

Golden staph tricked by vitamin mimic

January 4 2016

Vitamins are good for our health, but what if we could use vitamins to treat infections as well?

Ashleigh Paparella at the University of Adelaide has discovered a new class of vitamin-like molecules that can be used to treat life-threatening 'golden staph' bacteria.

"Golden staph is a [dangerous bacteria](#) that is resistant to many common antibiotics," said Ashleigh.

"We've discovered a new class of antibiotics that stops golden staph in its tracks by preventing its use of vitamin B7."

Normally, golden staph picks up vitamin B7 from its environment and uses it as a co-factor to create energy for growth and metabolism. Ashleigh found that her antibiotic – which is a vitamin B7 mimic – prevents the normal activity of B7 through blocking the activity of an enzyme called BPL.

"We've also tested to show that our B7 mimic does not block BPL in [human cells](#), so it is safe to use," Ashleigh explained.

While these studies have been conducted in [cultured cells](#) so far, Ashleigh is now measuring the capacity of the B7 mimic to treat real-life infections.

"Antibiotic resistance is a global threat to human health," said Ashleigh.

"We hope our research will help tackle this important issue."

Provided by The Lead

Citation: Golden staph tricked by vitamin mimic (2016, January 4) retrieved 2 May 2024 from <https://medicalxpress.com/news/2016-01-golden-staph-vitamin-mimic.html>

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