

THE CHEMISTRY OF RHUBARB

COLOUR & LAXATIVE EFFECTS

Different species of rhubarb contain a wide variety of anthraquinone compounds. Anthocyanin pigments are the main compounds responsible for rhubarb's red colouration, but the anthraquinones are also coloured.

Rhubarb also contains various derivatives of these anthraquinone compounds, including compounds called sennosides. During digestion, these are turned into active compounds which can have a laxative effect. Chief among these is the metabolite called rheinanthrone. Sennosides are also found in senna plants, and are on the World Health Organisation's list of essential medicines.

WHY SHOULDN'T YOU EAT RHUBARB LEAVES?

Rhubarb leaves are relatively high in oxalic acid and oxalate salt content, which can cause nausea and vomiting if ingested. In Britain in World War I, food shortages led to recommendations to eat rhubarb leaves, with a number of documented poisonings as a result. There is still some debate, however, as to whether other poisonous compounds in the leaves may contribute. The stalks are safe to eat, as they contain a lower oxalic acid content, the dominant acid being malic acid.