Supplement Shown To Extend Life In Animal Studies

Written by Alan Gionet

DENVER (CBS4) — Visit the supplement aisles of your local vitamin store and you'll find loads of products with all kinds of claims, but there's one that's raising eyebrows: Resveratrol.

"Oh it's very incredible," said one man already taking it. It was news to one woman. "And I thought I knew about them all."

Resveratrol has been a sleeper to a lot of people, but positive data just seems to keep coming.

Consider this: Pharmaceutical giant GlaxoSmithKline last month offered over $700 million for all of the outstanding shares of a startup company called Sirtris.

Sirtris has been working with resveratrol, a chemical found in red wine, that shows an effect on the aging process. Sirtris has developed what it says is a more powerful version that it is testing on diabetes patients.

Resveratrol seems to turn on an enzyme called, sirtuin 1 that can slow down the aging process. The enzyme is found in various forms in life as varied as yeast, worms, mice ... and people.

Studies showing whether human life is actually lengthened would take decades, but in every living being tested so far, it does. Many experts are already taking it, noting that resveratrol is well tolerated.

"There's no doubt, if you feed an animal this stuff, they're going to get less cancer," says Dr. Robert Sclafani, Chair of the Biochemistry and Molecular Biology Department at CU Denver.

It started when scientists isolated it in the skin of grapes. It's also in peanuts.

Sclafani is hoping for funding to further his studies of how resveratrol acts on cancer cells.

Initial research done at CU Denver shows resveratrol has an effect on human cancer cell lines.

"What resveratrol does, as we found in our studies, it activates a system that's present in cells but only activates it in cancer cells, not in normal cells ... What it does is it fools the cell into thinking that its DNA is being damaged," says Sclafani. "And then it turns on a response mechanism that now the cell does not divide anymore."

He believes it may have a future use accompanying radiation or chemotherapy treatments.

Sclafani thinks the resveratrol may make the cells more sensitive to radiation or chemo. That might mean that doses of radiation or chemo might be reduced.

It's not a treatment by itself, Sclafani believes, but if human studies bear out what it's doing in other living beings it looks to be an effective cancer preventative.

"Now one of the things we'd like to know is what the connection is between this anti-cancer property and the anti-aging."

But researchers don't know. They do know it seems to have an effect. The fact of the matter is, the only thing proven to extend life is a low-calorie diet.

The encouraging thing is that it motivates sirtuin to go active and do all the good things it does, which is what resveratrol has been shown to do in animal studies.

Since the enzyme is virtually the same in humans, Sclafani thinks there's good reason to believe the properties would be the same in humans.

But no one knows what doses might be most effective on humans and for how long the effects will last. It will take years of research.

In the meantime, researchers like Sclafani says check with your doctor if you're under treatment for any medical condition before taking any supplement. But he's taking it. And it's all part of what may be a science of anti-aging that's just developing.

It may open new questions about the value of additional years -- if we can get them.

"Well that's a big point of contention in that what would be your quality of life if you did that anyway," says Sclafani. "Maybe if you're drinking red wine and having your Thai food, maybe it's not such a bad deal anyway."

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