

CODEX FOOD CHEMICAL GRADE DIATOMACEOUS EARTH (Amorphous Silica)

- Food grade diatomaceous earth is great for internal and external parasite control. The mineral and silica content seems to increase feed utilization. Reported to kill 75% of flies and fleas that come in contact with it within 72 hrs. Mixed with grains at a ratio of 2% keeps out pests. Great for eliminating ants, aphids, flea beetles, fleas, earwigs, sowbugs, mites, etc. We use DE diluted in water and painted on tree trunks to keep ants off our fruit trees. Food grade diatomaceous earth be applied as a foliar spray or sprayed in buildings or just lightly sprinkled in pest infested areas or compost/manure piles. Great for internal worming purposes for humans and animals. Helps detox heavy metals. Diatomaceous earth is a drying agent, and thus reduces odor and moisture in barns and stalls. Fed to animals daily, food grade diatomaceous earth keeps fly larvae from developing in manure, noticeably reducing the fly population. Added diatomaceous earth to livestock waterers, it keeps the algae from growing in the hot summer months.

We currently feed food grade diatomaceous earth in all rations once a day.

Overly toxic persons might experience a "healing crisis", as their system is detoxing too quickly, so it is suggested to start with a small dose and work up to the heaping tablespoon over a period of a few days or weeks, to help avoid this situation.

Food grade diatomaceous earth has many uses and excellent health benefits. We basically use it for parasite control. Natural diatomaceous earth (DE) is the remains of microscopic one-celled plants (phytoplankton) called diatoms that lived in the oceans and lakes that once covered the western part of the US and other parts of the world. These deposits are mined from underwater beds or from ancient dried lake bottoms.

NOTE: It is important to use ONLY food grade diatomaceous earth. Pool filter 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.

Food grade diatomaceous earth is EPA approved to be mixed with grains to control mealworms and other pests and has been exempted from tolerance requirements as an inert, inactive ingredient in chemical pesticides. Diatomaceous earth is EPA approved against indoor and outdoor crawling insects. Diatomaceous earth is USDA approved as an anti-caking agent for animal feed. Diatomaceous earth is FDA approved for internal and external use and has a rating of Food Chemical Codex Grade.

DISCLAIMER: Any food grade diatomaceous earth uses other than those approved by the EPA, FDA, or USDA are strictly reports of what farmers, others, and we ourselves have done with diatomaceous earth. Additionally, the following material is not intended as a substitute for the advice of a physician or vet. 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 seek information and counsel from as wide a variety of sources as possible, as in the end YOU make the decisions.

We use a Diatomaceous Earth and is pure white in color. It contains less than .5% silicon. There are food grade diatomaceous earth products that are yellow or tan in color which indicates a higher iron content. Those which are gray in color contain more clay.

INTERNAL PARASITE CONTROL: Food grade diatomaceous earth makes a very effective natural insecticide. The insecticidal quality of diatomaceous earth is due to the razor sharp edges of the diatom remains. When diatomaceous earth comes in contact with the insect, the sharp edges lacerate the bugs waxy exoskeleton and then the powdery diatomaceous earth absorbs the body fluids causing death from dehydration.

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.

Food grade diatomaceous earth works in a purely physical/mechanical manner, not 'chemical' and thus has no chemical toxicity. Best yet, parasites don't build up a tolerance/immunity to its chemical reaction, so rotation of wormers is unnecessary.

***CLINICAL OBSERVATIONS OF FEEDING CODEX 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 (*Ancliyostoma caninum*), and Whipworms (*Trichuris vulipis*)."

***RESULTS ON FEEDING CODEX 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.

Daily recommended food grade diatomaceous earth feeding rates:

Kittens - 1/2 teaspoon
Cats - 1 teaspoon
Puppies - 1/2 to 1 tsp.
Dogs under 35 lbs. - 1 teaspoon
Dogs over 35 lbs. - 1 tablespoon
Dogs over 100 lbs. - 2 tablespoons

Cattle, Dairy Cows, & Hogs - 2% of dry feed ration

Chickens - 5% in feed

Goats & Sheep - 2% in grain

Horses - 1/2 to 1 cup in daily ration

*Humans - 1 heaping tablespoon daily

Internal feeding of food grade diatomaceous earth helps eliminate most internal worms, though possibly not all. It's also excellent when fed daily to keep down fly loads, since food grade diatomaceous earth is eliminated from the body, exactly the way it went in, it helps reduce the manure odor and kills flies that come in contact with it.

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 not harm anyone. 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.

EXTERNAL APPLICATIONS FOR DOGS & CATS: Lightly rub food grade diatomaceous earth into pets coat, fur, and bedding to dehydrate fleas, lice, mites, and ticks. Dust them lightly, but thoroughly, as in order to kill the parasites, they must come in contact with the DE. Note, external application can take up to 72 hours to dehydrate external parasites.

Lightly sprinkle in household carpet. Leave for 2-3+ days, then vacuum. Please do not get heavy handed with the DE in your carpet, as I have heard from some people advising it causes problems with their vacuum.

PLEASE NOTE: Many people advise using ONLY food grade diatomaceous earth eliminates a flea problem, but we cannot say that it does this for everyone. If you are dealing with a flea infestation, we usually recommend food grade DE in the household carpet, pet bedding, on the pets, and outside in the dry areas where fleas congregate. But in the moist areas, such as lawns, gardens, etc., we have always recommended using beneficial/parasitic nematodes. These microscopic nematodes parasitize flea larvae. DE, as far as we know, only kills the adult fleas that come in contact with it. So DE possibly does not kill flea larvae.

It is said that only 5 to 15% of a flea infestation are the adult fleas that you see. The remaining 85 to 95% of your infestation are the larvae waiting to hatch!! As such, and although we have many customers who advise using only food grade diatomaceous earth worked to eliminate their flea problem, we still recommend using the food grade DE in conjunction with beneficial nematodes in outdoor moist areas.

Food grade diatomaceous earth applied to manure piles keeps fly loads down/eliminated.

Dairy cow owners put food grade diatomaceous earth in burlap bags, so cows can rub against it and sprinkle themselves with DE, which helps to eliminate flies, that land on them, as well as lice and mites.

Apply to moist kennel areas to reduce odors, dry the area, and prevent pest breeding.

Deodorizing and absorption are natural functions of diatomaceous earth, so add to kitty litter to absorb odors and keep the litter box drier.

A small amount of food grade DE applied to livestock waterers keeps algae from growing on hot summer days.

Food grade diatomaceous earth is great for compost piles, to prevent breeding pests and control odors.

YARD, GARDEN, & LANDSCAPE APPLICATIONS: DE's minerals are great for the yard and gardens.

Apply DE to ant hills. Small ants may require a few applications to completely eliminate them, as they burrow new hills elsewhere, after we cover their initial hill with DE, but if we keep at it, eventually they disappear. Big ants are eliminated within two applications of a reasonable amount of DE applied to their ant hill. Ants in trash cans can be controlled by either painting DE around the bottom of the trash can or sprinkling it dry around it. They'll go elsewhere, as they do not like walking over DE. Of course, you will need to find their home to completely eliminate them, but it will keep them away from areas you put DE. Sprinkled around the house foundation keeps new crawling insects from coming inside.

We mix food grade diatomaceous earth with water to paint our fruit tree trunks with it, like a white wash. The DE keeps ants OFF our fruit trees. 1 cup applied to ½ gallon of water works well. Be sure to stir frequently as the DE settles to the bottom. Good as a white wash for wood fencing too.

1 to 2 cups per gallon of water can be used to apply diatomaceous earth in a backpack or hose end sprayer for problem infestations of mites, aphids, fungus problems, etc. Food grade diatomaceous earth will turn whatever you paint or spray with it white – so it may look like a “white” winter at your place.

OUTDOOR BUGS AFFECTED BY DIATOMACEOUS EARTH: Ants, fire ants, caterpillars, cut worms, army worms, fleas, ticks, cockroaches, snails, spiders, termites, scorpions, silver fish, lice, mites, flies, centipedes, earwigs, slugs, aphids, Japanese beetles (grub stage), fruit flies, corn earworm, cucumber beetles, corn borer, sting bugs, squash vine borers, thrips, loopers, etc., etc.

Pests that lay eggs may require a second application to catch the hatching eggs.

MINERALIZATION: Natural food grade diatomaceous earth contains 15 trace minerals: calcium, magnesium, sodium, potassium, copper, zinc iron, phosphorous, selenium, etc. People note shinier coats, better overall health, better production, etc. in their animals who are fed food grade diatomaceous earth regularly.

FLY CONTROL: Used daily, DE helps eliminate our fly population here used in conjunction with beneficial/parasitic nematodes in wet or moist garden areas. Sprinkle DE on livestock when flies are present. Dust barns, coops, after mucking and throw on top of manure/compost piles. We feed it daily to all dogs, cats, fowl, and livestock, so it comes out in the manure of each animal as well and prevents flies from growing in the manures.

Farmers hang burlap bags full of diatomaceous earth for the cattle to rub against and keep themselves dusted, which eliminates flies and other pests that land on them.

Diatomaceous earth can be put in a backpack sprayer mixed with water to spray your barn or coop buildings. Reapply DE when rain or water washes or wind blows it away.

GRAIN STORAGE & PROTECTION: Codex food grade diatomaceous earth is a healthy non-toxic alternative to chemical contamination of stored grain. When the grain is to be used, food grade diatomaceous earth can be easily removed, but need not be. Since it is “food grade”, makes no difference in taste or cooking quality, and adds 15 trace minerals. Suggested grain storage use: 1 cup of DE will protect 50 #'s of grain -- 5 cups of food grade diatomaceous earth will protect 300 #'s of grain -- 7 lbs. of DE will protect 1500 #'s of grain or seeds. One source advises only 1 to 2 #'s of DE per ton of grain.

A study done by ACRES, USA, Inc. advised that after 12 months of storage, the food grade diatomaceous earth treated material had 15 insects, compared to 4884 for malathion and 16,994 for untreated grain.

MORE DIATOMACEOUS EARTH BENEFITS: Food grade diatomaceous earth has been reported in scientific literature to absorb methyl mercury, e-coli, endotoxins, viruses (including poliovirus), organophosphate pesticide residues, drug residues, and protein, perhaps even the proteinaceous toxins produced by some intestinal infections. Food grade diatomaceous earth detoxes.

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. Food grade diatomaceous earth has not been found to cause any insult to the mucousa or barrier wall.

Diatomaceous earth has a negative charge and bacteria has a positive charge, wherein it is believed by some that food grade diatomaceous earth sweeps bacteria out of the body by trapping it in it's honeycomb shaped skeletal form.

There is no withdrawal period when given to milking or feed animals. No toxins. Decreased mortality, increased milk production, decreased mastitis, better feed conversion.

CAUTIONS:

- DE manufacturers who work in diatomaceous earth mines 5 days/week advise inhaling it is not a problem (tho of course, don't be snuffing it) and we have not had problems when inhaling DE in small amounts. IF you have asthma or some other lung ailment, either wear a mask or be very careful when using food grade diatomaceous earth.
- Do NOT get diatomaceous earth in the eyes. DE is drying to the eyes, so do NOT put it out when you or your pets are down wind of it. DE is drying to your skin, hands, and feet, just as it can be to your pets.
- NEVER use pool filter grade or any diatomaceous earth other than those labeled "Food Grade" around animals. It can poison or kill them.
- Some people experience a healing crisis (detox reaction) when beginning DE consumption. If this occurs, reduce the dose, till your body is cleansed, and then increase to the RDA.
- Remember, DE will kill beneficial insects as well, so use accordingly.

FOOD GRADE DIATOMACEOUS EARTH BENEFITS SUMMARY:

- Natural wormer – eliminates many parasites without chemicals
- Safe, non-toxic, parasites don't build immunity as they do with traditional wormers
- 15 trace minerals – great for animals, humans, plants, and soil
- No feed withdrawal for milk or feed animals
- Decreased mastitis
- Reduced scours
- Decreased mortality
- Better feed conversion
- Helps detox heavy metals, ecoli, bacteria, viruses, etc.
- Promotes shinier coats
- Digestive aid
- Colon cleanser
- Better production
- Better overall health
- Eliminates pests in stored grains
- Reduces flies, fleas, ticks, etc.
- Reduces manure odor
- Drying agent

- Reduces moisture and pests in barns, coops, kennel, litterboxes, compost piles, and other moist areas
- Antifungal properties – good for garden fungal growth
- Reduces overall animal stress
- Cost effective
- DE health benefits mean reduction in vet bills and dis-ease