

What Are Negative Ions?

A negative ion is a molecule with a negative charge assigned to it. Negative ions occur commonly throughout nature and can create an overall sense of well being. Remember that feeling you've experienced near a waterfall, the beach or high in the mountains? Those are places where thousands of negative ions occur.

Negative ions are found after a rainstorm (falling water creates negative ions) or after a lightning strike. Every home has its own built-in negative ionizer--your shower.

The normal ion count in fresh country air is 2,000 to 4,000 negative ions per cubic centimeter. At Niagara Falls, you'll experience more than 100,000 negative ions per cubic centimeter.

Concentration of Negative Ions in Different Environments

Environment	Concentration
Waterfalls	95,000 - 450,000
Mountains, seashores	50,000 - 100,000
Breezy country meadow	5,000 - 50,000
Cities	100 - 2000
Rooms and offices	40 - 100
Rooms with air conditioner	0 - 20

Health Benefits of Negative Ions

Negative ions attach themselves to airborne particles such as dust, pollen, smoke and dander, causing them to drop from the air. Because the air is free of these allergens, many people notice that it is easier to breathe.

Reprinted from "Economy Daily News" - January 30, 2002. Ion benefits include:

- Strengthen the functions of autonomic nerves
- Reinforces collagen (tissues that are resilient and tension-related)
- Improves the permeability of the cell's prototype plasma membranes (improves metabolism)
- Strengthens the body's immune system

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Health Benefits of Negative Ions, continued

*As reported in *The Effect of Air Ionization, Electric Fields, Atmospheric and other Electrical Phenomena on Man and Animal* by Felix Gad Sulman, MD, benefits include:*

- Decreased respiratory rate (indicating a relaxed state)
- Decreased blood pressure (no a substitute for medical therapy)
- Feeling of well being
- Decreased skin temperature
- Acceleration of the conversion of succinate to fumerate (increased metabolism)
- Decreased blood sedimentation rate (a sign of inflammation that is normally elevated in disease states)
- Increased ciliary activity (allows our body to clear pollution we breathe in)
- Increased resistance to infection
- Suggested adjunctive therapy in chronic rhinitis, sinusitis, migraines, insomnia, wound and burn healing, asthma, hay fever, emphysema, bronchitis and more

"Negative ions increase the flow of oxygen to the brain; resulting in higher alertness, decreased drowsiness, and more mental energy," says *Pierce J. Howard, PhD, author of *The Owner's Manual for the Brain: Everyday Applications from Mind-Brain Research* and director of research at the Center for Applied Cognitive Sciences in Charlotte, NC*

In a study conducted by Columbia University, 25 people with SAD (Seasonal Affective Depression) sat in front of a negative ion air purifier for a half hour every morning for a month. Half the subjects were given a low level of negative ions, and the other half a high level. The higher level of negative ion treatment proved to be as effective against SAD as antidepressants, such as Prozac and Zoloft, and without the side effects of these drugs.