

Is a cup of tea really the answer to everything -- even anthrax?

March 12 2008

A cup of black tea could be the next line of defence in the threat of bioterrorism according to new international research.

A new study by an international team of researchers from Cardiff University and University of Maryland has revealed how the humble cup of tea could well be an antidote to Bacillus anthracis –more commonly know as anthrax.

As a nation, Brits currently drink 165 million cups of tea, and the healing benefits of the nation's favourite beverage have long been acknowledged.

But now the team of scientists led by Professor Les Baillie from Welsh School of Pharmacy at Cardiff University and Doctor Theresa Gallagher, Biodefense Institute, part of the Medical Biotechnology Centre of the University of Maryland Biotechnology Institute in Baltimore, has found that the widely-available English Breakfast tea has the potential to inhibit the activity of anthrax, as long as it is black tea.

Anthrax - a potentially fatal human disease - is caused by the bacterium Bacillus anthracis. A very serious and rapidly progressing form of the disease occurs when bacterial spores are inhaled making anthrax a potent threat when used as a biological warfare agent.

Published in the March issue of the Society for Applied Microbiology's journal *Microbiologist*, Professor Baillie said: "Our research sought to



determine if English Breakfast tea was more effective than a commercially available American medium roast coffee at killing anthrax. We found that special components in tea such as polyphenols have the ability to inhibit the activity of anthrax quite considerably."

The study provides further evidence of the wide range of beneficial physiological and pharmalogical effects of this common household item.

The research also shows that the addition of whole milk to a standard cup of tea completely inhibited its antibacterial activity against anthrax.

Professor Baillie continued: "I would suggest that in the event that we are faced with a potential bio-terror attack, individuals may want to forgo their dash of milk at least until the situation is under control.

"What's more, given the ability of tea to bring solace and steady the mind, and to inactivate Bacillus anthracis and its toxin, perhaps the Boston Tea Party was not such a good idea after all."

Source: Cardiff University

Citation: Is a cup of tea really the answer to everything -- even anthrax? (2008, March 12) retrieved 19 April 2024 from https://phys.org/news/2008-03-cup-tea-anthrax.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.