



## DENTIST FAQS

### Why should I choose an Oventus Device over the devices I currently use?

The Oventus family of devices are the only devices that offer a solution for patients who suffer from multiple levels of obstruction; including nasal obstruction, soft palate, tongue based and epiglottal obstruction. The incorporated Oventus airway has also been shown to reduce negative pressure building up in the airway causing airway collapsibility.

### What is the difference between the Oventus O<sub>2</sub>Vent™ and other oral devices?

Like all oral appliances that bring the jaw forward, the O<sub>2</sub>Vent™ stabilizes the jaw position and brings the tongue forward to reduce airway collapse. In addition, the unique airway allows for breathing through the device to bypass obstruction in the nose and soft palate which can contribute to snoring and mild to moderate obstructive sleep apnea.

#### **BENEFITS:**

##### **1. Airway**

The O<sub>2</sub>Vent™ has an enclosed airway about the size of a healthy human nose incorporated into it. Air enters the airway between the lips and is delivered through the enclosed airway to the back of the mouth so patients can breathe through the device while maintaining an oral seal, if they have a blocked nose, soft palate collapse or are mouth breathers.

##### **2. Small and streamlined**

The O<sub>2</sub>Vent™ is 3D printed in medical grade titanium which facilitates its lightweight, thin wall and complex hollow structure incorporating its unique airway design. This allows us to build an airway into a more streamlined device that is less than 5mm thick as it passes between the teeth - it's about the size of a standard mouthguard.

##### **3. Comfort**

The O<sub>2</sub>Vent™ is lined with a medical grade, polymer liner to maximize patient comfort. The design of this customized device comfortably fits around your teeth, and provides ample space to accommodate the tongue.

### Why is the Oventus O<sub>2</sub> Airway important?

The airway allows the patient to maintain a closed mouth position while still getting needed airflow. Lip seal is maintained around the extension on all O<sub>2</sub>Vent™ devices. This seal combined with the 3D printed Titanium Airway, delivers airflow to the oropharynx with minimal resistance.

### How does device breathing differ from mouth breathing?

Mouth Breathing offers 2.5 times the resistance as healthy nose breathing. This increased resistance contributes to flow limitation, negative pressure swings in the oropharynx and airway collapse. Device breathing offers little to no resistance which reduces negative pressure swings and airway collapsibility.<sup>1</sup>



### **Do Oventus devices promote mouth breathing?**

No. If a patient can breathe through their nose they should, can, and will continue to do so. As nasal resistance increases, during the night, as it often does, the patient would ordinarily switch to mouth breathing. With an Oventus device in place the patient will switch to device breathing, resulting in a stable airway and normal ventilation.

### **Is it suitable for a mouth breather or patients with nasal congestion?**

Yes. The O<sub>2</sub>Vent™ does not prevent you from breathing through the nose, but provides an additional airway within the device to create a low resistance airway to breathe through the device as well. Although counterintuitive, the O<sub>2</sub>Vent™ actually prevents oral breathing. Oventus clinical trial data showed that compliance with treatment did not appear to be reduced by the presence of nasal congestion.<sup>2</sup>

### **Does it maintain an oral seal like other oral devices?**

Ideally, people should breathe through their nose while they sleep. The O<sub>2</sub>Vent™ does allow the patient to maintain an oral seal while wearing the device. However, unlike other oral devices it provides an auxiliary airway to breathe through. The auxiliary airway is the same size as a healthy human nose, as such providing an additional airway to breathe through while keeping your mouth closed. This is beneficial to patients with nasal obstruction, soft palate collapse and those who may feel claustrophobic.

### **How does the Oventus O<sub>2</sub>Vent™ Device prevent dry mouth syndrome?**

The airway in the O<sub>2</sub>Vent™ is fully enclosed from the intake at the front of the mouth to the pharynx at the back of the mouth so the air doesn't come into contact with the mouth as the patient breathes through the device airway. While maintaining an oral seal it provides a second "nose" for the patient to breathe through if they cannot get enough air due to nasal congestion or obstruction. It converts mouth breathers to "pseudo" nose breathers.

### **Do Oventus devices provide adequate tongue space?**

Yes. All Oventus Devices allow for adequate tongue space. In cases where an extremely large tongue is involved, the lingual acrylic on the upper arch and the distillingual acrylic on the lower arch can be reduced to create additional space.

### **Will Oventus devices work for partially or fully edentulous patients?**

We need a minimum of eight teeth upper and lower or a dental arch implant retained prosthesis in the absence of teeth. The Oventus O<sub>2</sub> Vent Airways are not suitable for patients with Full Arch upper or lower dentures.

### **Will Oventus provide an AM Re-positioner with their devices?**

No. Most dentists have their own techniques and/or ideas about what they want their patients to do.



### What warranty do the Oventus devices have?

Both the O<sub>2</sub>Vent™ W and O<sub>2</sub>Vent™ T devices come with a:

- 12 months warranty on the Insert Material eg. dual laminate
- 36 months warranty on the Titanium.

### Are the O<sub>2</sub>Vent™ devices comfortable?

Yes. In a study published in the JDSM, the Oventus clinical trial reported an average usage of the device six nights per week and an average of seven hours per night, resulting in a compliance of 82.8%.<sup>2</sup>

### George Gauge vs edge to edge bite measurement-does it matter what I use? Why?

You can take the patient bite in a protruded position, using the dental techniques that you prefer. We recommend starting at 50 - 60% of protrusive range. Oventus requires standard bite registration material (PVS) ensuring that the vertical distance between the upper and lower arch is a minimum of 5mm universally. This is critical to incorporate the Oventus Airway technology into the device design. It is recommended to check the vertical dimension at the anterior and posterior of the bite record by using callipers to measure the deepest point of the cusp, ensuring a minimum 5mm. Unfortunately, if there is not enough clearance we will need to request another bite registration, so if in doubt its best to take the bite registration twice to prevent delays.

### Do you accept Digital records for Oventus devices?

Yes, but the physical bite must be sent separately. At this time, the open/protruded bites don't seem to scan accurately. Impressions- Please make sure the lower arch extends 5mm beyond the gingival margin.

### What proof do you have that the Oventus device works?

Oral or mandibular advancement devices - like the O<sub>2</sub>Vent™ are emerging as an accepted alternative treatment to CPAP for sleep apnea. An Oventus clinical trial showed that 100% of patients experienced a significant reduction in snoring and an improvement in AHI with 82% of patients eliminating snoring completely and 76% of patients reducing their AHI by more than half. <sup>2</sup>

### Does it make a person gag?

The O<sub>2</sub>Vent™ sits between the teeth and the cheeks. It does not extend over the palate or the tongue so we have not had any issues with patients gagging from it and we have treated some very severe gaggers.

### What is the regulatory status of the O<sub>2</sub>Vent™?

O<sub>2</sub>Vent™ devices are FDA 510k cleared: O<sub>2</sub>Vent™ T - K161832 and O<sub>2</sub>Vent™ W - K171316.

### References

1. Fitzpatrick et al Effect of nasal or oral breathing route on upper airway resistance during sleep. Eur Respir J 2003 Nov;22(5):827-32
2. Lavery D, Hart C et al Safety and Efficacy of a Novel Oral Appliance in the Treatment of Obstructive Sleep Apnea. Journal of Dental Sleep Medicine Vol.4 No.3 July 2017