Principles of pigments in food technology



Overview

This standard is about the principles of pigmentation in food technology. It is about understanding the use of both natural and additive based colours in food processing.

This standard is for you if you need a broad understanding of the science and food technology of pigments and their application. You need to understand the function of pigments. You need to know how food additive colours are approved and coded.

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Performance criteria

You must be able to: See

IMPPM110S Carry out process control of production in food manufacture

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Knowledge and understanding

You need to know and understand:

- 1 the important role played by pigment molecules in the appeal of natural and processed foods
- 2 what role pigment molecules play in indicating the ripeness, deterioration or spoilage of foods
- 3 the structure, pigmentation characteristics and sources of carotenoids; carotenes, lycopenes and xanthophylls, as examples of the isoprenoid derived naturally occurring pigments
- 4 the structure, pigmentation characteristics and sources of tetrapyrrole derived naturally occurring pigments; chlorophylls, pheophytin, haemoglobin, oxyhaemoglobin, myoglobin and oxymyoglobin
- 5 the structure, pigmentation characteristics and sources of benzopyran derived naturally occurring pigments; anthocyanins, flavones and tannins
- 6 how food additive colours used in the UK are approved and reviewed by the European Union
- 7 what the permitted food colours are, E.coding and their characteristics
- 8 the source product for the synthesis of food additives colours and the basis of their complex nitrogen containing structure
- 9 the sensitivities surrounding the use and consumption of food additive colours

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