that have solidified inside the muscles. This is a big part of what forms the "knots." Exercise helps in a similar way, as well by promoting sweating, which will also flush out toxins.

As long as the Herxheimer reaction is not too severe, treatment should continue. It is common for patients to be alarmed or concerned about the development of new symptoms and stop treatment. However, if the symptoms are caused by a Herxheimer reaction, it is best to continue treatment as long as symptoms are bearable.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## **How To Use For Farm Animals and Pets**

### **Sprinkle it in the Chicken Coop**

Added to chicken feed, DE helps produce eggs with stronger shells. [Sprinkled around the coop](#), it controls flies and odor.

**Get Rid of Fleas and Ticks on Dogs:** Sprinkle it on bedding and around other places where fleas or ticks might be found. Keep it away from your pet's eyes and avoid inhalation. Glenn's NOTE: If you use it on your pets' bedding I would wash the bedding before allowing the pet to use it. This is to avoid any possibility of inhalation.

Manage unwanted intestinal organisms that are lacerated through the abrasiveness of Diatomaceous Earth. It has also proven positive results in freeing E-Coli along with other types of bacteria and infections.

MINERALIZATION: People note shinier coats, better overall health, etc. in their animals who are fed food grade diatomaceous earth regularly. This is due at least in part to better mineral absorption and utilization.

Food Grade Diatomaceous Earth can also be used as a safe and non-toxic method to de-earthworm pets, and has even been used as a natural litter.

INTERNAL PARASITE CONTROL ~ Food grade diatomaceous earth has been used for at least two decades as a natural wormer for livestock. Some believe diatomaceous earth scratches and dehydrates parasites. Some scientists believe that diatomaceous earth is a de-ionizer or de-energizer of worms or parasites. Regardless, people report definite control. To be most effective, food grade diatomaceous earth must be fed long enough to catch all newly hatching eggs or cycling of the worms through the lungs and back to the stomach. A minimum of 60 days is suggested by many, 90 days is advised for lungworms.

\*CLINICAL OBSERVATIONS OF FEEDING FOOD GRADE DIATOMACEOUS EARTH TO DOGS, O.C. Collins, DVM, Midland Animal Clinic And Hospital, Midland, TX: "In clinical observations of feeding dogs over 35 lbs. 1 tbsp./day and under 35 lbs. 1 tsp./day of DE, within seven days all ova disappeared from stools. DE controlled Ascardis (Toxacara canids), Hookworms (Ancllyostoma caninum), and Whipworms (Trichuris vulipis)."

\*RESULTS ON FEEDING FOOD GRADE DIATOMACEOUS EARTH TO WALKING HORSE, L. Thomas, Trainer, L. Frank Roper Stables, Winter Garden, FL: "With horses fed approximately 5 oz. of DE mixed in the feed twice daily, the following results were observed: Stopped scours even on horses that had not responded to any other medications; noticeable fly reduction, horses showed an increase in appetites; weight gain due to better feed conversion; reduction in manure odor; elimination of any internal parasites; healthier appearance."

### **IS FOOD GRADE DIATOMACEOUS EARTH SAFE TO USE DURING ANIMAL PREGNANCY?**

Definitely! When food grade diatomaceous earth is fed in adequate daily amounts, it eliminates all intestinal worms and parasites. This helps the animal better absorb the nutrients from the food it eats, which in turn benefits the expecting mom, and also greatly benefits the unborn animals by passing on these nutrients to them making them stronger and healthier as well. Just be sure to have plenty of water available.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## Daily recommended food grade diatomaceous earth dosages:

Start with lower dosage to avoid "die off" (see Herxheimers Response on page 15) which sometimes causes mild flu-like symptoms for a couple days. This is a side effect of toxins leaving the body, not a side effect of DE itself. You can counteract these symptoms by increasing fluid consumption, as well as reducing the DE dose for few days.

Slowly increase the amount taken to:

- Kittens - 1/2 teaspoon (Start with lower dosage)
- Cats - 1 teaspoon (Start with lower dosage)
- Puppies - 1/2 to 1 teaspoon. (Start with lower dosage)
- Dogs under 35 lbs. - 1 teaspoon (Start with lower dosage)
- Dogs over 35 lbs. - 1 tablespoon (Start with lower dosage)
- Dogs over 100 lbs. - 2 tablespoons (Start with lower dosage)
- Cattle, Dairy Cows, & Hogs - 2% of dry feed ration (Start with lower dosage)
- Chickens - 5% in feed (Start with lower dosage)
- Goats, Sheep, Alpacas, & Llamas - 2% in grain (Start with lower dosage)
- Zoo animals - 2% in daily feed (Start with lower dosage)

Internal feeding of food grade diatomaceous earth helps eliminate most internal worms, including roundworms, pin worms, tapeworms, etc. It's also excellent when fed daily to keep down fly loads. Food grade diatomaceous earth is eliminated from the body exactly the way it went in therefore helping reduce the manure odor and killing flies that come in contact with it.

Mix in animal feed or grain and/or feed free choice.

If fecal counts are not zero for worms and ova after feeding DE for 30 days, increase the daily dose. Feeding too small a dose of DE will not give desired results. Increasing the dose, even if greater than the above recommendations, will do no harm. Some horses do fine on 1/2 cup of DE daily, others need a full cup. This reminds us that all beings are different. So again, if the worm and ova counts are not zero, increase your daily dose.

When you know you are dealing with a worm infestation or tapeworms in particular it is best to at least double the recommended dosage as suggested above by the manufacturer. Remember, the diatomaceous earth MUST come in contact with the worms in order to "dehydrate" them. Since worms can kill us or our pets and at the very least, cause disease, more DE is better to prevent having to deal with disease or death.

## **EXTERNAL APPLICATIONS FOR LIVESTOCK, BARN, COOPS, KENNELS, & LITTER BOXES**

Deodorizing and absorption are natural functions of diatomaceous earth, so add to kitty litter to absorb odors and keep the litter box drier. Apply to moist kennel areas to reduce odors and dry the area.

A small amount of food grade DE applied to livestock water keeps the water fresh on hot summer days. The amount of DE you need to apply depends on the size and color of the water container and climate temperature. Start by experimenting with a small amount of DE in the water container and increase as/if needed.

Food grade diatomaceous earth is great for compost piles, to control odors. It will not harm earthworms, provided you just apply to the top of the compost or worm farm soil. The earthworms will slowly work the DE into the soil making them healthier, as well as the soil. Of course, if you put the earthworms in a bucket of DE, it will dehydrate them.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## **HOME, YARD, GARDEN, & LANDSCAPE APPLICATIONS:**

**In Your Food Storage:** Add food-grade diatomaceous earth to wheat, barley, maize, legumes, and other grains before sealing them for long term storage. It keeps the food dry and prevents insect infestation and mold.

**Remove Stubborn Stains:** Its absorbent nature makes DE excellent for removing oily stains from clothing and other surfaces. Sprinkle it on the stained areas and work it in. Allow it to absorb the oil for a few minutes before washing it away.

Food grade diatomaceous earth will not destroy earthworms, if applied to the top of the soil in worm farms and the worms are allowed to work it into the soil on their own. It is actually beneficial to the worms and compost. Just make sure to allow the worms to do the work and not bury them in the DE.

**As a Soil Conditioner:** Added to soil, diatomaceous earth improves retention of water and nutrients while draining freely. It is often used as a growing medium in hydroponic gardens and as a soil conditioner in potting soils.

**Kills Garden Pests:** Mix 3 parts cornstarch or arrowroot powder with 1 part food-grade diatomaceous earth. Add 2 parts melted coconut oil and stir to completely mix. Store in container with a tight-fitting lid.

Sprinkle DE around plants in the garden to kill slugs, Japanese beetles, squash bugs, Mexican bean beetles and other pests. Sprinkle it on the ground around plants and whenever possible, use a bulb puffer to blow the diatomaceous earth directly onto the pests or into cracks and crevices where they hide. Avoid using it on flowers where bees might be harmed. It is a completely safe pesticide for people and pets.

**Water Filtration:** Diatomaceous earth is used in water filtration products to remove very fine particles. It also helps kill viruses and purify the water. Research shows that DE filters remove up to 80 percent of the viruses present in tap water. DE is currently used in many swimming pool and aquarium filters.

**As an Abrasive Cleanser:** Diatomaceous earth is mildly abrasive and works well as an abrasive cleanser or as a metal polish. Use it like a scouring powder to clean away burned on grime from pots and pans. Sprinkle it on the toilet brush for an abrasive boost when cleaning the bowl.

**As an Absorbent:** Diatomaceous earth can absorb up to 1.1 times its weight in water, making it good for cleaning up spills. Use it in homemade kitty litter to absorb smells and moisture. It will also absorb oil, so sprinkle it over spilled cooking oil or motor oil to make it easier to clean.

**As a Deodorizer:** DE soaks up odors in garbage pails, sweaty sneakers and the kitty litter box. Put a small jar of DE in the refrigerator to soak up odors. Sprinkle a little wherever you need its deodorizing properties.

**In the Compost Pile:** DE controls both odor and pests in the compost pile, but won't hurt beneficial worms and other organisms.

## **How to Use For Pest Control**

Food Grade Diatomaceous Earth is frequently used like a natural pesticide, since its absorption qualities really dry out the waxy surface from the insects' exoskeleton.

**Safely Kills Insects:** Use diatomaceous earth around the home to kill insects, including cockroaches, bed bugs, ants, fleas, dust mites, spiders, and silverfish (anything with an exoskeleton). The tiny diatoms are abrasive and kill insects by cutting through their skin or outer shell, causing dehydration. Apply it into areas where infestations are possible.

It contains no harmful chemicals and is completely safe around kids and pets as long as the fine powder is not inhaled. Apply it around baseboard and places the pests like to hide. Avoid where wind or foot traffic might stir up the dust. If carpet goes up to the baseboard be aware that the very fine dust clogs vacuum cleaner bags very fast.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## **Orthosilicic Acid**

### ***Orthosilicic Acid Review***

**Orthosilicic Acid** (OSA) is a type of silicic acid that naturally occurs in water, seawater, and certain beverages (like beer). It is often referred to as “soluble silica” because *Orthosilicic Acid* is a dietary form of silicon (a mineral that is involved in the creation of collagen and bones).

Many people do not get enough OSA per day. As a result, the use of Orthosilicic acid supplements has grown tremendously. You can find OSA supplements at your local health store or through various online retailers.

### ***Uses for Orthosilicic Acid***

According to natural health proponents, orthosilicic acid can treat various health conditions, including the following:

Alzheimer’s Disease, Arthritis, Atherosclerosis, Hypertension, Heart Disease, Osteoporosis and Stroke

However, despite these claims, there is very limited evidence on whether or not OSA actually has any effect on these health conditions. Some medical experts are skeptical about OSA and have expressed their concerns over the claims made by natural medicine supporters.

As a result, it is not entirely sure whether or not OSA can improve upon these health conditions. However, there are a few research studies that give us hope about orthosilicic acid.

### **Proven Health Benefits of Orthosilicic Acid**

Of the few studies we have involving orthosilicic acid, there are, so far, three main benefits associated with OSA. They include:

#### **Bone Health**

**Bone health:** In a 2008 study, 136 women with osteopenia took OSA along with calcium and vitamin D, or a simple placebo every day for a year. After the full year was completed, participants given OSA had shown greater improvements in bone formation.

Scientists attributed this to OSA’s ability to stimulate the production of collagen (a protein that is found in connective tissue) and in promoting the development of “bone-forming cells.”

#### **Joint Health**

**Joint health:** One of the earliest studies, conducted in 1997, studied the effects of OSA on joint health in calves. Researchers found that calves that were fed an OSA supplement typically had a greater concentration of collagen in their cartilage, which would indicate stronger, healthier joints.

Researchers were not entirely sure whether or not OSA supplementation would result in the same effects in humans, although more recent studies would suggest that OSA may replicate similar results.

#### **Hair Health**

**Hair health:** A small study published in the Archives of Dermatological Research in 2007 suggests that OSA may help improve hair quality and health. In the study, 48 women with “fine hair” were either given a placebo or an orthosilicic supplement for nine months.

Researchers found that OSA appeared to boost hair strength and thickness. Overall quality of hair was also improved through OSA supplementation.

# Diatomaceous Earth (inorganic silica) and Orthosilicic Acid (organic silica) for Health

## **Side Effects of Orthosilicic Acid**

Since orthosilicic acid has been studied very little, we don't know whether or not there are long term negative effects. However, since orthosilicic acid is a naturally occurring mineral generally thought that long-term use will have no negative impact on an individual's health.

Orthosilicic acid is very likely safe for almost everybody to use. No common side effects or adverse health effects have been found as a result of using it.

## **Final Thoughts On Orthosilicic Acid**

Silicon is an important mineral that has many functions in the human body. We're confident that orthosilicic acid can improve your health in various ways and we hope the new research will further prove how beneficial orthosilicic acid can truly be.