

# Epigenetics: A new link between nutrition and cancer

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In "Epigenetics: A New Link Between Nutrition and Cancer", a recent article from *Nutrition and Cancer: An International Journal*, a publication of Routledge, researchers explore the possible effects that diet can have on gene expression through epigenetic mechanisms. Explaining the impact of nutrition on epigenetic mechanisms may help to predict an individual's susceptibility to cancer, provide dietary recommendations, or provide therapeutic applications of natural compounds to fight against cancer.

Epigenetic modifications are heritable and potentially reversible changes in [gene expression](#) that do not require changes to the actual DNA sequence. By taking advantage of these modifications, researchers believe it is possible to mediate environmental signals and provide a link between susceptibility genes and environmental factors in the cause of cancer.

However, it should be noted that any protective effect is unlikely due to a single dietary component and thus, the identification of specific relevant compounds and metabolites is necessary. Metabolism can also play a large role in affecting the potential to induce epigenetic changes. Along with dietary components, eating patterns, and [environmental factors](#), there are many variables that can complicate studies aiming to identify specific components which might prevent cancer development.

Further studies are necessary to determine effective doses and concentrations of bioactive food components in cancer prevention or

treatment. More research is also necessary to determine proper responses for healthy individuals attempting to prevent cancer, as well as individuals with different stages of cancer.

**More information:** "Epigenetics: A New Link Between Nutrition and Cancer." Gordana Supic, Maja Jagodic, Zvonko Magic . *Nutrition and Cancer*. Vol. 65, Iss. 6, 2013. [DOI: 10.1080/01635581.2013.805794](https://doi.org/10.1080/01635581.2013.805794)

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