



December 11, 2001

• Weather: 30° Fair

Central Ohio's Largest Online Job Bank!

sponsored by Dispatch

columbusjobs.com

| Register / Sign In | Home | Archive | Classifieds |

Search...



Site map

▶ Local/State News

Market place

- Classified ads
- Find a car
- Find a business

NEWS
Local / State
National / International
Editorials / Letters / Forum
Columnists
Archive
Weather
Lottery
Obituaries
Faith & Values
Special Reports
SPORTS
OSU Football
OSU Men's Basketball
OSU Women's Basketball
Blue Jackets
Crew
Clippers
Reds
Indians
Bengals
Browns
Preps
Golf
The Ticket
Outdoors
BUSINESS
Stocks
Personal finance
Connect: Technology
ACCENT/ARTS
WeekEnd
Food
Dining
Movies
Travel
IPIX
Home & Garden
NOW! for kids
USA Weekend
Horoscopes
Crosswords
SERVICES
Register / Sign In
My Account
Web FAQs
Subscribe to the paper
Affiliated sites
Other sites
Newspaper in Education
Sponsored events
Dispatch jobs
Dispatch Media Kit

OSU raising toast to soy bread

A food researcher and a student baker have devised a bread they say is good and good for you.

Tuesday, December 11, 2001

Misti Crane
Dispatch Medical Reporter

Combining scholarly practice with the art of baking, food scientists at Ohio State University soon may give soy seekers a good excuse to toss the tofu.



Jeff Hinckley / Dispatch

Not that there's anything wrong with tofu. But abundant evidence points to American reluctance to embrace a soy-rich, Asian-influenced diet that is good for the heart and could help defy some types of cancer.

Dr. Yael Vodovotz helped develop soy bread, still undergoing tests such as the one being conducted by Ohio State research assistant Yuchu Zhang.

Betting that bread will be more easily accepted than traditional soy foods, the university is poised to license a recipe that would be the first soy bread to pack enough of the bean to carry a heart-healthy claim.

To reap the benefits of soy, people have to eat at least 25 grams of soy protein daily, according to the Food and Drug Administration.

For a soy product to be considered heart-healthy, a serving needs to provide 6.25 grams of soy protein as well as be low in fat, saturated fat and cholesterol.

The bread, which meets those claims, is the product of the work of researcher Yael Vodovotz, assistant professor in the school's Food Science and Technology Department, and Cory Ballard, a student, baker and businessman.



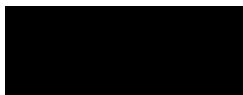
Click Here!

To start your home delivery subscription today!



Or call 614.461.5100

▼ SPECIAL SECTIONS ▼



Vodovotz began looking at soy bread while working at the NASA Johnson Space Center in Houston. There, she was involved in developing a plan for sustaining human life on another planet.

At Ohio State, Vodovotz has shifted from working on bread for Earthlings-turned-Martians to bread for health-conscious PB-and-J lovers.

The yellow-hued, chewy, mass-marketable bread never would have come about without a partnership with Ballard, an undergraduate and senior food technologist for Chef-Con, a research, consulting and food-manufacturing company, Vodovotz said.

When the carbohydrate chemist came to the university, Ballard attended a lecture she gave on the properties that make bread stale.

"We kind of joked because she was baking bread in bread machines, and I like to bake bread a more traditional way," he said.

Next thing you know, the duo were concocting a formula for a tasty soy-rich bread that could be reproduced in a factory.

Ballard's baking wizardry was key: Adding that much soy to bread can be disastrous, at least according to American bread standards, Vodovotz said. "It can taste beany or grassy.

"It's been a very difficult process to be able to incorporate enough soy into your product."

Ballard and Vodovotz believe they've cleared the obstacles. Translation: Even kids have actually said they like this stuff.

In a comparison at The Hills Market in Sharon Township north of Worthington, 70 percent of taste-testers liked the soy bread better than wheat, Ballard said.

And it caught the attention of at least one well-positioned set of taste buds -- those of OSU President William E. Kirwan. Having sampled the bread, he fired off an e-mail to Vodovotz, asking why it wasn't on the market.

More concerned with science than stocking store shelves, Vodovotz still blushes a bit and shrugs her shoulders when retelling the story.

"I'm not here to become a millionaire off of this," she said with a



The Central Ohio
Better Business
Bureau



The Columbus
Dispatch

Start your
subscription
today!
CLICK HERE

Sponsored by:



OHIO'S EMERGING
TECHNOLOGIES GATEWAY
www.oar.net

laugh. "I just want money to do my research."

But Kirwan's push has resulted in negotiations to license the recipe to bakeries, which will put the bread on grocery shelves. Ohio State -- and both Ballard and Vodovotz -- would make money in the deal.

Neither is willing to guess when consumers might be able to try a loaf, but Ballard said he's certain that day will come.

Grocery-store loaves might not be the end of the road: Ballard talks of soy bread in school lunches and sub shops and of such treats as soy-enhanced English muffins and danishes.

On the scientific end, university researchers are interested in testing the bread's cancer-control potential, said Steven Schwartz, a professor and the Carl E. Haas endowed chair in the food industries.

Although some studies point to potential benefits, "There's still a great deal of work that has to be done," Schwartz said.

On a similar front, a \$1.27 million grant OSU received recently from the U.S. Department of Agriculture will pay for research into the potential benefits of soy-enhanced tomato-based foods, such as tomato juice.

Lycopene in tomatoes and isoflavones in soy have been linked to cancer prevention. A combination of the two could work to attack two different targets within a cancer cell.

Who knows -- maybe one day it will be commonplace to sit down to a grilled cheese sandwich and a bowl of tomato soup and fight cancer and heart disease at the same time.

It might even taste good.

 [Printer-friendly version](#)  [E-mail this story](#)



| [Home](#) | [Search](#) | [Site map](#) | [Privacy policy](#) | [News](#) | [Sports](#) | [Business](#) | [Features](#) | [Contact us](#) |

Copyright © 2001, The Columbus Dispatch. Content may not be republished without permission.