

Have you explored our Genotoxic Nitrosamine Resource Center? Take a minute today to peruse the site which covers a range of resources from app notes to webinars, to tools Phenomenex has created, to resources from fellow OpCos, like SCIEX.

Nitrosamines are common chemicals found in water and foods including cured and grilled meats, dairy products and vegetables. Everyone is exposed to some level of nitrosamines, and even produces a certain level. However, manufacturers also add nitrates to processed foods, such as bacon, to preserve them and make them last longer. They're the reason why cured meat is pink or red. In meat, nitrites turn into nitric oxide. This reacts with proteins in the meat, changing its color and helping preserve it. Without nitrites and other additives, the meat would turn brown quickly.

Nitrates also occur naturally in water. In some areas, fertilizer use may lead to high levels of nitrates that can be harmful to children. For this reason, health authorities regulate nitrate levels in drinking water.

Nitrates and nitrites are essential compounds, but they can become hazardous if they form nitrosamines. Nitrosamines can form if you cook nitrates or nitrites at high heat. There are different types of nitrosamines, and many can increase the risk for cancer. Nitrosamines are some of the main carcinogens in tobacco smoke, for example.

As described above, in some forms, nitrates and nitrites can be hazardous. However, they

may also have health benefits.

Studies suggest that nitrates can enhance physical performance, especially during high intensity endurance exercise. Some people often use beetroot or beetroot juice for this purpose, because they contain high levels of nitrates. The reason for this improvement in physical performance may be due to nitrates increasing the efficiency of mitochondria. Mitochondria are the parts of cells that produce energy.

For all these reasons and more, there is a high need for testing abilities in food, water, and environmental for levels of nitrosamines, which the Genotoxic Nitrosamine Resource Center aids in. You will be able to find upcoming webinars that you can sign up to attend for free, recent technical applications, method optimization techniques, analysis guides, and so much more for all your chromatographic needs.

Start explore the site by click the image or link below:

**Genotoxic Nitrosamine Analysis Resource Center**



July 15, 2020 – 11:00 CEST

Upcoming Live Panel Discussion and Q&A Session on the LC-MS/MS Identification of Genotoxic Nitrosamines

[Sign up Now »](#)

July 16, 2020 – 3:45 CET

Comprehensive Identification and Quantification of Nitrosamine Impurities by HPLC-MS/MS

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Have any questions regarding the above information or any other technical inquiries? Reach out to our technical specialists today through Chat Now - our free online service that can help with method optimization, chromatographic tips, product recommendations, and provide quotes for an easier buying process.

Start chatting today at [www.phenomenex.com/chat](http://www.phenomenex.com/chat).



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