

## Detection of nitrate in potatoes, vegetables and fruits with QUANTOFIX® Nitrate/Nitrite

### Background



Potatoes, vegetables and fruits are an important part of humans' basic food in many parts of the world. Every day people consume them in great quantities. Nitrate is a nitrogen compound which accumulates through the use of fertilizers. Above the concentration of 200 mg per kilogramme potatoes develop a poor taste and bad stocking features. Often potatoes become wet rot through a reduction of cell stability.

Experts recommend to consume potatoes, vegetables and fruits with low concentrations of nitrate. The transformation of nitrate to nitrite through the influence of proteins may produce nitrosamines which are carcinogenic.

### Test procedure for potatoes

Cut a potato and introduce one QUANTOFIX® Nitrate test strip. Then press the two halves together, so that the test strip comes in good contact with the potato.

Remove the test strip from the potato after a few seconds. Wait for 60 seconds and compare the test strip with the colour scale. A red-violet coloration of the test strip indicates the presence of nitrate.



Cut a potato



Introduce the test strip and press the halves together



Compare the test strip with the colour scale

### Test procedure for vegetables and fruits

Cut vegetables and fruits into halves and introduce one QUANTOFIX® Nitrate test strip for a few seconds. Place the test strip on the inside of the fruit, so that the test field absorbs the liquid. Remove the test strip and wait for 60 seconds. Then compare the test field with the colour scale on the tube. A red-violet coloration indicates the presence of nitrate.



Apples contain low quantities of nitrate



In green pepper nitrate is easy to detect



In kohlrabi great quantities of nitrate are detectable

### Product data and ordering information: QUANTOFIX® Nitrate/Nitrite

Part No	MN91313
Price	£24.50 (ex VAT) per 100 test strips
Colour reaction	white to red-violet
Limit of sensitivity	0-10-25-50-100-250-500 mg/l NO <sub>3</sub> <sup>-</sup> 0-1-5-10-20-40-80 mg/l NO <sub>2</sub> <sup>-</sup>