

Coming to your senses: nutritional tools and advices for cancer patients suffering from changes in smell and taste

Postma EM^{1,2}, Van Elferen L³, Greene RS⁴

1. Division of Human Nutrition and Health, Wageningen University, Wageningen, NL; 2. Smell and Taste Centre, Hospital Gelderse Vallei, Ede, NL; 3. Sodexo Food Services, Hospital Gelderse Vallei unit, Ede, NL; 4. HungerNdThirst Foundation, Amsterdam, NL

Introduction

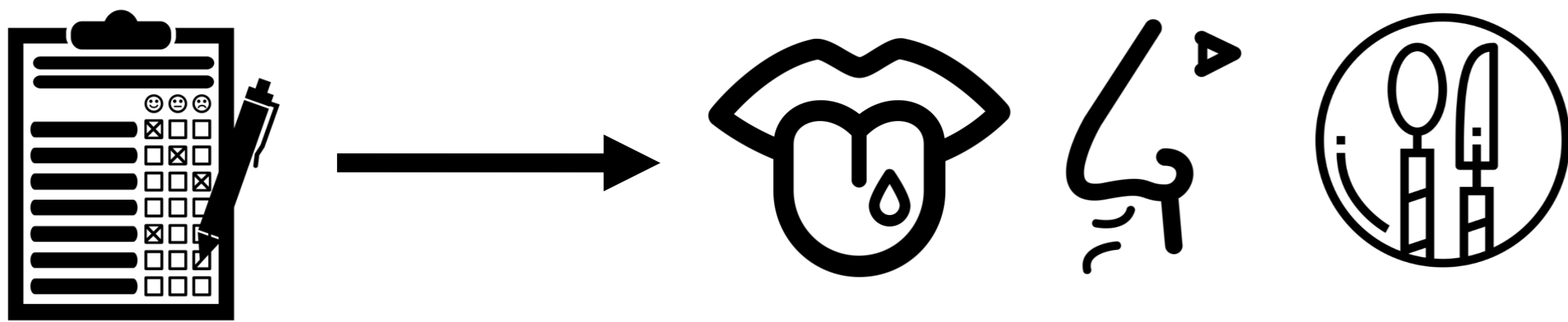
- Two out of three cancer patients experience taste alterations, mostly due to treatment. Prevalence of smell alterations ranges from 5 to 75 percent. Smell and taste alterations vary in prevalence, duration and severity. Consequences are:
 - Lower appetite and changed food preferences → inadequate food intake, weight loss → malnutrition
 - Decreased eating enjoyment and distress → lower quality of life, difficulties with cooking, mood changes
- Patients and health care professionals find it hard to deal with changes in smell and taste in daily life, as not many practical tools and advices for daily life are available.

Aim: develop a new menu for cancer patients suffering from smell and taste changes tailored to their needs and preferences

Methods

- Location: oncology department of Hospital Gelderse Vallei in Ede, NL
- Day care treatment and clinical department

- 57 cancer patients
- 39 patients receiving chemotherapy
- 60.32±12.63 (range: 22-81 years old)



Results – Taste and food preferences of patients

Salty  

Sweet  

Umami  

Results – Smell and taste ability

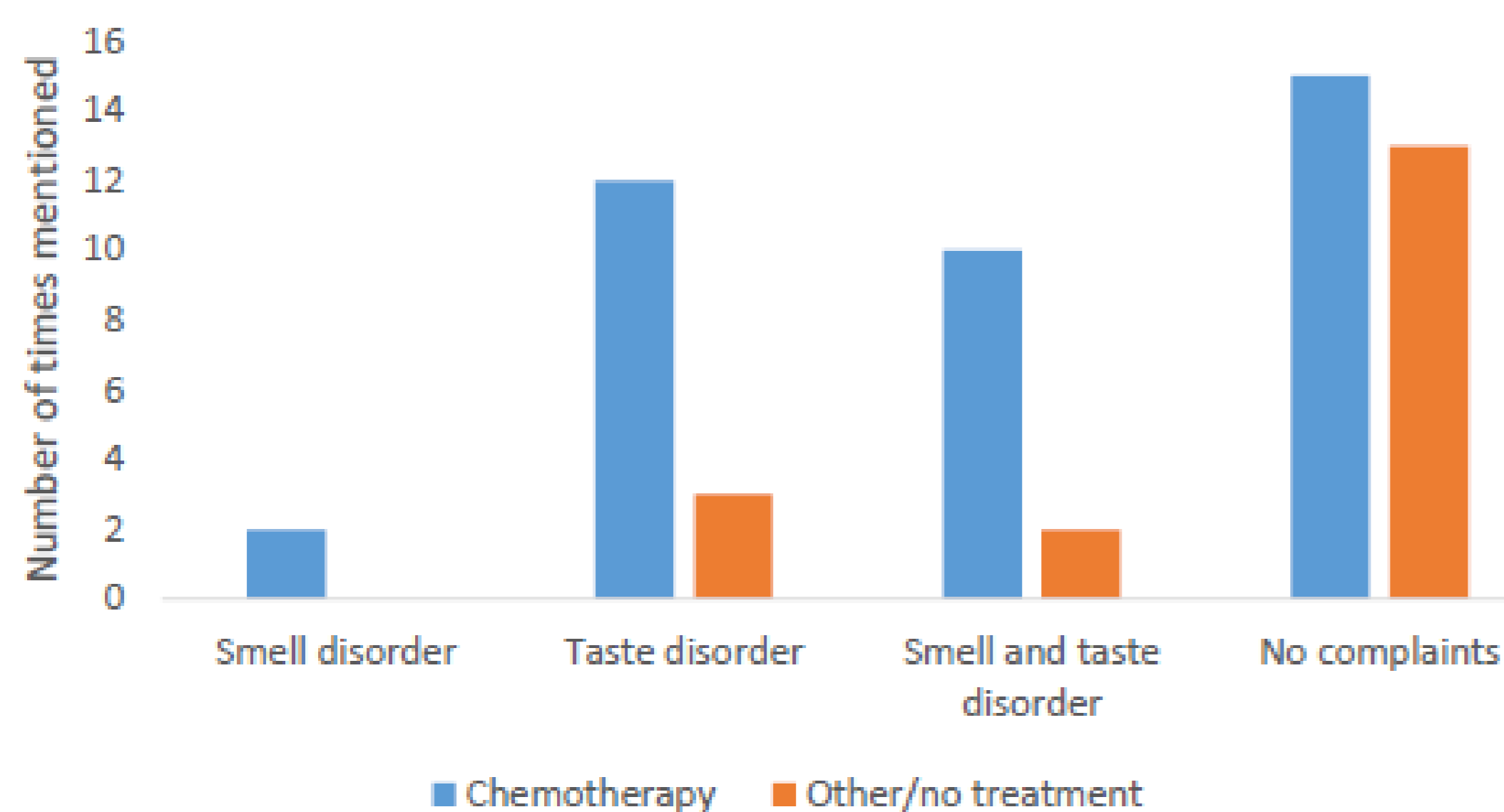


Figure 1. Self-reported changes in smell and taste, categorized on treatment

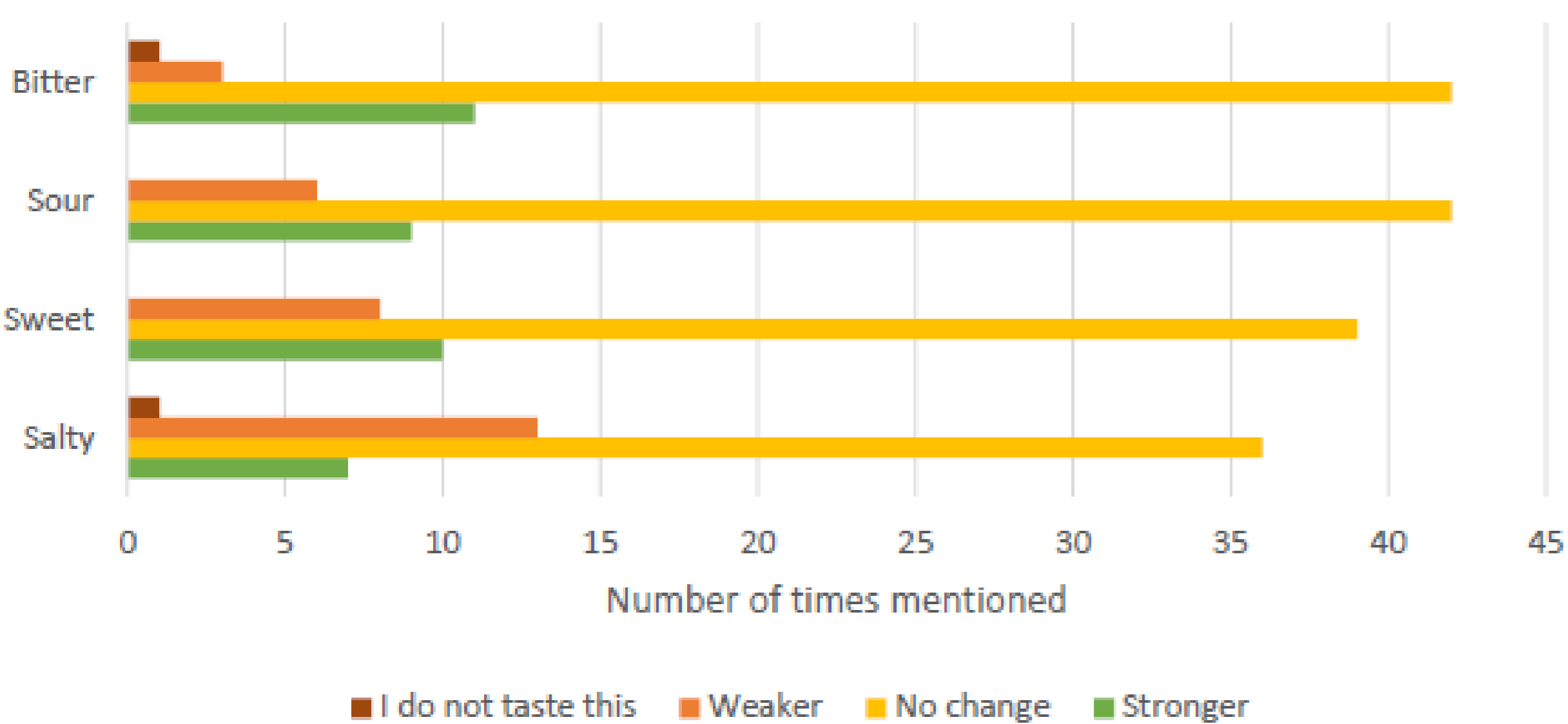


Figure 2. Changes in taste perception as reported by the participants

Implementation

- Results were discussed for translation to a new menu for the oncology department in a multidisciplinary team, involving dietitians, chefs from the hospital kitchen and the researchers
- This menu involves the categories sweet, savory, salty and sour. All categories contain several dishes, including a main course, a dessert and a snack.
- Patients can order a sample board, which serves small portions of dishes from different categories. In this way, the patients can discover their own taste preference.
- The menu was piloted among (ex)patients from the oncology department of Hospital Gelderse Vallei.

A better understanding of smell and taste dysfunction and practical tools and advices on nutrition for daily health care will enable health care professionals to minimize impact of these changes. Multidisciplinary teams need to address the problems that cancer patients face.

