MSU JAMS WITH STUDENTS IN DETROIT

Music is a great teacher, especially when kids like what they're hearing. Isaac Kalumbu, assistant professor of music, is using that idea to teach students in the Detroit Public Schools (DPS).

Kalumbu is part of the Detroit Public Schools Music Partnership Program through the MSU School of Music. As part of a larger university initiative to build positive relationships with communities in southeast Michigan, the DPS Music Partnership began as a pilot program nearly a year ago. The program focuses mainly on the Detroit "arts magnet" schools: Renaissance, Cass Technical, Martin Luther King and Detroit High School for the Performing Arts.

The partnership uses music clinics, community performances, ethnomusicology (the study of ethnic music) and jazz presentations to teach students while keeping them entertained. The program has developed into a self-sustaining, mutually beneficial dialogue between School of Music and DPS music educators and offers MSU and DPS students exposure to each other's learning environment and ultimately a richer experience of the music they share.

Faculty and students from both partners are excited by the arrangement. In a short period of time, new lines of professional communication have opened, invaluable human resources are being shared across a geographic and cultural gulf, friendships are forming and students are excited about learning.

Connect with the School of Music at www.music.msu.edu

LIFE MIGHT BE BETTER WITH A BOWL OF CHERRIES

EATING CHERRIES IS DEFINITELY NOT THE pits when it comes to keeping healthy. In fact, two recent studies – one involving the use of cherries in hamburgers to reduce cancer risks, the other tart cherries as a natural pain reliever – have intrigued consumers and the media nationwide.

J. Ian Gray, professor of food science and human nutrition and director of MSU's Michigan Agricultural Experiment Station, found that adding cherries to fried hamburgers retards spoilage and reduces the formation of suspected cancer-causing compounds. Previous research into the effect of combining cherry tissue with ground beef has shown the resulting product to be lower in fat, yet juicier and more tender than pure beef burgers.

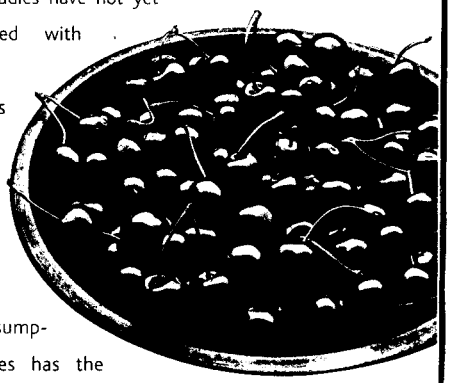
Gray says these findings are part of ongoing work into discovering the benefits of combining fruits and vegetables with meats to decrease health hazards and improve nutrition and taste.

"The pursuit goes on for these compounds found in many foods – like garlic, onions and soybeans," Gray said. "We are getting a handle on how these compounds are formed and understanding how to reduce the risk."

Research by Muralee G. Nair, professor of horticulture, who is affiliated with the National Food Safety and Toxicology Center, found that popping tart cherries instead of a pill might be an option for those suffering from inflammatory pain.

Nair's research found that the same chemicals that give tart cherries their color might relieve pain better than aspirin and ibuprofen.

Although studies have not yet been conducted with humans, Nair says that results suggest eating about 20 tart cherries could reduce inflammatory pain.



"Daily consumption of cherries has the potential to reduce pain related to inflammation, arthritis and gout," Nair said. "If you have pain from chronic arthritis and aspirin bothers your stomach, eating a bowl of cherries may reduce that pain."

If eating a bowl of cherries isn't always practical, a cherry pill with all the benefits of the fruit may be available in the future.

For more on the work of those in food safety: www.foodsafe.msu.edu

For more on initiatives at the Experiment Station: www.maes.msu.edu

The gunman is barricaded in a small room with hostages. As he calculates his next move, he fails to notice that he's a player in a scene straight out of a Steven Spielberg thriller: Around the room, a handful of robots – each the size of a Palmetto bug, each equipped with a camera and microphone – enters through the ventilation system and systematically scales walls and ceilings, feeding information back to the SWAT team outside...

Fact or fiction? In fact, these adaptable, reconfigurable microrobots are creations of a multidisciplinary team out of Michigan State University's College of Engineering. The team of six is collaborating on a three-year, $1.6-million grant from the Defense Advanced Research Project Agency, DARPA for short, to design and build the devices for use in law enforcement, search and rescue, and other purposes.

Project coordinator Lal Tummala, professor of electrical engineering and manufacturing, says the robots give law enforcement officials information critical to assessing a situation and determining action. And that's exactly what the U.S. Department of Defense, which wants to develop a means for safe and efficient fact-finding when the environment is dangerous or inaccessible to humans, is hoping for.

"The robots could be dropped by helicopter or shot like bullets into a building," Tummala says. "From there, they could go about their business, gathering information without notice."

The MSU team brainstormed design ideas based upon several open-ended criteria, including cost, maneuverability, and ability to communicate, robot-to-robot. The result: a bipedal caterpillar-like structure that could slink along floors and rugged terrain as well as climb vertically on stairways and walls using its suction-cup feet. ■

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