

3rd International Conference on Surface and Colloid Science,
Stockholm, August 1979.

ALKOXYGLYCEROLS IN CELL MEMBRANES STOP TUMOUR
GROWTH?

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Alkoxyglycerols are present in small quantities in
a number of natural sources. They are relatively
abundant in bone marrow and in mother's milk. The
general formula for the alkoxyglycerols is
 $\text{CH}_2\text{OH}\cdot\text{CHOH}\cdot\text{CH}_2\text{OR}$, where R is a long-chain aliphatic
radical (1).

Regression of tumour growth is observed for patients
suffering from cancer in the uterine cervix when
alkoxyglycerols are administered prophylactically
before the radiation treatment (2). No regression is
observed for the patients who received alkoxyglycer-
ols only during this treatment, the prophylactically
administration thus being of decisive significance.

In the human body the alkoxyglycerols are esterified
with fatty acids of C_{16} - C_{18} atoms. A result of utmost
importance is that these alkoxyglycerol esters have
been found in tumour cells but not in normal cells
(3). It is likely that the alkoxyglycerols or their
esters will form liquid crystals thus giving a more
rigide structure to the membrane, a structure which
might reduce the possibility of the cell to divide.

References:

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