

Fillet discolouration

Fish flesh naturally changes colour with age and depending on how it has been handled after capture. Initially, whitefish species such as cod and haddock have a blue, translucent colouration, which changes to white after a couple of days. After this the flesh can become yellow and then brown but it is generally considered inedible before it changes into these colours.

There are also other reasons as to why fish change colour.

Change of Colour through the Food Source

Fish can pick up colours from the food they eat. This is a seasonal phenomenon which affects fish in different ways, depending on what they have been eating and how much they have eaten.

Yellow discolouration can be caused by a carotenoid (colour) pigment called zeaxanthin that may be present in some parts of the diet, such as algae.

Pink discolouration can be due to the carotenoid pigment astaxanthin which is naturally present in shellfish such as prawns and shrimp. Astaxanthin makes the shellfish pink – the greater the pink colouration the higher levels of astaxanthin are present. If fish have been feeding heavily on these shellfish they can take up the pink colouration in their flesh. This is a natural occurrence.

Change of Colour through Handling at Sea

The way that a fish has been caught, handled and stored can affect the colour of the flesh.

Brown discolouration may indicate inadequate bleeding at sea i.e. it may be a result of freezing immediately after filleting, without giving the gutted fish time to eliminate any remaining blood. Brown discolouration is not necessarily a sign of poor quality providing the fish have been properly handled, frozen and stored.

Yellow discolouration can occur if the fish have been insufficiently bled at sea and then incorrectly frozen and thawed for example if the fish aren't properly glazed before going into frozen storage. This is a more noticeable problem as the fish can develop unpleasant odours and flavours which are off putting to the consumer.

Further Information from Seafish

Contact Michaela Archer – m_archer@seafish.co.uk
Tel 01472 252300

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