Wine diet in a pill: Mice stay trim and fit on drug

An experimental drug that works much like an ingredient in red wine and grapes kept rodents from getting fat and increased their longevity. Researchers say the drug, SIRT1720, also lowered glucose levels — good news for a human version of the medicine being developed to treat diabetes.

The findings, published in the journal Cell Metabolism, show that mice fed a high-fat diet for 10 weeks who were given 100-milligram or 500-milligram doses of the medicine remained alive, while those on the same diet that didn't receive the drug packed on the pounds. The 10 medicated mice also lived twice as long as normal rodents.

The drug works by triggering a protein called SIRT1 that normally helps in during starvation and tells the body to burn fat and conserve energy, according to the study.

"We are activating the same enzymes that are activated when people go to the gym," Peter Elliott, an exec at Sirtris Pharmaceuticals, the drug's developer, told Reuters.

"Resveratrol is an ingredient in red grapes and wine, but it acts on SIRT1 by increasing sirtuin enzymes... and lowering levels of glucose in the blood — anti-diabetic effects also seen in the mice who were given the experimental drug. But it took less SIRT1720 to achieve the same results.

"SIRT1720 is a prototype for another Sirtris drug designed for humans that also activates SIRT1. That drug, SRT2104, is in early testing for glucose control in diabetes, says Michelle Dipp, the company's VP of corporate development. The drug is five to 10 years away from being available, she says, and would be priced the same as other once-a-day meds — about $5 to $7 per day.

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