# Killing Cancer Cells With Fat

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Have you ever taken “Omega-3 fish oil” supplements? Fatty acids are essential for humans. For example, one type of omega-3 fatty acid called DHA (short for **d**ocosa**h**exaenoic **a**cid) helps make up body structures, including the brain and the eye.

A team of researchers at the University of Louvain claims that it may be possible to **take advantage of the way tumor cells digest omega-3 fatty acids and omega-6 fatty acids to develop drugs that work with other cancer treatments** in slowing tumor growth. Because of poor blood flow and unusual sugar use, tumors tend to become acidic inside.The researchers found that as tumor cells in an acidic environment were “fed” an large amount of omega-3 and omega-6 fatty acids, they became too “full” and failed to store the excess fatty acids correctly. The excess omega-3 and omega-6 fatty acids within the tumor cells were then altered by a process called *peroxidation.* This eventually led to the death of tumor cells. Furthermore, researchers found that when lab mice were fed a diet rich in omega-3 fatty acids, their tumor growth was slower than that seen in mice fed other fatty acids.

Does this mean taking non-prescription omega-3 supplements will slow tumor growth in humans? That is not yet known. It’s important to note that the impact of increased fatty acids has only been shown in mice and  cell cultures. **Hopefully, the discovery will allow researchers to develop medicines that take advantage of this “flaw” in the tumors' "digestive system.”**

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