Plums Poised to Give Blueberries Run for the Money

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There's an emerging star in the super-food world. Plums are rolling down the food fashion runway sporting newly discovered high levels of healthy nutrients, say scientists at Texas AgriLife Research.

Plainly, "blueberries have some stiff competition," said Dr. Luis Cisneros, AgriLife Research food scientist. "Stone fruits are super fruits, with plums as emerging stars."

Far from fruit snobbery, the plum is being ushered in after Cisneros and Dr. David Byrne, AgriLife Research plant breeder, judged more than 100 varieties of plums, peaches and nectarines and found them to match or exceed the much-touted blueberries in antioxidants and phytonutrients associated with disease prevention.

The duo acknowledge that blueberries remain a good nutritional choice. But Byrne said their findings are plum good news, especially in tight economic times, because one relatively inexpensive plum contains about the same amount of antioxidants as a handful of more expensive blueberries.

"People tend to eat just a few blueberries at a time - a few on the cereal or as an ingredient mixed with lots of sugar," Cisneros said. "But people will eat a whole plum at once and get the full benefit."

Discovery of the plum's benefits - along with that of fellow stone fruits, the peach and the nectarine - came after the researchers measured at

least five brands of blueberries on the market. Against those numbers, the team measured the content of more than 100 different types of plums, nectarines and peaches.

The first comparison was for antioxidants, molecules that sweep through a body looking for free radicals to knock out. Free radicals are atoms or molecules that lurk where diseases like cancer and heart disease are found.

"If the radicals aren't taken care of," Cisneros said, "they will cause the problems that lead to disease."

But the scientists didn't stop at knowing that plums and peaches were flexing their antioxidant muscles.

"Knowing that we had all these varieties with high levels of antioxidants, then the possibility of preventing these diseases would also be high with their consumption, so we went to the next step - how these compounds could actually inhibit chronic diseases," Cisneros said.

The team examined the full content of plums and peaches, then tested the effect of the compounds they found on breast cancer cells and cholesterol in the lab.

"We screened the varieties again with the biological assays," Cisneros said. "And that had never been done before, because it is expensive and a lot of work. But that investment is small in terms of the information we got, and how it can be used now for breeding efforts to produce even better fruit."

Byrne noted, for example, that one benefit the team found was that the phytonutrients in plums inhibited in vitro breast cancer growth without adversely affecting normal cell growth.

He said this type of research needs further study but is an indication that breeders ultimately will be able to produce new crop varieties with the best ratio of various phytochemicals to have an impact on disease prevention and inhibition. And these fruits will be available as fresh produce as well as in extracts for dietary supplements.

"Future work with stone fruits will focus on cardiovascular and cancer using animal models and identification of specific compounds that exert the properties," Cisneros added.

Bottom line from the researchers: "We suggest that consumers take seriously the recommendation to eat at least five servings of fruits and vegetables - or even more - every day and to make sure that plums are part of that," Byrne said.

Source: Texas A&M AgriLife Communications