

HARMFUL BACTERIAL METABOLITES

Gut bacteria that feed on healthy food appear to amplify the nutritional benefits of those foods. However, they also appear to amplify the undesirable effects of unhealthy food. Here are a few examples.

A HETEROCYCLIC AMINES

Heterocyclic amines (HCAs) are found in the char that coats grilled meat and are considered carcinogenic. When HCAs enter the colon, they are digested by bacteria that convert the chemicals into electrophilic derivatives that damage DNA, placing people at increased risk for colon cancer.

B HYDROGEN SULFIDE

High-protein diets, particularly those high in red meats, can also provide gut bacteria with raw material for producing more damaging compounds, such as hydrogen sulfide, which can damage DNA and increase the risk of cancer formation.

