## The next big food safety technology could be from this ancient root

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

What if our next-generation, futuristic antimicrobial turns out to be the same thing people have been using for the <u>last 4,000 years</u>? A new invention could improve food safety by borrowing a trick from ancient civilizations: using spice to fend off germs.

If you want to keep food from spoiling you can load it with sugar (see <u>preserves</u>), or salt (see <u>pickles</u>), or fat (see confit, or SPAM) — but then you end up with a lot of sugar, salt, and fat. . . .

Another alternative is to add spices, which can inhibit the growth of harmful microbes. . . .

But we don't always want everything to taste spicy. Ruplal Choudhary, a food and bioprocess engineer at Southern Illinois University Carbondale, is part of a research team that has found a way that the antimicrobial properties of the spice turmeric might be employed without making foods taste like turmeric. They discovered how to coat glass and metal with curcumin — the main antibacterial chemical in turmeric. The curcumin is embedded in nano-capsules, so it doesn't rub off and flavor foods. You could imagine using this technology to coat the insides of cans (a substitute for BPA perhaps) or knives and countertops — to provide a new line of defense against food-borne illness.

Choudhary also thinks this technology could be used to make fresh produce safer.

. . . .

A new application for an ancient technology that could keep food fresher and safer? If I was an executive at Chipotle, I'd be perking up my ears right now.

Read full, original post: The next big food safety technology could be from this ancient root