

The Importance of Sleep

Normal healthy restorative sleep is reliant on a range of factors including sufficient sleep duration, sleep quality and the absence of disturbances¹:



Sleep disruption and sleep deprivation can both have negative short - and long-term health consequences in otherwise healthy individuals and those with underlying medical conditions^{1,2}



Even a small sleep deficit of 1-2 hours for a few nights can have important implications for everyday functioning – including social interactions, work performance and the risk of accidents³



Sleep disturbances and microarousals can lead to unsatisfactory poor quality sleep⁴ – even when sleep quantity is not reduced⁵



Fragmented sleep is thought to be just as detrimental to health as sleep deprivation.^{1,6}

Despite its importance, many people have reduced or disrupted sleep that can impact their health and ability to function.

Nasal congestion and sleep



Nasal congestion, even in healthy adults, can lead to disrupted sleep cycles, increased microarousals and daytime sleepiness.⁴



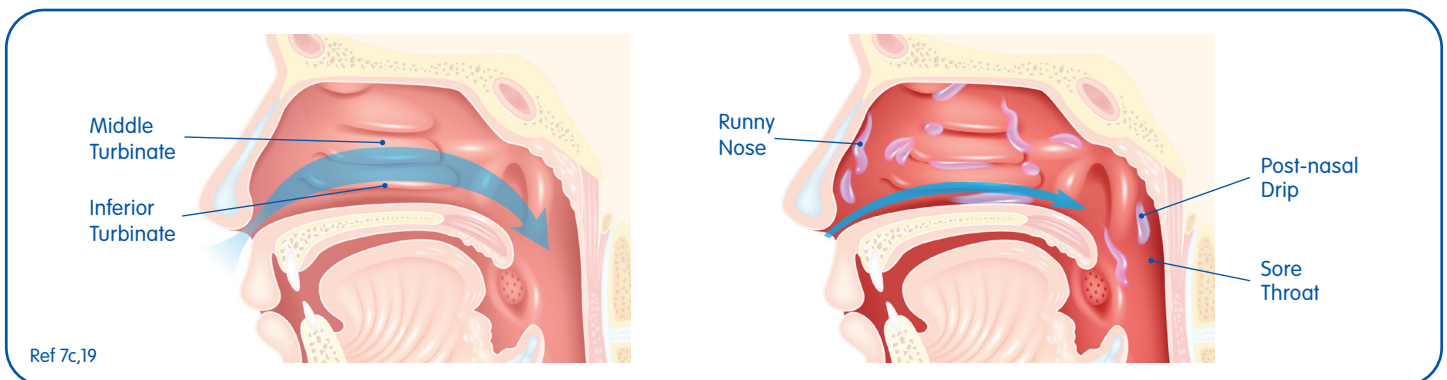
Nasal congestion is very common and one of the main symptoms in allergic and non-allergic disorders of the upper respiratory tract.⁷



Nasal allergies, sinus infections, colds and flu can lead to mucosal inflammation and swelling that reduces the physical size of nasal passages making nose breathing more difficult, particularly at night^{2,7}



Irritation or infection causes more mucus production, which can obstruct the nasal passages and lead to nasal congestion, sinus pain and pressure as well as postnasal drip⁸ – which can also interfere with sleep.



Nasal congestion is considered to be one of the most troublesome symptoms for people with common nasal conditions such as allergic rhinitis and rhinoconjunctivitis.⁸⁻¹⁰ Nasal congestion is also the leading symptom related to sleep issues.⁹



Patients with allergic rhinitis report nasal stuffiness, blockage and congestion as well as rhinorrhoea as interfering with sleep while other symptoms such as itchiness or sneezing were less important.⁹



Even a small change in nasal airway patency can have a significant effect on breathing⁴ and reduced nasal patency due to congestion is considered a potential contributor to sleep disordered breathing¹²

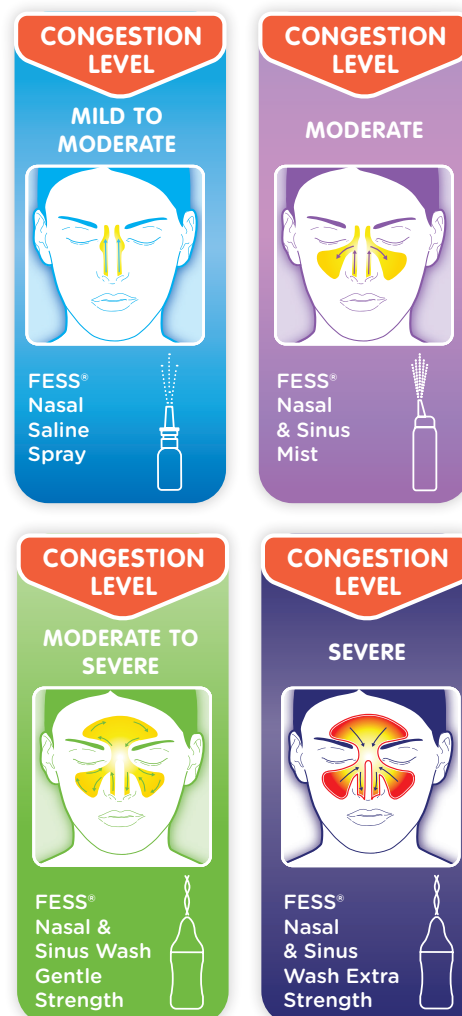
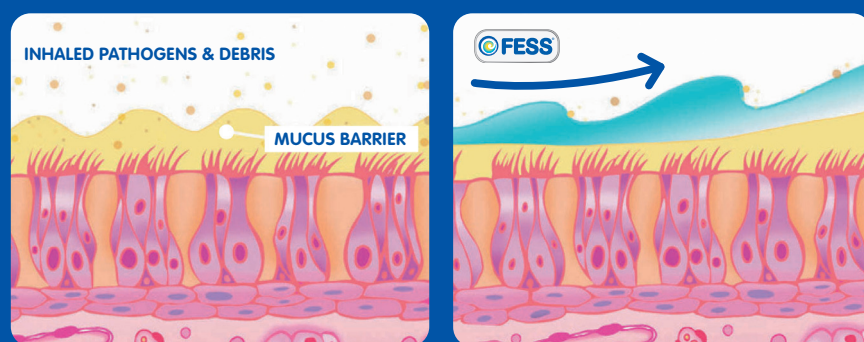


Other daytime symptoms, such as fatigue and sleepiness, can be considered secondary to poor sleep which itself may be secondary to nasal congestion.⁴

Regular use of FESS® nasal saline irrigation can help clean and clear blocked noses* and help relieve sinus congestion

Saline nasal irrigation is a simple, inexpensive, nonpharmacological, patient-controlled therapy that can be performed at home and is an appropriate treatment option for many patients (including young children) with nasal congestion^{13,14}.

- ✓ Gently loosens and thins excess mucus and helps maintain normal ciliary function^{13,14}
- ✓ Washes away inhaled allergens and irritants to help reduce inflammation and soothe irritated tissues^{13,14}
- ✓ Can be used as an adjunct treatment to clear the nose prior to using medicated sprays – to help improve their absorption and effectiveness.^{15,16}



FESS® helps moisten nasal tissues to prevent dryness¹⁶

- ✓ **Non-medicated FESS® saline sprays and washes help humidify and moisturise the nasal mucosa**
 - Airway dryness is a frequently reported symptom of nasally administered CPAP¹⁷
 - Can be used with OTC and prescription medications, such as antihistamines and decongestants, to counteract drying out of nasal passages and sinus tissues.
- ✓ **FESS® Dry Nose Oil Spray relieves nasal dryness including that due to oxygen, CPAP and nasal medication use**
 - Lubricates dry nasal tissue
 - Reduces nasal irritation and itching.
- ✓ **FESS® Nasal Gel relieves dry, chafed and sore noses**
 - Provides a protective barrier while still moisturising the sensitive skin around the nose
 - Ideal for raw and chafed noses that often accompany nasal congestion and CPAP use.

FESS®: A simple and effective way to relieve nasal congestion and dryness



References: 1. MedicG, et al. Nat Sci Sleep. 2017;9:151-61. 2. Kent DT, Soose RJ. Clin Chest Med. 2014;35(3):589-601. 3. Saksvik-Lehouillier, et al. Sleep. 2020;43(10):zsaa078. 4. Craig TJ, et al. J Allergy Clin Immunol. 1998;101(5):633-7. 5. Kishi A, et al. PLoS One. 2017;12(4):e0175504. 6. Van Someren EJ, et al. J Neurosci. 2015;35(41):13889-95. 7. Nacario RM, et al. Int J Gen Med. 2010;3:47-57. 8. Hamilos D, et al. Patient education: Chronic rhinosinusitis (Beyond the Basics). Last updated August 2021. <https://www.uptodate.com/contents/chronic-rhinosinusitis-beyond-the-basics> (accessed September 2021). 9. Juniper EF, et al. J Allergy Clin Immunol. 2003;111:484-90. 10. Storms W. Prim Care Respir J. 2008;17(1):7-18. 11. Stull DE, et al. Curr Med Res Opin. 2007;23:811-9. [ABSTRACT] 12. European Respiratory Society. Chapter 23 - Sleep breathing disorders. In: European Lung White Book. Available at: <https://www.erswhitebook.org/> (accessed August 2021). 13. Casale M, et al. Int J Immunopathol Pharmacol. 2018;32:2058738418802676. 14. Wang YH, et al. J Microbiol Immunol Infect. 2014;47(1):63-9. 15. Cingi C, et al. Front Allergy. 2021;2:638136. 16. Santoro E, et al. Rhinology Online. 2021;4:1-16. 17. Ghodiri M, Grunstein RR. Respirology. 2020;25(6):593-602. 18. #IRI Nasal Saline MAT to 14/02/21. 19. Kent DT, Kezirian EJ. Chapter 21 - Nasal Obstruction and Sleep-Disordered Breathing. Editor(s): Michael Friedman, Ofer Jacobowitz, Sleep Apnea and Snoring (Second Edition), Elsevier, 2020, Pages 128-32.

Abbreviation: CPAP, continuous positive airway pressure; OTC, over-the-counter. *caused by excess mucus

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