

Changes in smell and taste caused by chemotherapy

What can you do as a nurse?



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 the sense of smell or taste are often temporary and almost always disappear within a few weeks to months after treatment.

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

Reduced nutritional status may hinder treatment and recovery. For this reason it is important to know what causes smell or taste disorders and what can be done about them. This factsheet provides information on smell and taste disorders, 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. The receptors for smell and taste are rapidly dividing cells, with the result that changes in the sense of smell or taste may be an unwanted side-effect of treatment.
- Whether changes occur and in what form they occur, depends on the type of the cancer, the type of chemotherapy and the individual patient.
- Changes in the sense of smell or taste may occur at three different levels:
 - *Enhanced, reduced or no sensitivity to smell/taste*
 - *Disruption to the perception of smell/taste;*
 - *Smell and/or taste hallucinations.*



Recommendations

- Discuss within the department whether it is possible to include a question on smell and taste disorders in the patient's medical history. Smell and taste disorders will then be discussed in a standardized way.
- Put problems concerning nutritional status and dietary habits in context. Refer to a dietician if help is needed. Ask advice from an oral health specialist if the patient suffers from oral health problems and ensure good oral hygiene.
- No medication is (yet) available for smell and taste disorders. Discuss on an effective strategy with the patient for dealing with these disorders. Patient-specific advice is important, because the symptoms and needs of individual patients differ.
- Be aware – especially with outpatients – that most of the problems occur in the home situation. For this reason it is important to involve the social network of the patient.
- 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.

