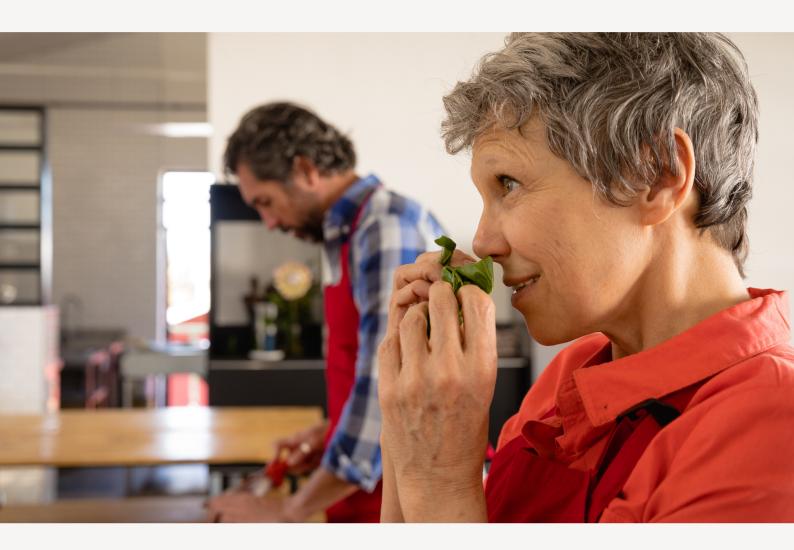
Parkinson's Nisease & Scent Loss



Learn How to Safely Retrain & Regain Your Sense of Smell.

Liz Mountford - Clinical Nutritionist

BHsc. Nutritional Medicine Postgraduate Research Honours - BHsc. Nutritional & Dietetic Medicine (Parkinson's Disease)

> Copyright © Liz Mountford - Clinical Nutritionist www.fant.com.au lizmountford@fant.com.au



Parkinson's Pisease & Scent Loss

Most people will think of Parkinson's disease as a condition that predominantly affects how a person moves. However, there are also many other aspects of Parkinson's disease many people are unaware of that have a significant impact on person's everyday quality of life. For example, losing the sense of smell.

The sense of smell is something many of us take for granted but losing the sense of smell is common in people with Parkinson's disease. It is estimated that upto 95% of people with Parkinson's disease lose their sense of smell, which also significantly impacts their sense of taste.

There are no standard medical treatments available to help a person that loses their sense of smell. However, there are non medical options available, such as scent training, which are safe, and have proven to be capable of increasing a person's sensitivity to smell. Unfortunately, scent training is rarely discussed as an option with patients.



The sense of smell has many important functions. Take, for example, the smell of smoke which can alert a person there is fire and possible danger or the smell of sour milk warning a person it has gone bad and not to drink it. Smell can also trigger powerful emotions, for instance, smelling a perfume that reminds you affectionately of a special person. Also, importantly, smell is the key for the enjoyment of food.

Losing the sense of smell can impact a person's enjoyment of food by reducing the ability to experience and identify the different flavours in food. Flavours a person experiences when eating food, is mostly due to their sense of smell.

Additionally, smell plays a big part in a person's eating behaviour. This is because smell helps a person detect food, it attracts a person to the food they like and it triggers a person's appetite. Smell also acts as a cue for the body to start preparing to receive and process food.

Smell prepares the body for food by having a stimulatory effect. When a food smell is detected, a cascade of physiological and chemical responses are triggered to prepare the body to receive, digest and process the food. So without smell, a person's eating behaviours and response to food, can become disrupted.



People that lose their sense of smell, also report losing their enjoyment of food. Losing the enjoyment of food can result in poor appetite, a low interest in choosing food for health and not enjoying social occasions such as family dinners.

Additionally, research has shown that people who lose their sense of smell, may also avoid eating. This is because a person no longer enjoys eating when they cannot taste the food. Ultimately, this can result in a person developing nutrient deficiencies and becoming malnourished.

The loss of smell can become frustrating for a person, with little currently being offered clinically. The loss of smell for many people will impact their psychological, emotional and physiological wellbeing.

However, there is good news! There have been many studies suggesting that the loss of smell can be recovered in up to 20 - 30% of people that have Parkinson's disease using "Scent Training". Unfortunately, scent training is rarely discussed with Parkinson's disease patients with the clinical focus on Dopamine replacement therapies.

Scent Training

The idea that a person is able to regain their sense of smell was discovered by researchers using Frequency Deep Brain Stimulation. Deep Brain Stimulation was used to investigate if it could increase a person's sensitivity to smell by triggering part of the brain responsible for decoding and identifying smells.

This research found that when the area of the brain responsible for smell was stimulated, people with Parkinson's disease with smell loss, improved their ability to identify smells. This indicated that a person sense of smell can be recovered. However, Deep Brain Stimulation can be invasive, costly and take a lot of time. Therefore, alternative approaches have been clinically researched and identified in the form of scent training, making the possibility of smell recovery accessible to everyone. In people with Parkinson's disease that have lost their sense of smell, having an option to improve their sense of smell is significant.

Scent training works by presenting a person to structured exposure to certain fragrances. By doing this, it stimulates the olfactory (smell) system in three main ways: 1) increasing the overall number of smell receptor nerves 2) increasing the overall number of smell receptors and 3) triggering the regeneration of functional nerve connections that are responsible for smell.

Odour Prism

Most people are familiar with the categories of taste which are sweet, salty, sour, bitter and umami. However, scent is also categorised and grouped into primary odours known as the "Odour Prism".

The Odour Prism represents categories of odours that people can recognise and identify. In total there are 6 categories of odours however, for scent training only 4 categories are needed and used.

The odours used in retraining a person's sense of smell are usually an undiluted single essential oil fragrance. The reason why essential oils are used in scent training is due to their odour potency and the stability of the odour to stay true to its natural fragrance if stored correctly.

The benefit of scent training is its simplicity, efficacy and safety. Scent training is increasingly used clinically to assist patients that have experienced a loss of smell for a variety of reasons, including Parkinson's disease and more recently COVID.

The downside to scent training is that a person needs to be committed, consistent and train for a minimum of 12 weeks, twice daily. However, it only takes a couple of minutes each day.

Odour Prism Continued ...

The categories of odours used in scent training are listed below. Also, listed is a fragrance from each category which can be used in scent training.



F.thereal Odour

This category of fragrance is one that is usually smelt in fruits and wines. Lemon scent is in the Ethereal category.



Fragrant Odour

This category of fragrance is more commonly associated with sweet floral smells. Geranium scent is in the Fragrant category.



Resinous Odour

This category is usually easily picked up by the nose and associated with nature smells. Eucalyptus scent is in the Resinous category.



Spicy Odour

This category is varied and diverse ranging from woody to a musty smell. Clove scent is in the Spicy category.

Scent Training To Find Out More

Just type in <u>www.fant.com.au/scent-training</u> in your web browser.

