

Fresh pot of tea strikes anti-cancer gold

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Researchers might one day brew up a cancer treatment in their afternoon cuppa, says a study in a Royal Society of Chemistry journal.

Researchers report in the *Journal of Materials Chemistry* that chemicals in [tea](#) are the best yet discovered to make consistent, biologically-safe [gold](#) nanoparticles, which show promising anti-cancer properties.

The team from University of Missouri, Columbia, literally brewed a fresh pot of Darjeeling and added gold salts, which get reduced by phytochemicals already known for their health benefits.

The tea chemicals that regulate the size of these nanoparticles also increase their likelihood of being taken into breast and [prostate cancer](#) cells, improving their potential for targeted anti-cancer drugs.

Kattesh Katti, lead author of the article, says that discovering tea's non-toxic formation of nanoparticles is of paramount importance for medical and technological applications.

Gold nanoparticles have many potential medicinal and technological uses, such as targeted anti-cancer drugs, but currently their synthesis needs toxic reagents which make them unsuitable for use in the body.

The [natural chemicals](#) used in this new method are harmless in the body and the reaction produces no toxic by-products - only some slightly dodgy-tasting cold tea.

More information: Kattesh Katti, J. Mater. Chem., 2009, DOI: 10.1039/b822015h

Provided by Royal Society of Chemistry

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