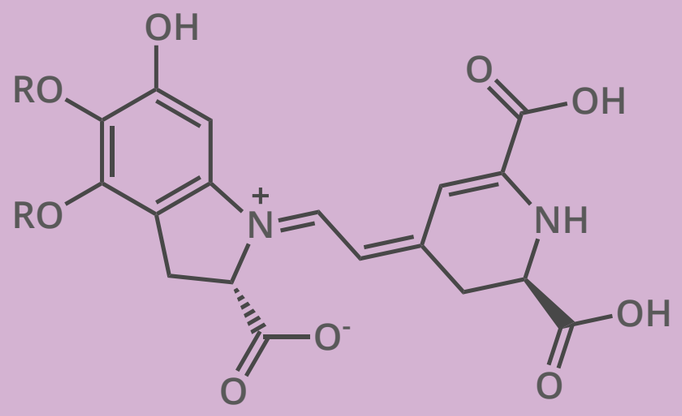
THE CHEMISTRY OF BEETROOT

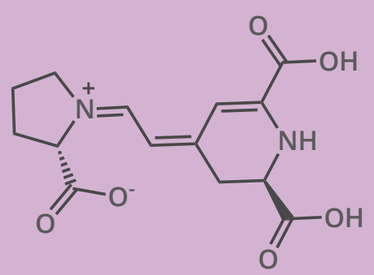
WHY IS BEETROOT RED?



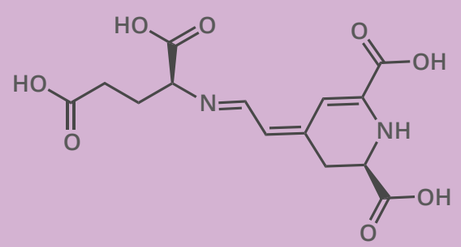
BETACYANINS

A class of compounds called betacyanins are responsible for the red colouration of beetroot. The major compound responsible for the colour is betanin; this can be extracted from beetroots and used as a red food dye called 'beetroot red', which has the E number E162.

The compounds vulgaxanthin & indicaxanthin are also found in beetroot, and also contribute towards its colouration.

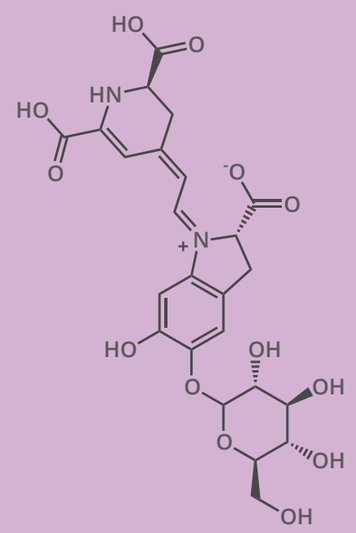


INDICAXANTHIN



VULGAXANTHIN

WHY CAN BEETROOT MAKE URINE RED?



BETANIN

The same chemical compounds that are responsible for the red colour of beetroot are also responsible for its ability to turn urine red.

Betanin is the compound that causes 'beeturia'.It has been suggested that the pigment is usually degraded by stomach acid, explaining why the effect is not always evident - only when the stomach acid's pH is not low enough to degrade the pigments are large enough amounts present in urine. However, it has also been suggested that genetic factors could influence whether people experience beeturia.