MANAGEMENT OF CHANGE IN TASTE

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OVERVIEW

- What is change in taste
- Causes
- Pathology
- Patient Experience
- Nutritional Risks
- Research
- Management
  - Food preparation
Sense of Taste

- Gustation
  - Taste buds located on the tongue, soft palate, epiglottis and upper esophagus

- Taste
  - Sweet
  - Sour
  - Salty
  - Bitter
  - Umami
    - L-glutamate
CHANGE IN TASTE

- **Dysgeusia**: distortion of the sense of taste
- **Ageusia**: lack of taste
- **Hypogeusia**: decreased sense of taste
COMMON CAUSES

 Drug therapy

 Chemotherapy
  - Cisplatin, carboplatin, cyclophosphamide, doxorubicin, 5-flourouracil, methotrexate

 Radiation therapy

 Vitamin deficiency
  - Zinc
PATHOLOGY R/T CANCER TX

- Tissue and taste bud damage
  - Rapidly growing cells

- Change in taste receptors
  - Venous taste change
  - Circulating drugs permeating into saliva from blood
**Patient Experience**

- Most common experience is difficulty in recognition of bitter and sweet
- “Bad” taste
- Metallic taste
- No taste
- Heightened tastes
- Difficulty with meats
NUTRITIONAL RISKS

- Decreased intake during critical time
- Anorexia
- Weight loss
- Dehydration
- Decline in overall condition
- Inability to complete treatment due to poor nutritional status
Sanchez-Lara *et al.* 2010 found:

- Cancer patients under chemotherapy have higher sweet detection threshold and higher bitter recognition threshold
  - required increased concentrations of taste flavors to recognize bitter and sweet flavor
- No umami taste threshold differences related to intake
- Abnormalities in taste associated with decreased fat, calorie, protein, carbohydrate and zinc intake; weight loss
MANAGEMENT IN TASTE CHANGE

- Rinse mouth before meals with salt water/baking soda or ginger ale, brush teeth

- Avoid cigarette smoking

- Change food preparation
FOOD PREPARATION TIPS

- Try making the flavors more powerful
  - Spices, herbs, marinades, lemon juice, sauces or pickled foods

- Beef or other meats may taste metallic or “bad”
  - replace with other forms of protein like nuts, nut butters, eggs or dairy

- Try to overpower a metallic taste with something acidic or use lemon drops, hard candy, mints or gum
  - Stimulate saliva
- Use plastic utensils and drink from bottles, not cans
- Prepare in glass baking dish
- Avoid any acidic additives if patient has mouth sores
- Make meal time a social and enjoyable experience!
Some Helpful Tips from the Author:

- Taste food while cooking so you don’t have to majorly change it when finished
- Fat, Acid, Salt and Sweet
  - Olive oil
  - Lemon juice
  - Sea salt—fuller flavor due to trace mineral content
  - Maple syrup, agave nectar
- Acid and salt add highness, fat and sweet add roundness
FAT, ACID, SALT AND SWEET

- If things taste too:
  
  **Metallic**
  Add sweetener (maple syrup/agave nectar) and a squeeze of lemon
  Add some fat, i.e. nut cream or butter

  **Sweet**
  Start with six drops of lemon or lime juice, keep adding until “muted”

  **Salty**
  Add ¼ tsp lemon juice
Bitter
Add sweetener (maple syrup/agave nectar)

Cardboard
Add more sea salt until flavor moves to the front of the mouth, splash of lemon juice

- Trouble swallowing, mouth sores: add fat
MORE PATIENT ADVICE

- Take advantage of foods that are well tolerated
  - Write them down
  - Keep them on hand

- Experiment

- Take advantage of “good” days


QUESTIONS OR EXPERIENCES TO SHARE?

THANK YOU!
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