

*SomnoDent*<sup>®</sup> AVANT<sup>®</sup>



**AVANT is our smallest<sup>1</sup>,  
strongest<sup>2</sup> and most  
precise<sup>3</sup> appliance**

 **SomnoMed**<sup>®</sup>

# SomnoDent<sup>®</sup> AVANT<sup>™</sup>



## SomnoDent AVANT is our first oral appliance that is both digitally designed and manufactured.

The efficacy of the SomnoDent AVANT is enhanced by the unique strap mechanism that ensures the lower mandible is extended and the mouth is closed.

### Strap Kit

The strap set is determined by SomnoMed and depends on the patient's jaw size and the bite registration provided by the Dentist.

All new SomnoDent AVANT devices are supplied with the designated starting strap assembled on the device and the matching strap kit containing 10 different sizes, offering up to +8mm forward protrusion and -1mm reverse protrusion. Each strap provides +1mm of advancement and each decrease -1mm backwards.

The dentist should set the patient at *60% of their maximal protrusive range*. The dentist should initiate treatment on strap size 0 and then titrate appropriately.





# Why *Design* Matters

SomnoMed AVANT's innovative design is key to its **clinical efficacy** and drives **patient compliance** through **comfort**.

# How is Comfort Impacted by Design?

## Strap Design Promotes Nasal Breathing

The SomnoMed AVANT strap design minimises mouth opening by pulling the jaw together, whilst still allowing lateral movement. This promotes nasal rather than mouth breathing, reducing snoring and dry mouth symptoms.

***“Nasal breathing is critical to a good night’s sleep for all patients. Compared with oral breathing, nasal breathing decreases snoring and excessive daytime sleepiness”<sup>4</sup>***

## Our Strongest Material<sup>2</sup>

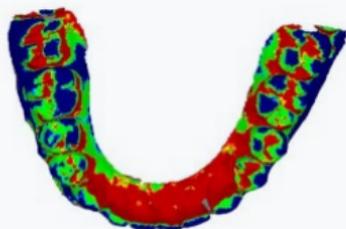
SomnoMed AVANT is made from both soft and hard materials. Durable pre-cured acrylic is 18% stronger than acrylic made from traditional methods.

## Soft Lining

The BFlex Soft inner liner has been developed to support and cushion the teeth, which may reduce tooth movement whilst providing comfort.

## Digital Design

Our manufacturing process utilises CAD and CAM, allowing for 33% less material through milling and a personalised design.



Traditional



CADCAM Avant

## CLINICAL RESULTS

# SomnoDent AVANT Validation Study

Baseline Data	mean	±SD
n	31	
age (years)	54	± 11
male / female	25 / 6	
BMI (kg/m <sup>2</sup> )	27.1	± 4.4
ODI 3%	11.0	± 12.4
Visual Analogue Snoring scale (VAS) /10	6.3	± 3.0
Epsworth Sleepiness Score (ESS) /24	8.5	± 5.5
AHI overall (events/h sleep) on Type 1 PSG (range 14–79 events/h sleep)	33.1	± 18.4
AHI supine	53.5	± 26.0
AHI non-supine	22.2	± 19.6

The results from this study found a statistically significant improvement in all baseline data measure.

Especially in the supine position, mouth opening during sleep increases. This counteracts therapeutic efficiency. SomnoDent AVANT effectively alleviates such supine effect, showing a statistically significant higher improvement in AHI supine as compared to AHI-non supine.<sup>5</sup>

PT = Post Treatment	Mean events /hr sleep	(↓% from BL)
PT AHI	<b>7.1 ± 4.5</b>	76%
OT AHI (supine)	<b>10.5 ± 11.2</b>	77%
PT AHI (non-supine)	<b>5.9 ± 4.2</b>	71%

The change in AHI supine was significantly higher than the change in AHI non-supine ( $z = -3.771$  with  $p \leq 0.001$ )

## Why choose SomnoDent AVANT?

- ✔ 2-Year Warranty\*
- ✔ Easily adjustable
- ✔ Custom-fitted full lip seal
- ✔ Permits normal mouth opening
- ✔ Allows talking and drinking

\*Terms and conditions apply



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1. 31–33% less volume than SomnoDent Flex or Fusion (REP-0657);

2. Acrylic 18% stronger than traditional SomnoDent acrylic (REP-0649);

3. Fitting surface 3–4 times more accurate than traditional SomnoDent device (REP-0654);

4 <https://www.sleepreviewmag.com/sleep-disorders/breathing-disorders/obstructive-sleep-apnea/nasal-breathing/>

5 Braemet al. Poster #9, American Academy of Sleep Medicine Meeting, San Antonio, Texas, May 2019.