

Changes in smell and taste caused by chemotherapy

What can you do as a doctor?



Two out of three patients undergoing chemotherapy are affected by changes in the sense of smell or taste.

Changes in the sense of taste occur more frequently than changes in the sense of smell.

Changes in sense of smell and taste are often temporary, and can last a few weeks to months after treatment.

The senses of smell and taste play an essential part in food choice and intake of food. Smell and taste changes may lead to altered food preferences, reduced food intake and food aversions. This may result in weight loss and ultimately malnutrition. Changes in sense of smell and taste may also influence a patient's quality of life.

Reduced nutritional status may influence treatment and the recovery capacity of a patient. It is important to know the cause of smell and taste changes and how they can be treated. This factsheet provides information on smell and taste changes, as well as tips and advice on how to handle these in daily practice.

This factsheet is published by the Science Shop of Wageningen University & Research as part of the project 'Changes in smell and taste in cancer patients', in cooperation with the HungerNdThirst Foundation. If you have any questions, contact the HungerNdThirst Foundation (info@hungerndthirst.org).



Smell and taste disorders

- Changes in the sense of smell or taste may occur during chemotherapy. Chemotherapy attacks rapidly dividing cells, such as the receptors for smell and taste. This may result in changes in sense of smell and taste as a side effect of the chemotherapy.
- Changes in smell and taste depend on the type of cancer, the type of chemotherapy treatment and on the individual patient.
- Changes in sense of smell and taste may occur in three different levels:
 - *Enhanced, reduced or no sensitivity to smell/taste*
 - *Disruption to the perception of smell/taste;*
 - *Smell and/or taste hallucinations*
(*non-present flavors are tasted*)



Recommendations

- Be aware – especially with outpatients – that most of the problems occur in the home situation. It is essential to involve the social network of the patient.
- Ask patients if they experience changes in the sense of smell and taste. This can be done in a consultation, but also through of a structured questionnaire or by using objective testing.
- Put problems concerning nutritional status and dietary habits in context and discuss them with the patient. Refer to a dietician if help is needed.
- No medication is (yet) available to treat smell and taste disorders. Therefore it is important to explain strategies for dealing with these disorders. Patient-specific advice is important because the symptoms and needs of individual patients differ.
- Search for websites with practical tips, such as recipes, so that patients can search for information at home themselves. Look, for example, at the Dutch websites www.voedingenkankerinfo.nl and www.kanker.nl.

