

## Peaches, plums, nectarines give obesity, diabetes slim chance

June 18 2012

---

Peaches, plums and nectarines have bioactive compounds that can potentially fight-off obesity-related diabetes and cardiovascular disease, according to new studies by Texas AgriLife Research.

The study, which will be presented at the [American Chemical Society](#) in Philadelphia next August, showed that the compounds in [stone fruits](#) could be a weapon against "[metabolic syndrome](#)," in which obesity and inflammation lead to serious [health issues](#), according to Dr. Luis Cisneros-Zevallos, AgriLife Research [food scientist](#).

"In recent years obesity has become a major concern in society due to the [health problems](#) associated to it," said Cisneros-Zevallos, who also is an associate professor at Texas A&M University. "In the U.S., statistics show that around 30 percent of the population is overweight or obese, and these cases are increasing every year in alarming numbers."

While he acknowledged that lifestyle, genetic predisposition and diet play a major role in one's tendency toward obesity, "the major concern about obesity is the associated disease known as metabolic syndrome.

"Our studies have shown that stone fruits – peaches, [plums](#) and nectarines – have bioactive compounds that can potentially fight the syndrome," Cisneros-Zevallos said. "Our work indicates that phenolic compounds present in these fruits have anti-obesity, anti-inflammatory and anti-diabetic properties in different cell lines and may also reduce the oxidation of bad cholesterol LDL which is associated to

cardiovascular disease."

What is unique to these fruits, he said, is that their mixture of the bioactive compounds work simultaneously within the different components of the disease.

"Our work shows that the four major phenolic groups – anthocyanins, chlorogenic acids, quercetin derivatives and catechins – work on different cells – fat cells, macrophages and vascular endothelial cells," he explained. "They modulate different expressions of genes and proteins depending on the type of compound.

"However, at the same time, all of them are working simultaneously in different fronts against the components of the disease, including obesity, inflammation, diabetes and cardiovascular disease," he explained.

Cisneros-Zevallos said this is believed to be the first time that "[bioactive compounds](#)" of a fruit have been shown to potentially work in different fronts against a disease."

"Each of these stone fruits contain similar phenolic groups but in differing proportions so all of them are a good source of health promoting compounds and may complement each other," he said, adding that his team plans to continue studying the role of each type of compound on the molecular mechanisms and confirm the work with mice studies.

Provided by Texas A&M University

Citation: Peaches, plums, nectarines give obesity, diabetes slim chance (2012, June 18) retrieved 27 April 2024 from <https://medicalxpress.com/news/2012-06-peaches-plums-nectarines-obesity-diabetes.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.