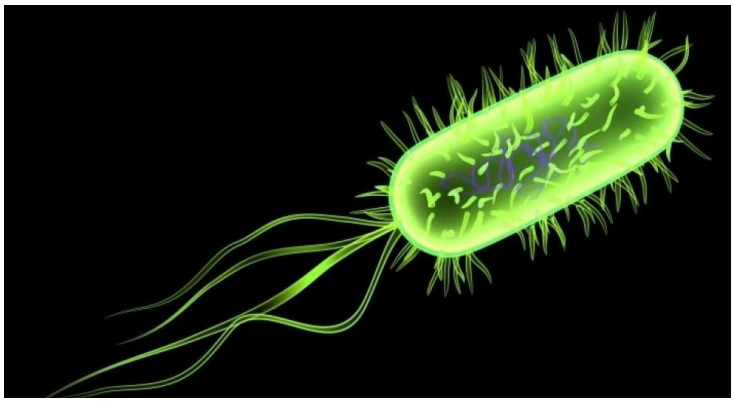
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An improved tool to detect cancer

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In a collaborative research project, scientists from Griffith University's Institute for Glycomics, the University of Adelaide and University of Queensland have discovered a new and improved tool to detect cancer.

The researchers took a naturally occurring *E. coli* toxin that recognizes a tumor antigen, and engineered it to change the protein make-up so it became entirely specific to detecting only this singular tumor antigen structure.

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The substance Neu5Gc recognized by the *E.coli* toxin is expressed at very high levels on cancer cells but not normal cells so the discovery of Neu5Gc indicates the patient may be suffering cancer.

Humans are unable to make Neu5Gc but is absorbed into the human body through dietary intake of red meat and dairy.

More research has to be done but the important thing is this new tool has the potential to detect far more sensitively, a wide range of possible cancers.