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Like other supplements, resveratrol carries risks

No one knows effects or dosage

*By Melissa Healy
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Like aspirin and the heart medicine digitalis, resveratrol is a plant extract — one with seemingly powerful and broad effects on living organisms. It acts as a phytoestrogen, mimicking many of the hormone estrogen's effects.

In the cells of rodents as well as humans, it disrupts the genetic machinery that gives rise to inflammation and to cancerous tumors. In cell cultures of brain tissue, it even cleans up the tangled amyloid deposits that are the hallmark of Alzheimer's disease.

It is, potentially, a powerful drug.

But unlike aspirin and digitalis, resveratrol qualifies as a dietary supplement, produced and marketed by an industry that operates under far less stringent government oversight than companies producing prescription drugs.

Supplement manufacturers are forbidden to make direct claims that their products will treat or cure diseases in humans. But they are permitted to cite animal research suggesting a product's curative powers, and to claim that their products improve or support the function of healthy bodily processes.

They are under no obligation to demonstrate the safety of their products.

Supplement supporters maintain that, if a substance seems to have only positive effects — as resveratrol seems to — there's little need to wait for the glacial pace of clinical trials to determine whether resveratrol supplementation is safe. Similarly, a fine-tuning of the precise dose can seem unnecessary as well.

Traditional health experts disagree. "Taking it as a supplement without long-range safety and toxicity studies is foolish," said Dr. Gerald Weissmann, director of New York University's biotechnology study center. Besides, he added, "you might get terrible pimples, infections or worse" because the touted "antioxidant" agents that resveratrol sets loose in the body to scavenge toxins also function to dampen our defenses against some dangerous bacteria.

Dr. Arthur Grollman, a microbiologist at New York State University at Stony Brook, said people are taking resveratrol — often in very large doses — "on faith" that compounds will have the same effects in humans that they do in the lab and in experiments with animals.

On complex biological issues such as aging and the human diseases that come with it, said Grollman, "they rarely do."

Studies now under way will show whether that faith is well founded or illusory. But it will take several years.
