

Groundbreaking study finds link between common bacteria and stomach cancer

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A new study has discovered that a type of bacteria commonly found in the body, which usually does not pose problems for healthy people, plays a significant role in causing stomach cancer, the fifth most common cancer in the world.



Professor Joseph Sung, NTU Singapore's Senior Vice President (Health and Life Sciences) and Dean of the Lee Kong Chian School of Medicine, is the co-lead of the study which found that Streptococcus anginosus bacteria play a significant role in causing stomach cancer. (Image Credit: NTU Singapore) © Provided by News Medical

Streptococcus anginosus bacteria exist alongside other germs in the mouth, throat, intestines and vagina. Occasionally, they may cause mild infections like sore throats and skin infections.

However, research co-led by NTU Singapore and the Chinese University of Hong Kong found that *S. anginosus* is involved in stomach infections in mice that cause cell damage and changes known to encourage gastric cancer.

Mice experiments also revealed that the bacteria spurred the growth of stomach cancer cells, doubling the size and weight of tumors in some cases.

But the researchers found that disrupting a protein on the bacteria's surface, which they need to interact with stomach lining cells, reduced *S. anginosus*' ability to contribute to stomach cancer.

The findings add to the number of bacteria species known to cause gastric cancer. While infection by another bacteria, *Helicobacter pylori*, is known to increase gastric cancer risk, whether other bacteria are involved has remained unclear until now.

The study's co-lead, Professor Joseph Sung, NTU's Senior Vice President (Health and Life Sciences) and Dean of Lee Kong Chian School of Medicine, said that the results lay important groundwork for

further studies in humans that will help clinicians better treat and prevent gastric cancer driven by bacteria.

Source:

Nanyang Technological University, Singapore (NTU Singapore)

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Fu, K., *et al.* (2024). Streptococcus anginosus promotes gastric inflammation, atrophy, and tumorigenesis in mice. *Cell*. <u>doi.org/10.1016/j.cell.2024.01.004</u>.

https://www.msn.com/en-gb/health/other/groundbreaking-study-finds-link-between-commonbacteria-and-stomach-cancer/ar-BB1kr5xs