

# Taste Changes - Advice for Head and Neck Cancer Patients

#### Introduction:

This information leaflet is designed to help people who have recently completed chemotherapy, or radiation for a Head and Neck Cancer, and are experiencing changes or loss of taste. While initially this may seem like a minor side effect, it can have significant consequences because it can cause you to lose your desire to eat, making it difficult to maintain adequate nutrition. Good nutrition is imperative to help your body heal and repair after your treatment.

### **Understanding Taste Changes**

Taste changes are an alteration in how you perceive flavors. The four main tastes we perceive are sweet, sour, bitter and salty. Any or all of these may be altered. For example, sour or bitter food may taste very strong, whereas sweet foods may not taste as sweet as they used to.

Foods you once enjoyed may taste bland or you may experience a bitter or metallic taste in your mouth. Taste changes are different for everyone and vary according to which area of your Head and Neck was treated, or how much radiotherapy you were given.

At the moment we have no available treatment for taste changes, but they usually resolve within two to three months of finishing treatment (although it can take considerably longer for some people). In the meantime, it's important to take steps to reduce the impact of these taste changes so that you can continue eating and maintain your weight.

# Why do things taste different?

The reason for this is not fully understood, we know that Taste buds normally renew themselves every 9-14 days, however some research has shown that Radiotherapy appears to interrupt this process, and until the taste buds are able to regenerate, they are unable to function effectively, and our ability to taste is reduced. Radiation can also damage the salivary glands which results in a dryer mouth, and this is thought to be another key factor. Saliva contributes to our sense of taste by mixing with food, which helps to stimulate the taste buds on our tongue. When there is less saliva, the food does not come into contact with the taste buds as easily and there may be changes in how we perceive the four tastes.

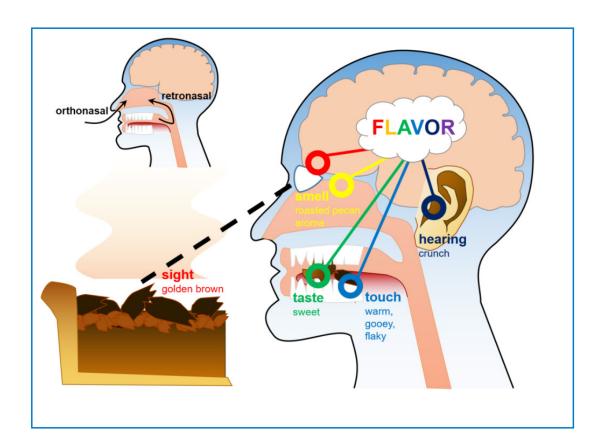
# **Understanding our taste buds**

The surface of our tongue, soft palate and Epiglottis are covered with tiny bumps called papillae, which contain our taste buds. Taste buds contain special receptor cells which are able to detect chemicals in food, and convey this information to the brain, where taste is perceived.



When we eat we usually think it's our taste buds that allows us to pick up the flavour in foods – in fact all they gives us is the basic four tastes: sweet, sour, salty and bitter (plus unami – savouriness). Our sense of smell contributes to tasting our food – We detect odours by sniffing them, which rise to the back of the throat through the nose, to smell receptors, which when combined with taste give us the experience of flavour – in summary, we don't have taste buds that can pick up strawberry, chicken or onion – it's a combination of the two senses working together.

# Knowing how we taste can help you develop techniques to try and combat changes and loss of taste.



# Hints and tips that may prove effective:

- Rinse your mouth with water before eating, and cleanse the palate between mouthfuls.
- Allow your food to cool a little. Hot temperatures can heighten taste sensations
- Avoid any unpleasant tasting foods. However, do retry them in a couple of weeks as your taste
  may have returned.
- Try foods that you wouldn't normally eat

#### If food tastes too sweet

- Try adding a little salt, vinegar, pureed fruit or lemon juice to tone down the sweetness
- Try yoghurt or fromage frais instead of ice-cream
- Try flavouring milk drinks with coffee or cocoa powder instead of chocolate
- Choose vegetable juices instead of fruit juices, or blend together
- Snack on cheese, crisps, nuts, fruit, biscuits with peanut butter or other savoury snacks
- Gymnema Sylvestra, a herbal tea that is often used by professional wine tasters, will deaden the
  taste buds to sweet tastes for about 20 minutes. This should be held in the mouth for about five
  minutes before eating

#### If food tastes too salty

- Add a pinch of sugar
- Avoid stock cubes, MSG and pre-prepared sauces and gravies
- Limit seasoning, herbs and spices
- Add milk, coconut milk or cream to soups and stews

### If meat lacks appeal

- Experiment with egg or cheese dishes
- Try fish (fresh or tinned) or chicken in different ways
- Try tofu, Quorn™ meat or bean dishes e.g. Chilli con Carne with Quorn™ mince
- Drink extra milk drinks and dairy desserts
- Snack on nuts or cheese for extra protein

#### If food tastes bitter

- Add sweet fruits to meals
- Add honey or sweetener to foods and drinks
- If meat tastes too bitter, eat it cold or at room temperature
- In place of meat, eat blandly prepared chicken and fish, mild cheeses, eggs, dairy products or tofu.
   All of these foods may taste better when prepared in casseroles or stews
- Marinating foods may make them taste better. Marinate meats or fish in pineapple juice, wine, Italian
- Dressing, lemon juice, soy sauce or sweet-and-sour sauces

#### If food has metallic taste

- Avoid food and fluids from metal cans
- Try chewing sugar free gum, mints, coffee flavoured sweets or lemon drops
- Use a variety of spices such as mint, parsley, chilli, mustard, garlic, oregano and tomato/brown sauce

#### If food tastes sour

- Try chewing sugar free gum and mints or sucking coffee flavoured sweets or lemon drops
- Use a mouth wash and clean teeth at least twice daily
- Drink fluids through a straw to bypass taste buds
- Maintain an adequate and regular food intake as ketosis from rapid weight loss can cause bad breath and unpleasant taste in the mouth

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#### If food tastes off

- Drinking water, tea, ginger ale or fruit juices mixed with club soda may remove some of the strange tastes in your mouth. It might also help to try boiled sweets, such as sugar-free mints or Tic Tacs<sup>®</sup>.
   Sugar-free gum as these can often reduce after-tastes
- Add wine, beer, mayonnaise, sour cream or yogurt to soups and sauces to disguise the off tastes of other foods
- Eat starchy foods such as bread, potatoes, rice and plain pasta. Do not add butter, margarine or other fatty substances to these foods if the added fat poses a problem
- Choose bland foods. Eggs, cheeses (including cottage cheese) hot cereals, puddings, custards, tapioca, cream soups, toast, potatoes, rice and peanut butter are less likely to taste strange than foods with more distinctive flavours

### **General points to note:**

- Mouth care helps!! Follow the instructions your health care team gives you for best mouth care.
   Often a mild mouth rinse of 1 tsp of baking soda dissolved in 1 quart of room-temperature water is helpful to swish in your mouth before and after each meal and snack.
- You may have cravings for spicy and salty foods. Spicy, highly seasoned foods can cause pain and irritation, however, if your doctor does not advise against such foods, and if you can tolerate them, by all means give it a try.
- Experiment with different food textures such as crunchy, creamy, crispy foods.
- High-protein foods and supplements are particularly important when taste blindness prevents you from eating properly.
- For any or all taste changes, try swishing & swallowing (or swishing & spitting) with plain
  carbonated water (Seltzer, Club Soda, etc). The carbonation seems to help clear the mouth of
  unwanted tastes for short periods of time. This tactic can help before, during, and after meals.

# Try the F.A.S.S. technique (from Chef Rebecca Katz) to trick your taste buds and make flavour improvements based on your taste changes:

- extra virgin olive oil (the Fat)
- lemon juice (the Acid)
- sea salt (the Salt)
- grade B organic maple syrup (the Sweet)

# Some examples of F.A.S.S:

If food tastes bland, or like cardboard, try adding a few drops of an acid flavour, such as lemon, lime, or vinegar. The acid flavour will animate the other flavours in the dish, making them easier to taste.

If you're experiencing a metallic, sharp taste in your mouth, try adding a few drops of a healthy fat like olive oil and a little bit of sea salt.

If you're avoiding acid due to mouth sores, then add a little fat, such as extra virgin olive oil, and sweet flavouring to dishes, such as grade B maple syrup. The fat creates a coating action that smoothes over mouth sores, and the sweet teases the taste buds at the front of the mouth.

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# **Taste Diary**

You may wish to use this record to monitor how your sense of taste is changing – this can show you how things are improving over time, but also to make a record of what helped and what was less successful.

DATE	TASTE SCORE	TECHNIQUES ATTEMPTED	COMMENTS
Week:	0 - no taste at all 1 - 25%	1.	
	2 - 50%	2.	
	3 - 75% 4 - normal taste	3.	
Week:	0 - no taste at all 1 - 25%	1.	
	2 - 50%	2.	
	3 - 75% 4 - normal taste	3.	
Week:	0 - no taste at all	1.	
	1 - 25% 2 - 50%	2.	
	3 - 75% 4 - normal taste	3.	
Week:	0 - no taste at all	1.	
	1 - 25% 2 - 50%	2.	
	3 - 75% 4 - normal taste	3.	
Week:	0 - no taste at all	1.	
	1 - 25% 2 - 50%	2.	
	3 - 75% 4 - normal taste	3.	

Sharing this information with your Dietitian / Head and Neck Team can help improve the advice we provide to other Head and Neck Cancer patients – so any feedback regarding either positive or negative outcomes would be gratefully appreciated.

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# If you have any comments about this leaflet or the service you have received you can contact:

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Specialist Head and Neck Dietitian
Huddersfield Royal Infirmary

Telephone: 01484 347072

www.cht.nhs.uk

# If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

ਰ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਪ੍ਰਾਰੂਪ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਉਪਰੋਕਤ ਵਿਭਚਾ ਵਿੱਚ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

اگر آپ کو سے معلومات کسی اور فارم علی طازبان می در کار ہوں، تو برائے مہربازی مندرجہ بالا شعبے می ہم سے رابطہ کری.

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم المذكور أعلاه"

