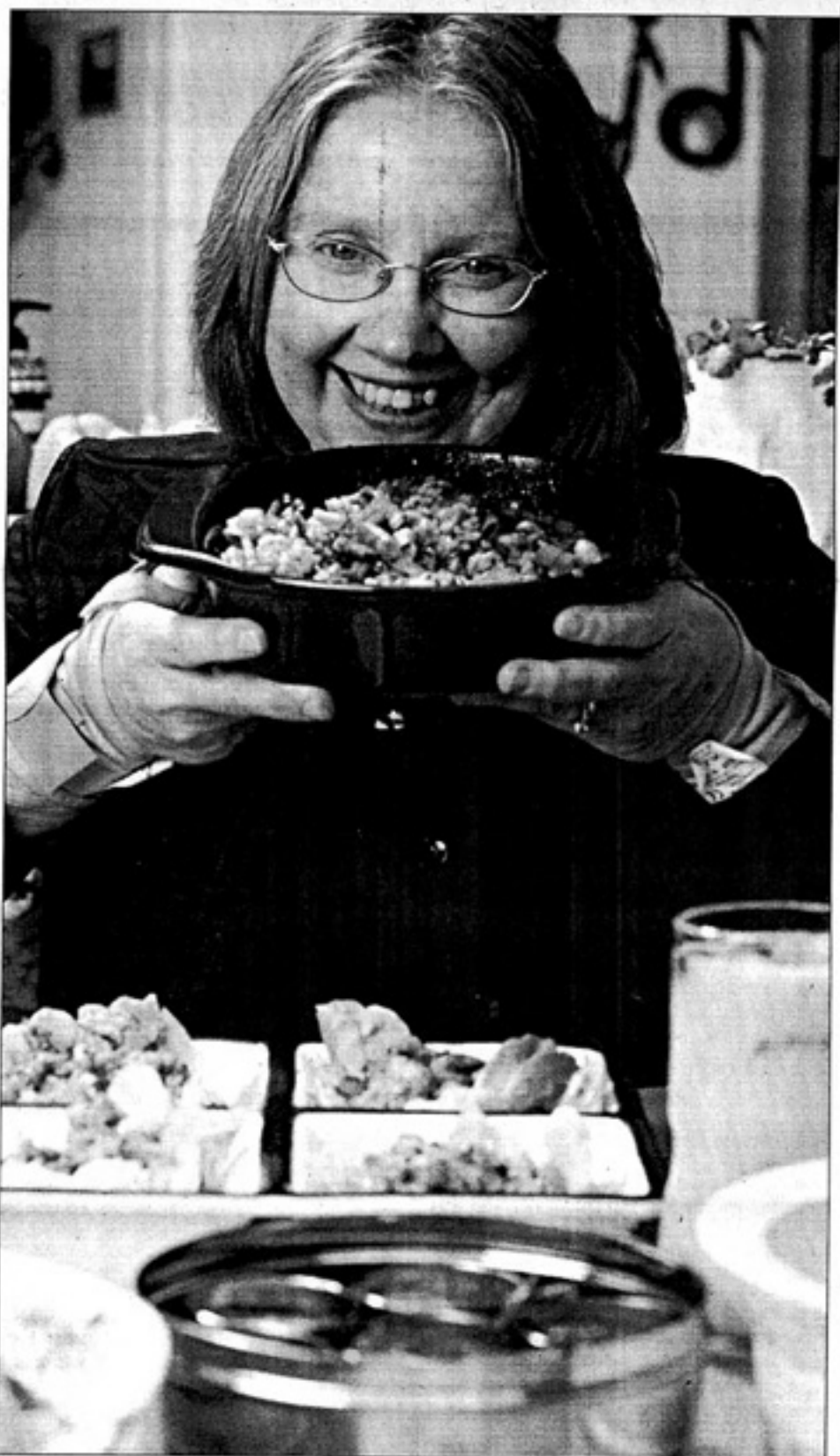


Tasty curry might have a fringe benefit

Research suggests turmeric may help prevent arthritis and a host of other diseases

"The spice of life": Curry is a blend of turmeric and other spices, such as fennel seeds, black pepper, cumin, mustard seeds and chili powder.



Photos by Andy Maris for USA TODAY

By Kathleen Fackelmann
USA TODAY

Five years ago Darci Jayne hardly ever touched a vegetable and pretty much lived on pizza, pasta and fast food.

That diet led to weight gain and health problems, including severe joint pain. "I was close to 200 pounds and getting scared," she says.

By cutting portion sizes she lost 50 pounds but always felt as if she were on a diet. Then Jayne took an Indian cooking class that emphasized fresh vegetables and curry spices.

She began to whip up an Indian dinner once or twice a week — and soon she noticed she wasn't always looking for a late-night snack. And the curry in the food offered her a bonus: It seemed to ease the pain and swelling in her joints.

"I have arthritis," says Jayne, 55. "But I'm moving better now."

Preliminary research suggests Jayne may be right. A study in the November issue of *Arthritis & Rheumatism* suggests turmeric, one component of curry spice, almost completely prevented joint swelling in rats with arthritis. Other studies have suggested that the spice could protect against diseases such as heart

disease, cancer and Alzheimer's, a degenerative brain disease that afflicts nearly 5 million people in the USA.

Rates of Alzheimer's in India are about four times lower than in the USA, says Gregory Cole, a researcher at the University of California-Los Angeles. His studies suggest that curry contains a powerful substance that might protect the brain from damage that leads to Alzheimer's.

Surprising findings in mice

Can scientists prove curry wards off such diseases as Alzheimer's or cancer? Not yet, says Bharat Aggarwal at the University of Texas-Houston. But he says the growing file on curry includes compelling evidence gleaned from animal and human studies.

The findings from Western science fit with what traditional Indian healers have long said about turmeric. "They call it the spice of life," says P. Murali Doraiswamy, an Alzheimer's expert at Duke University in Durham, N.C.

For centuries, doctors trained in Ayurvedic medicine, a traditional medical system in India, have turned to turmeric to treat inflammatory diseases such as arthritis, says Janet Funk, a researcher at the University of Kansas. In the USA, many people with arthritis take over-the-counter supplements that contain curcumin, the active ingredient in turmeric.

In the November study, Funk and her colleagues gave rats that were bred to develop rheumatoid arthritis injections of turmeric. "The turmeric almost completely prevented the onset of arthritis," Funk says. The spice also seemed to help stop joint destruction in rats that had already started to develop the disease, she says.

Curry also may offer some protection against cancer. "Indians eat from 100 to 200 milligrams of curry every day, and that might be enough to prevent cancer," says Aggarwal of the M.D. Anderson Cancer Center at the University of Texas.

The curcumin in curry seems to shut down genes that trigger the development and the spread of breast cancer, animal studies in Aggarwal's lab suggest. And a preliminary human study suggests curcumin supplements might — in a handful of cases — be able to stabilize pancreatic cancer, he says.

Epidemiology studies in humans also have linked frequent use of turmeric spice to lower rates of breast, prostate and colon cancer, he says.

Large clinical studies still needed

Other research suggests curry might shield the brain from Alzheimer's, Cole says.

The studies on curry and Alzheimer's include:

- ▶ A test-tube study by researchers at UCLA in October showed that curcumin could help clear the human brain of toxic protein deposits thought to cause the memory loss and confusion of Alzheimer's.

- ▶ A study of more than 1,000 older men in Singapore last year found that those who ate lots of curry-spiced food did better on memory tests than those who rarely ate the spice.

The findings from Singapore suggest curry may help keep the aging brain in top shape. But to get the proof that curcumin fights cancer or Alzheimer's or arthritis, researchers will have to conduct large clinical trials, Cole says, and those studies will be expensive and take years to complete.

Americans don't need to wait for the proof on curry to enjoy a diet that includes more of this spice, says Alamelu Vairavan, co-author of the book *Healthy South Indian Cooking*. "You don't need to gulp supplements," she says, adding that cooks can find turmeric in Indian specialty shops and in most grocery stores.

Americans should give Indian food a try, Vairavan says. "This kind of food is very tasty and satisfying."

Eating more Indian food has worked for Jayne, who lives with her family in a small town outside Milwaukee. A family physician who recently retired because of disabling arthritis pain, Jayne says she knows there's no hard evidence of curry's health benefits. But that won't stop her from enjoying a lunch of tuna masala or an Indian stir-fry for dinner. She says the food seems to warm her joints and helps keep her in a size 8 dress. "You can't argue with success," she says.

It's the spices that help you

Indian food offers many benefits, especially if dishes are prepared with a healthy oil such as canola instead of butter or ghee, says Alamelu Vairavan, co-author of the book *Healthy South Indian Cooking*. She recommends preparing dishes loaded with brightly colored vegetables, which contain natural disease-fighting substances called antioxidants.

Indian food typically contains curry powder or turmeric, which scientists believe contains a compound that protects against arthritis, Alzheimer's and other diseases, she says. Curry powder is a blend of spices that includes turmeric, a mild-tasting spice made by grinding up the root of the curcuma plant, she says.

Sample menu

Appetizer
Tuna masala served with sliced French bread

First course
Cauliflower soup

Side dish
Bell pepper and tomato rice with cashews

Entree
Chettinad chicken kulambu

Side dish
Cucumber and tomato yogurt salad

Dessert
Carrot halva

Source: *Healthy South Indian Cooking* by Alamelu Vairavan and Patricia Marquardt (\$24.95 Hippocrene Books)

Good eating: Darci Jayne retired from medical practice because of arthritis. She took a class in Indian cooking to control her weight and discovered a bonus: She can move more easily.