

# Exploring why obesity might lead to cancer

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Cancer is caused by genetic changes that break down normal constraints on cell growth. It is known that obesity and being overweight increases the risk of developing cancer, but the question until now has been why? Now, researchers at University of Bergen have demonstrated that lipids associated with obesity make cancer cells more aggressive and likely to

form actual tumors.

The researchers have discovered that the changed environment surrounding the cancerous cell, from a normal weight body to an overweight or obese body, pushes the [cancer](#) cell to adapt.

"This means that even in the absence of new gene mutations, [obesity](#) increases the risk that tumors will form," says associate professor Nils Halberg. Obesity is the cause of approximately 500,000 new cancer cases each year—a number that is expected to grow as obesity rates continues to increase.

"To scientifically dissect how these two complicated diseases interact has been extremely interesting and rewarding. Especially as this new understanding will enable researchers to design improved treatments for obese cancer patients," Halberg adds.

The study was published in *Nature Communications*.

**More information:** Xiao-Zheng Liu et al, C/EBPB-dependent adaptation to palmitic acid promotes tumor formation in hormone receptor negative breast cancer, *Nature Communications* (2022). [DOI: 10.1038/s41467-021-27734-2](#)

Provided by University of Bergen

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