

NATURAL PEST CONTROL

INDOORS & OUTDOORS — Part Two —



This is **Part Two** of our three-part series on the wonders of Diatomaceous Earth (DE). In this issue, we'll head into our home and then outdoors to uncover how DE can be used to naturally control pests, deodorize spaces, and support a chemical-free garden.

The Science Behind Diatomaceous Earth

Diatomaceous earth is formed from the fossilized remains of diatoms—microscopic algae with silica shells. When ground into a fine powder, these shells become sharp, porous particles. Under magnification, DE resembles shards of glass mixed with sponges.

Mode of Action:

Abrasion: The sharp edges scratch the insect's cuticle.

Absorption: DE's porous structure absorbs oils and moisture.

Desiccation: The insect dehydrates and dies within hours to days.

This **mechanical process** is different from chemical pesticides, which target the nervous system. Because DE works physically, insects cannot develop resistance.

INDOORS: Safe Pest Control Without Chemicals

Applications:

Cockroaches & Ants:

Dust thin lines along baseboards, cracks, and entry points. Ants follow predictable trails, making them easy targets.

Bed Bugs: Apply to mattresses, carpets, and furniture.

Leave in place for several weeks to catch multiple life stages.

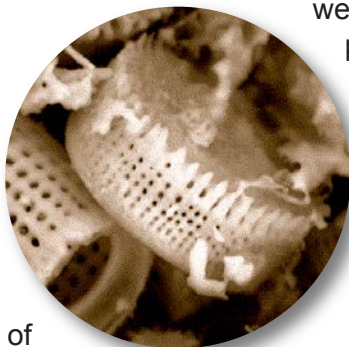
Pantry

Protection: Dust shelves or mix small amounts into stored grains to prevent infestations.

Advantages

Indoors:

- Non-toxic to humans and pets when food-grade DE is used.



- Long-lasting as long as it stays dry.
- Effective against a wide range of crawling pests: ants, fleas, bed bugs, cockroaches, silverfish, and mites.

Cautions Indoors:

Always use **food-grade DE**. Pool-grade has crystalline silica, linked to silicosis & cancer.

Wear a dust mask to avoid inhalation. Even food-grade DE can irritate lungs.

Apply sparingly—thick layers may repel insects instead of killing them.

Keep away from children's play areas and avoid airborne dust clouds.

OUTDOORS: Garden & Yard Protection

Applications:

Garden Pest Control:

Effective against slugs, snails, beetles, aphids, caterpillars, and ants.

Sprinkle around plant bases or garden perimeters.

Puff directly onto pests with a bulb duster.

Works only when dry—reapply after rain or irrigation.

Soil & Compost Benefits:

- Improves aeration and water retention.
- Controls odors and deters flies in compost piles without harming worms.

Anthill Control:

Stir anthills and dust generously. Consistent application dries out exoskeletons and eliminates colonies.

Advantages Outdoors:

- Approved for organic gardening.
- Reduces reliance on synthetic pesticides.
- Cost-effective: a small amount covers large areas.

Cautions Outdoors:

DE is **non-selective**: it can harm beneficial insects like ladybugs, lacewings, and bees.

Avoid dusting flowers or pollinator zones.

Reapply frequently in humid or rainy conditions.

Check product labeling before applying to food crops.

COMPARISONS TO CHEMICAL PESTICIDES

Chemical Pesticides: act quickly, but pests can develop resistance; may leave residues harmful to humans, pets, and pollinators.

Diatomaceous Earth: slower (hours to days), but pests cannot adapt; leaves

no toxic residue; safe when food-grade and applied correctly.

DID YOU KNOW?

DE particles are so fine they can pass through paper filters, which is why they're used in water purification.

Studies show DE is most effective against insects with waxy cuticles (ants, cockroaches, bed bugs) and less effective against soft-bodied pests in humid environments.

Because DE works physically, it's considered low-toxicity for humans and pets when used correctly.

SAFETY & PRECAUTIONS

Food-Grade Only: Pool-grade DE contains crystalline silica, a known carcinogen.

Respiratory Safety: Wear a mask; avoid airborne dust.

Environmental Caution: Apply strategically to minimize harm to beneficial insects.

Moisture Sensitivity: DE loses effectiveness when wet; reapply after rain or watering.

KEY TAKEAWAY

Diatomaceous earth is a **science-backed, eco-friendly option** for pest control indoors and outdoors. Its unique ability to abrade and dehydrate insects makes it powerful yet safe. With careful application—thin layers, food-grade only, and mindful reapplication after rain—you can protect your home and garden while minimizing risks to beneficial species.

Get ready for **Part Three**, where we'll turn our attention to our animal companions—exploring safe and effective ways to use DE for pet health, parasite prevention, and habitat care. Stay tuned—your journey into natural health and home harmony continues... ■

Good Health to You!

SOURCES:

Institute for Environmental Research and Education: IERE.org,
Seema Minerals: SeemaMinerals.com,
MDPI review on DE in pest control: MDPI.com,
The Spruce: [The Spruce.com](http://TheSpruce.com),
Great Garden Plans: GreatGardenPlans.com,
Live to Plant: LivetoPlant.com,
Martha Stewart Pest Control Guide: MarthaStewart.com,
Herb Prof Safety Review: TheHerbProf.com,
Safety Precautions: DiatomaceousEarth.com.



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