## THE CHEMISTRY OF EGGPLANTS

## THE COLOUR AND TEXTURE OF EGGPLANTS

The purple colour of eggplants comes from anthocyanin pigments. The main anthocyanin present is nasunin, named after the Japanese name for eggplant ('nasubi'). It is present as a mix of *cis* and *trans* isomers: the trans isomer is the more stable of the two.



Eggplants have a spongy texture, caused by many tiny air pockets between cells. This is why they shrink when cooked, and also soak up cooking oil. The latter can be prevented by pre-cooking or adding salt to draw out water into the air pockets, collapsing the structure.









**BITTER FLAVOUR AND BROWNING** 



Phenolic compounds cause the bitter flavour of eggplants. These compounds also explain their browning when cut. Cutting releases polyphenol oxidase enzyme from cells; it oxidises phenolic compounds, leading to the eventual formation of brown polymers.



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