



Full range of **Sea Water Solutions,**
Prevention and **Treatment** of **Specific**
Nasal Disorders

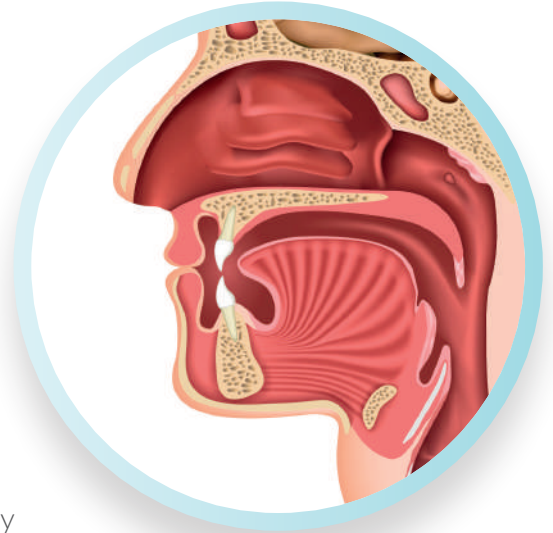


Physiology of the nasal mucosa

The **NASAL MUCOSA** covers the nostrils and performs the following functions:

- ① Allows air to pass into the lungs.
- ② Perceives odors through the olfactory mucosa.
- ③ Heats, moistens, and frees the inspired air of foreign solids.
- ④ Acts as a sounding board in voice production.

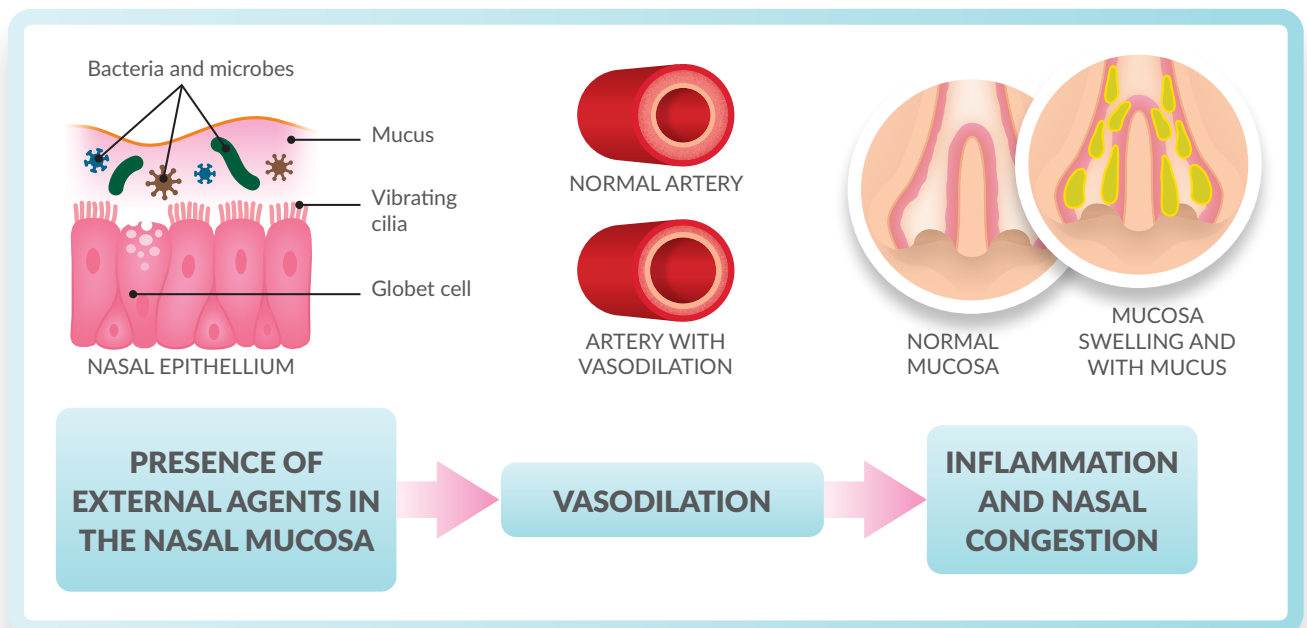
It is very important to keep the nasal mucosa clean and healthy so that it can perform its functions correctly. Factors such as temperature, pH, humidity, and ionic concentration can alter the integrity of the epithelium of the nasal mucosa. Apart from the functions already mentioned, the mucosa is very important as it is the first defense barrier of the body, and it prevents the entry of foreign bodies and microorganisms.



Pathophysiology of nasal mucosa

The **pathophysiology of the nasal mucosa** centers on its role as a dynamic barrier and immunologically active tissue. The nasal mucosa consists of a pseudostratified ciliated columnar epithelium with goblet cells, tight junctions, and an underlying lamina propria. This structure provides a **physical, chemical, immune, and microbiological barrier** that protects against inhaled pathogens, allergens, and particulates. ^[1-2]

Disruption of the epithelial barrier—by allergens, pathogens, pollutants, or inflammatory cytokines—leads to increased permeability and impaired mucociliary clearance. This allows antigens and microbes to penetrate deeper, activating antigen-presenting cells and triggering both innate and adaptive immune responses.



1. Zhang R, Zhang L, Li P, Pang K, Liu H, Tian L. Epithelial Barrier in the Nasal Mucosa, Related Risk Factors and Diseases. *Int Arch Allergy Immunol*. 2023;184(5):481-501. doi: 10.1159/000528969. Epub 2023 Feb 1. PMID: 36724763; PMCID: PMC10137320.
2. Zhang N, Van Crombruggen K, Gevaert E, Bachert C. Barrier function of the nasal mucosa in health and type-2 biased airway diseases. *Allergy* 2016 Mar;71(3):295-307. doi: 10.1111/all.12809. Epub 2016 Jan 13. PMID: 26606240.

Nasal congestion

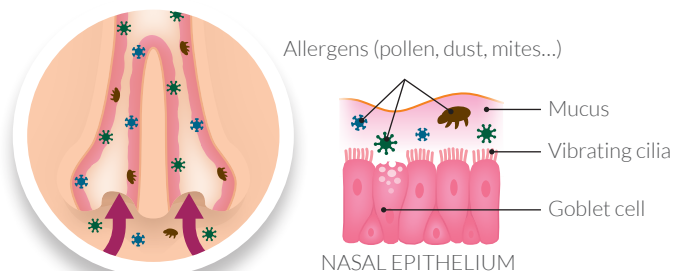
Nasal congestion is defined as the subjective sensation of reduced airflow through the nasal passages, typically due to swelling of the nasal mucosa and increased vascular permeability, which leads to obstruction or blockage of the nasal airway.^[1] In clinical practice, nasal congestion is most commonly associated with conditions such as allergic rhinitis, chronic rhinosinusitis (with or without nasal polyps), and viral upper respiratory infections.^[2-3]

The pathophysiology involves inflammatory mediators (e.g., histamine, leukotrienes) that cause vasodilation and edema of the nasal mucosa, narrowing the nasal airway and increasing resistance to airflow.^[2] This symptom is distinct from rhinorrhea (nasal discharge) and is best described as a feeling of stuffiness or blockage rather than excess mucus production.^[4] Nasal congestion is a cardinal symptom in the diagnostic criteria for acute and chronic conditions, and its severity can be quantified using validated instruments such as the Nasal Obstruction Symptom Evaluation (NOSE) scale.^{[3][5]}

Clinically, nasal congestion is highly bothersome, often impairing sleep quality, daytime functioning, and overall quality of life.^[6] It is important to clarify terminology with patients, as the term “congestion” may be interpreted variably, but in otolaryngology, it specifically refers to nasal blockage or impaired airflow.^[4]



Inflamed nasal mucosa due to the presence of allergens



1. Hsu DW, Suh JD. Anatomy and Physiology of Nasal Obstruction. *Otolaryngol Clin North Am*. 2018 Oct;51(5):853-865. doi: 10.1016/j.otc.2018.05.001. Epub 2018 Jun 23. PMID: 29941182.

2. Nathan RA. The pathophysiology, clinical impact, and management of nasal congestion in allergic rhinitis. *Clin Ther*. 2008 Apr;30(4):573-86. doi: 10.1016/j.clinthera.2008.04.011. PMID: 18498908.

3. Hopkins C. Chronic Rhinosinusitis with Nasal Polyps. *N Engl J Med*. 2019 Jul 4;381(1):55-63. doi: 10.1056/NEJMcp1800215. PMID: 31269366.

4. McCoul ED, Mohammed AE, Debbaneh PM, Carratola M, Patel AS. Differences in the Intended Meaning of Congestion Between Patients and Clinicians. *JAMA Otolaryngol Head Neck Surg*. 2019 Jul 1;145(7):634-640. doi: 10.1001/jamaoto.2019.1023. PMID: 31145430; PMCID: PMC6547093.

5. Skirko JR, James KT, Shusterman DJ, Weaver EM. Association of Allergic Rhinitis With Change in Nasal Congestion in New Continuous Positive Airway Pressure Users. *JAMA Otolaryngol Head Neck Surg*. 2020 Jun 1;146(6):523-529. doi: 10.1001/jamaoto.2020.0261. PMID: 32271366; PMCID: PMC7146531.

6. Lunn M, Craig T. Rhinitis and sleep. *Sleep Med Rev*. 2011 Oct;15(5):293-9. doi: 10.1016/j.smr.2010.12.001. Epub 2011 Feb 11. PMID: 21316270.

Daily hygiene and treatment of the nasal mucosa

Recommended daily hygiene practices for the nasal mucosa include regular nasal saline irrigation, which is supported by multiple clinical guidelines and systematic reviews. The American Academy of Otolaryngology–Head and Neck Surgery recommend high-volume nasal saline irrigation (≥ 100 mL per nostril) using either isotonic (0.9% NaCl) or hypertonic (2–3% NaCl) solutions for chronic rhinosinusitis, postoperative care, and general sinonasal hygiene. This practice improves mucociliary clearance, removes allergens and pathogens, and promotes mucosal healing, with minimal adverse effects such as mild irritation or rare epistaxis.^[1-2]

1. Payne SC, McKenna M, Buckley J, Colandrea M, Chow A, Detwiller K, Donaldson A, Dubin M, Finestone S, Filip P, Khalid A, Peters AT, Rosenfeld R, Akrami Z, Dhepyasuwan N. Clinical Practice Guideline: Adult Sinusitis Update. *Otolaryngol Head Neck Surg*. 2025 Aug;173 Suppl 1:S1-S56. doi: 10.1002/ohn.1344. PMID: 40742114.

2. Rudmik L, Soler ZM. Medical Therapies for Adult Chronic Sinusitis: A Systematic Review. *JAMA*. 2015 Sep 1;314(9):926-39. doi: 10.1001/jama.2015.7544. PMID: 26325561.

Cleaning and decongestion

Sea water-based preparations (isotonic or hypertonic) are effective and safe for daily nasal hygiene and symptomatic relief. Isotonic seawater sprays and irrigations have demonstrated efficacy in improving nasal symptoms, mucociliary clearance, and wound healing, with an excellent safety profile in both healthy individuals and those with allergic rhinitis or upper respiratory infections.^[2-3] Hypertonic seawater may offer superior symptom relief in certain postoperative or inflammatory conditions, but can cause more nasal irritation.^{[1][4]}



1. Payne SC, McKenna M, Buckley J, Colandrea M, Chow A, Detwiller K, Donaldson A, Dubin M, Finestone S, Filip P, Khalid A, Peters AT, Rosenfeld R, Akrami Z, Dhepyasuwan N. Clinical Practice Guideline: Adult Sinusitis Update. *Otolaryngol Head Neck Surg*. 2025 Aug;173 Suppl 1:S1-S56. doi: 10.1002/ohn.1344. PMID: 40742114.

2. Štanfel D, Kalogjera L, Ryazantsev SV, Hlača K, Radtsig EY, Teimuraz R, Hrabac P. The Role of Seawater and Saline Solutions in Treatment of Upper Respiratory Conditions. *Mar Drugs*. 2022 May 17;20(5):330. doi: 10.3390/md20050330. PMID: 35621981; PMCID: PMC9147352.

3. Holmström M, Rosén G, Wählander L. Effect of nasal lavage on nasal symptoms and physiology in wood industry workers. *Rhinology*. 1997 Sep;35(3):108-12. PMID: 9403939.

4. Perić A, Kovačević SV, Barać A, Gačša D, Perić AV, Jožin SM. Efficacy of hypertonic (2.3%) sea water in patients with aspirin-induced chronic rhinosinusitis following endoscopic sinus surgery. *Acta Otolaryngol*. 2019 Jun;139(6):529-535. doi: 10.1080/00016489.2019.1605454. Epub 2019 Apr 29. PMID: 31035841.

Osmosis, in the context of nasal congestion and saline or sea water irrigation, refers to the passive movement of water across the nasal mucosal epithelium driven by differences in solute concentration between the irrigation solution and the mucosal surface. When an isotonic saline or sea water solution (approximately 0.9% NaCl, matching plasma osmolality) is used, there is minimal net movement of water across the mucosa, which maintains mucosal hydration and supports mucociliary clearance without causing cellular swelling or dehydration.^[1-2]

When a hypertonic saline or sea water solution (typically 2–3% NaCl) is applied, the higher solute concentration in the solution creates an osmotic gradient that draws water out of the edematous nasal mucosa into the nasal lumen. **This reduces mucosal edema and thins mucus**, thereby improving nasal patency and facilitating clearance of secretions. The American Academy of Otolaryngology–Head and Neck Surgery notes that hypertonic saline may have superior anti-inflammatory effects and transiently enhance mucociliary clearance due to this osmotic mechanism, but it is also associated with increased local irritation and burning sensation.^[1]

1. Payne SC, McKenna M, Buckley J, Colandrea M, Chow A, Detwiller K, Donaldson A, Dubin M, Finestone S, Filip P, Khalid A, Peters AT, Rosenfeld R, Akrami Z, Dhepyasuwan N. Clinical Practice Guideline: Adult Sinusitis Update. *Otolaryngol Head Neck Surg*. 2025 Aug;173 Suppl 1:S1-S56. doi: 10.1002/ohn.1344. PMID: 40742114.

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Benefits of sea water

- 💧 **Natural and non-pharmacological solution** for **cleaning** and **decongesting** the nasal passages.
- 💧 **Hydrates the nasal mucosa**, which prevents dryness and wounds.
- 💧 **Facilitates the drainage of secretions from the nose.**
- 💧 Has an **anti-inflammatory effect** (depending on the sea water concentration).
- 💧 It has **healing properties** due to the high concentration of salts.
- 💧 **Helps reduce allergy symptoms**, evacuating part of the allergens in contact with the nasal mucosa. It also **contributes to the removal of dust and contaminants.**
- 💧 **Improves and facilitates the management of chronic rhinitis, snoring and sleep apnoea.** In short, **it improves nasal breathing.**

Sea Water Origin

Free Nose® Sea Water is sourced from **Cancale Bay** (French Brittany), an area renowned for the purity and quality of its Class A sea water. The Bay, located in **Mont Saint-Michel Bay**, has the **highest tide in Europe** (12 m), with powerful currents that naturally renew, oxygenate, and preserve the cleanliness of the water. The area is also known for its traditional oyster farming, where oysters act as **natural biofilters**, further contributing to the water's purity.



State of the art technology

At STE Pharmaceuticals we use the most advanced technology to ensure a full usable experience for the consumer.

NASAL SPRAYS

Bag-on-Valve (BOV) technology:
delivers a cleaner, superior
product application

3 forces available:



Introducing **an actuator** system **2 in 1**:
more flexibility for consumers



Jet for
rinsing



Spray for gentle
application

High evacuation rates

YOUR
BRAND
HERE

Without propellant gas

Barrier function:
Avoid contact with the exterior
to ensure ultimate product
protection

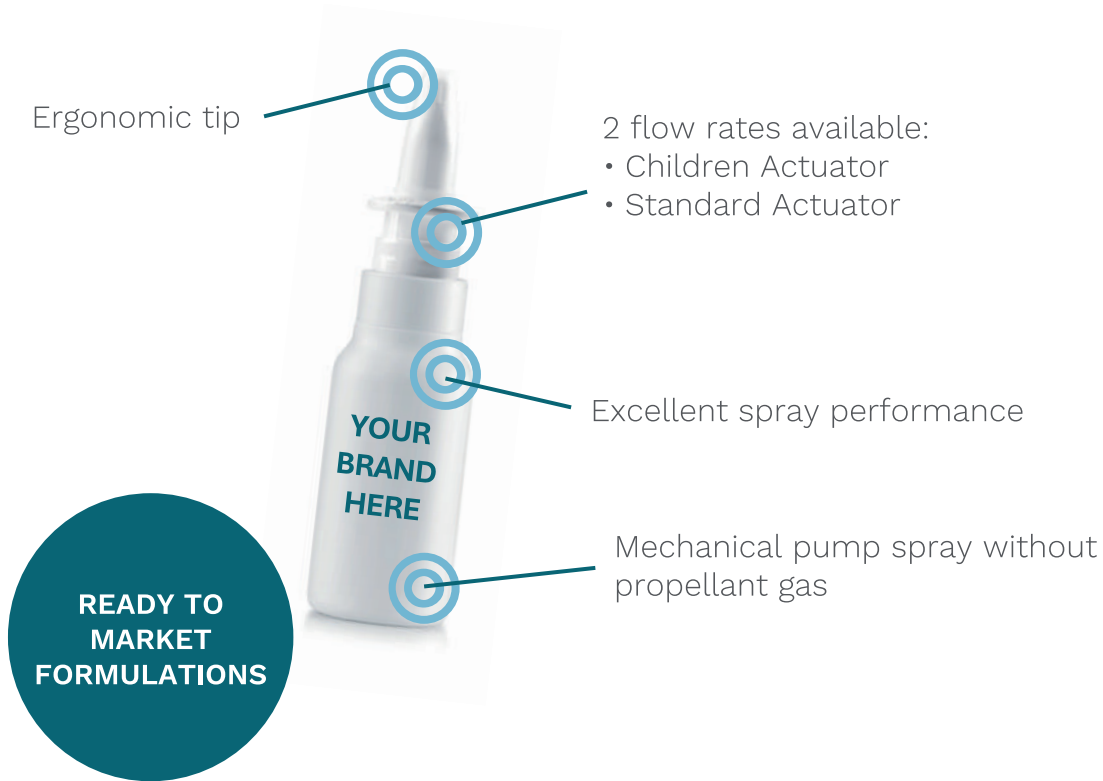


All positions bottle
Full 360° usage

READY TO
MARKET
FORMULATIONS

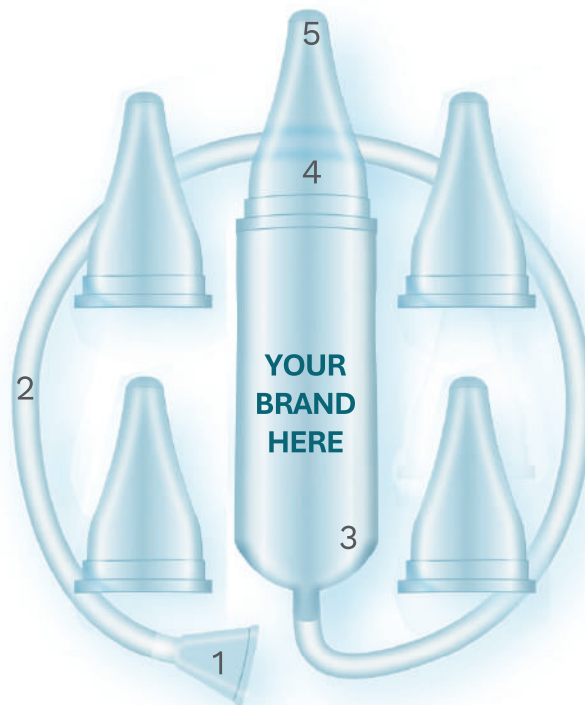
State of the art technology

Flexible, adaptable, customizable, safe and efficient.



NASAL SPRAYS

- Safe for babies.
- Easy to use for parents.
- Hygienic: with removable tips.



NASAL ASPIRATORS

COMPONENTS

1. Polypropylene (PP) suction nozzle
2. Flexible silicone tube
3. Body connector
4. Absorbent foam filter
5. Cannula



Free Nose[®] offers a wide portfolio of **nasal sprays for daily use**

1

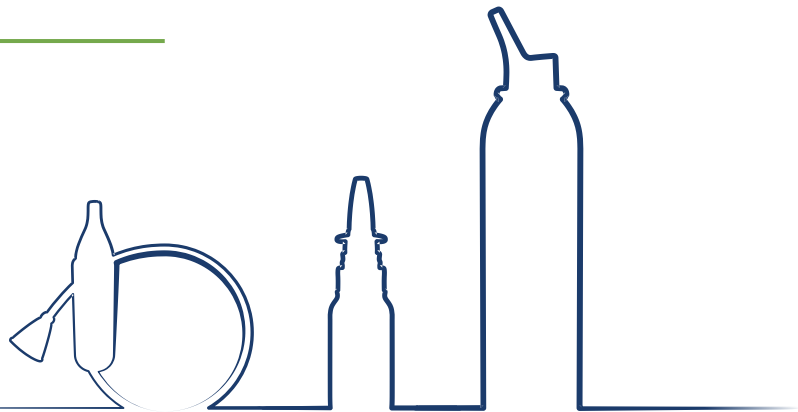
NASAL CLEANING: Isotonic sea water and nasal aspirators

2

NASAL DECONGESTION: Hypertonic sea water

3

SPECIFIC



Wide range of nasal sprays and aspirators

DECONGESTION



HYPERTONIC SEA WATER



HYPERTONIC SEA WATER WITH ALOE VERA AND MINT



HYPERTONIC SEA WATER WITH ALOE VERA AND EUCALYPTUS



HYPERTONIC SEA WATER WITH ALOE VERA, RAVINTSARA AND ROSEMARY

CLEANING



ISOTONIC SEA WATER



NASAL ASPIRATORS



ISOTONIC SEA WATER WITH ALOE VERA



ISOTONIC SEA WATER WITH ALOE VERA AND HYALURONIC ACID



ISOTONIC SEA WATER WITH ALOE VERA AND LEMON

SPECIFIC TREATMENTS



ANTI ALLERGY



VIRPROTECT



SALINE SOLUTION WITH PROPOLIS



DEEP BREATH



DEXPANTHENOL



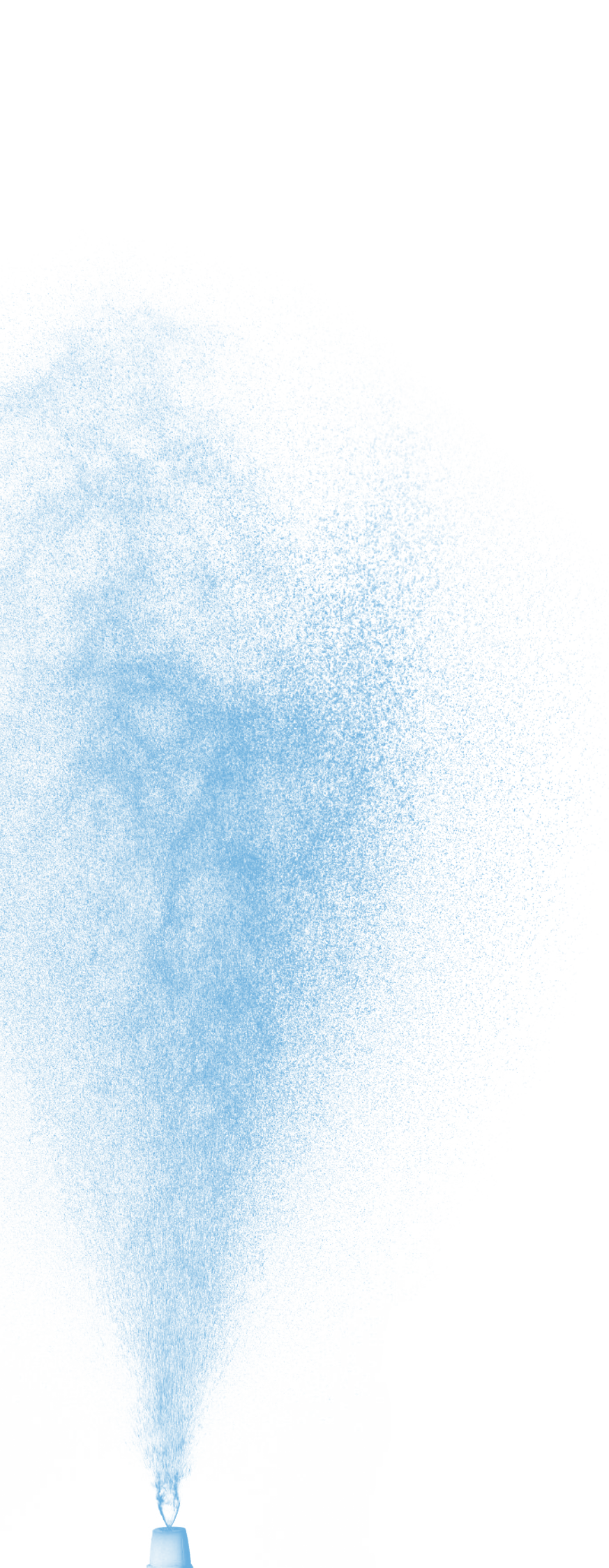
HYALURONIC 0.2%



HYALURONIC PLUS



SESAME OIL



free
nose[®]

1

NASAL **CLEANING**

ISOTONIC SEA WATER
AND NASAL ASPIRATORS

Isotonic sea water

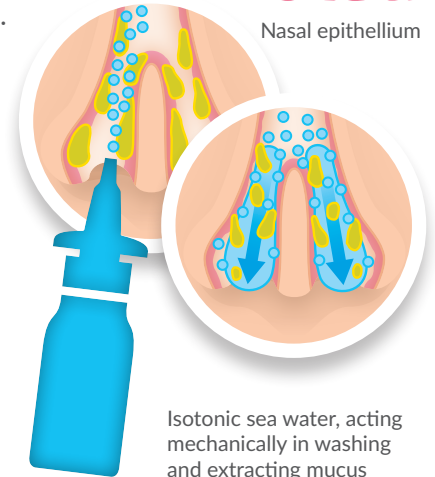
Proper use of **FREE NOSE® Isotonic sea water** in daily nasal hygiene of babies, children and adults allows a therapeutic aid in some basic indications such as: nasopharyngitis, obstructive rhinitis and sinusitis.

It has a salt concentration equal to plasma (0.9%).

- Helps to hydrate the nasal cavities.
- Facilitates the expulsion of excess mucus and retained impurities.
- Helps prevent microbial growth by cleaning the nasal passages.
- Ensures the permeability of the nasal mucosa.



Nasal epithelium



Isotonic sea water, acting mechanically in washing and extracting mucus



- SOFT (+0 months)
- MEDIUM (+3 years)
- STRONG (+6 years)

Technical description	Medical Device Class IIa
Possible/ existing galenics	30 ml nasal bomb spray without propellant gas and with an ergonomic tip. 120 ml. Bag on valve Technology. Without propellant gas and with an ergonomic tip.
Qualitative composition	Purified water and sea water (sodium chloride 0.9%).
Recommended dose	Apply in each nostril as often as necessary.
Shelf life	3 years

Free Nose® sea water products are suitable for babies and pregnant women as they are totally safe and perfectly tolerable.



Isotonic sea water with **Aloe Vera**

Nasal spray without propellant gas based on **Isotonic sea water solution (0.9% sodium chloride)** with sea natural minerals and trace elements and **Aloe Vera** natural extract.

Indicated for babies in daily nasal hygiene for prevention and as a therapeutic adjuvant in some indications such as nasopharyngitis, obstructive rhinitis, sinusitis, and nasal dryness.

It has a high moisturizing effect powered by Aloe Vera that facilitates and prolongs the hydration of sea water thanks to its mucopolysaccharides content. Aloe vera, thanks to its cosmetic skin-conditioner properties, helps to restore the nasal mucosa and promote its normal operation.



Technical description	Medical Device Class IIa
Possible/existing galenics	120 ml. Bag on valve Technology. Without propellant gas and with an ergonomic tip.
Qualitative composition	Purified water, sea water (sodium chloride 0.9%), Aloe Vera and sodium hydroxide.
Recommended dose	Apply 2-6 sprays per day in each nostril.
Shelf life	3 years

Gupta, V. K., & Malhotra, S. (2012). Pharmacological attribute of Aloe vera: Revalidation through experimental and clinical studies. *Ayu*, 33(2), 193-196. doi:10.4103/0974-8520.105237

Kumar, R., Singh, A. K., Gupta, A., Bishayee, A., & Pandey, A. K. (2019). Therapeutic potential of Aloe vera- A miracle gift of nature. *Phytomedicine*, 152996. doi:10.1016/j.phymed.2019.152996

Isotonic sea water with Aloe Vera & Hyaluronic Acid

Nasal spray without propellant gas based on **isotonic sea water solution with 0.9%** of sodium chloride and **Aloe Vera and hyaluronic acid**.

Adequate for nasal irrigation in cases of viscous nasal discharge and / or purulent and after endonasal surgery. The correct use of isotonic sea water nasal spray with aloe vera and hyaluronic acid in daily hygiene can help in basic therapeutic indications such as nasopharyngitis, rhinitis and sinusitis obstructive, nasal dryness, hoarseness dry mucous membranes, as an adjuvant treatment in ENT disorders and pediatric treatments.

Its effectiveness is due to two characteristics:

- The spray provides vigorous irrigation, due to the dragging effect of sea water, helping to the elimination of excess mucus and microorganisms, while moisturizing and protecting the nasal mucosa by helping removing scabs.
- The isotonic sea water solution has a high moisturizing effect, powered by Aloe Vera and hyaluronic acid that facilitates and prolongs the hydration of sea water.



SOFT (+1 year)

Technical description	Medical Device Class IIa
Possible/existing galenics	120 ml. Bag on valve Technology. Without propellant gas and with an ergonomic tip.
Qualitative composition	Purified water, sea water (sodium chloride 0.9%), Aloe Vera and sodium hyaluronate.
Recommended dose	From 1 year: apply 2-3 sprays per day in each nostril.
Shelf life	3 years

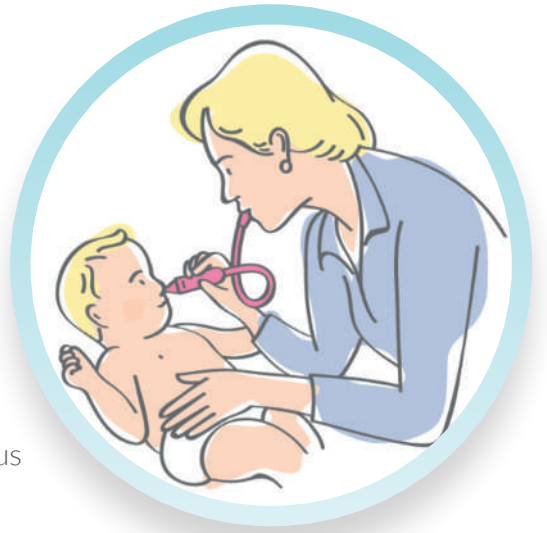
Gupta, V. K., & Malhotra, S. (2012). Pharmacological attribute of Aloe vera: Revalidation through experimental and clinical studies. *Ayu*, 33(2), 193–196. doi.org/10.4103/0974-8520.105237

Kumar, R., Singh, A. K., Gupta, A., Bishayee, A., & Pandey, A. K. (2019). Therapeutic potential of Aloe vera- A miracle gift of nature. *Phytomedicine*, 152996. doi:10.1016/j.phymed.2019.152996

Nasal aspirator

Free Nose® Nasal Aspirator is a medical device easy to use that:

- Provides relief from colds, sinusitis and other conditions that produce excessive nasal secretions.
- Improves breathing.
- Helps with lactation and makes sleeping easier.
- Allows you to control the suction force every time and thus allowing for a smooth and efficient removal of mucus from your baby.
- No risks to your baby.

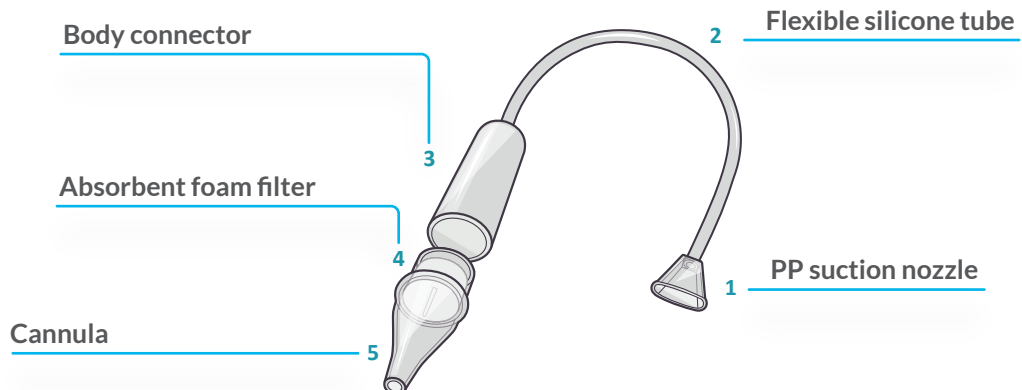


It can be used to remove nasal secretions when the baby has a stuffy nose due to colds, flu, sinusitis, allergic and all those pathologies that course with runny nose, allowing the baby to breathe normally.



Shelf life	5 years
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Components and materials





free
nose[®]

2

NASAL **DECONGESTION**

HYPERTONIC SEA WATER

Hypertonic sea water

Free Nose® Hypertonic sea water hydrates strongly nasal cavities and helps washing and extracting the mucus thanks to its mechanical action, which allows the permeability of the nasal mucosa.

- Strong and effective natural decongestant.
- Helps reduce swelling and inflammation of the nasal mucosa, thanks to the osmotic effect.
- Helps to hydrate the nasal cavities, avoiding excessive dryness.
- Facilitates the expulsion of excess mucus and retained impurities, improving the movement of the nasal cilia.
- Helps prevent microbial growth by cleaning the nasal passages.
- Helps decrease the use of decongestant drugs.
- Improves breathing, therefore, the quality of life.

Indicated as a therapeutic adjuvant in some indications such as nasopharyngitis, allergic rhinitis, sinusitis, hoarseness and in ENT disorders (ear, nose and throat infections) and pediatric treatments.



Technical description	Medical Device Class IIa
Possible/existing galenics	30 ml nasal bomb spray without propellant gas and with an ergonomic tip. 120 ml. Bag on valve Technology. Without propellant gas and with an ergonomic tip.
Qualitative composition	Sea water and purified water (sodium chloride 2.2%).
Recommended dose	Apply in each nostril as often as necessary.
Shelf life	3 years

Hypertonic sea water, Aloe Vera & Mint

A strong and effective natural decongestant that improves moisturizing and relief from stuffy nose discomfort thanks to **Aloe Vera** and **Mint** natural extracts. The proper use of **Free Nose® sea water** in daily nasal hygiene acts as a therapeutic aid for many basic indications such as nasopharyngitis, obstructive rhinitis and sinusitis, nasal dryness, hoarseness, dry mucous membranes, and as an adjuvant in ENT disorders (ear, nose and throat infections) and pediatric treatments.

- Facilitates the expulsion of mucus excess and impurities.
- Provides hydration and inflammation reduction of the nasal mucosa.
- Has a high moisturizing effect powered by Aloe Vera that facilitates and prolongs the hydration of sea water thanks to its mucopolysaccharides content.
- Aloe vera, thanks to its cosmetic skin-conditioner properties, helps to restore the nasal mucosa and promote its normal operation..
- Mint aroma provides symptomatic relief from nasal congestion and gives the formula a pleasant fragrance and a fresh sensation.



Technical description	Medical Device Class IIa
Possible/existing galenics	30 ml nasal bomb spray without propellant gas and with an ergonomic tip. 120 ml. Bag on valve Technology. Without propellant gas and with an ergonomic tip.
Qualitative composition	Sea water (sodium chloride 2.5%), purified water, propylene glycol, aloe vera, benzyl alcohol, sodium hydroxide, EDTA disodium salt dehydrate, benzalkonium chloride and mint aroma.
Recommended dose	From 6 years: apply 2-6 sprays per day in each nostril.
Shelf life	3 years

Gupta, V. K., & Malhotra, S. (2012). *Pharmacological attribute of Aloe vera: Revalidation through experimental and clinical studies*. Ayu, 33(2), 193–196. doi: org/10.4103/0974-8520.105237

Kumar, R., Singh, A. K., Gupta, A., Bishayee, A., & Pandey, A. K. (2019). *Therapeutic potential of Aloe vera- A miracle gift of nature*. Phytomedicine, 152996. doi:10.1016/j.phymed.2019.152996

Eccles, R. (2003). *Menthol: Effects on nasal sensation of airflow and the drive to breathe*. Current Allergy and Asthma Reports, 3(3), 210–214. doi:10.1007/s11882-003-0041-6

Hypertonic sea water, Aloe Vera & Eucalyptus

A strong and effective natural decongestant that improves moisturizing and relief from stuffy nose discomfort thanks to **Aloe Vera** and **Eucalyptus**. Indicated as a therapeutic adjuvant in some indications such as nasopharyngitis, allergic rhinitis, sinusitis, hoarseness and in ENT disorders (ear, nose and throat infections) and pediatric treatments.

- Helps reduce swelling and inflammation of the nasal mucosa, thanks to the osmotic effect.
- Helps to hydrate the nasal cavities, avoiding excessive dryness.
- Helps prevent microbial growth by cleaning the nasal passages and facilitates the expulsion of excess mucus and retained impurities, improving the movement of the nasal cilia.
- Has a high moisturizing effect powered by Aloe Vera that facilitates and prolongs the hydration of sea water thanks to its mucopolysaccharides content.
- Aloe vera, thanks to its cosmetic skin-conditioner properties, helps to restore the nasal mucosa and promote its normal operation.
- Eucalyptus provides a pleasant and fresh aroma.
- Helps decrease the use of decongestant drugs.
- Improves breathing, therefore, the quality of life.



Technical description	Medical Device Class IIa
Possible/existing galenics	120 ml. Bag on valve Technology. Without propellant gas and with an ergonomic tip.
Qualitative composition	Sea water (sodium chloride 2.2%), purified water, propylene glycol, ethoxylated hydrogenated castor oil, aloe vera, <i>Eucalyptus radiata</i> essential oil, mix of natural tocopherols and trisodium citrate dihydrate.
Recommended dose	From 6 years: apply 2-6 sprays per day in each nostril.
Shelf life	3 years

Gupta, V. K., & Malhotra, S. (2012). *Pharmacological attribute of Aloe vera: Revalidation through experimental and clinical studies*. Ayu, 33(2), 193–196. doi:10.4103/0974-8520.105237

Kumar, R., Singh, A. K., Gupta, A., Bishayee, A., & Pandey, A. K. (2019). *Therapeutic potential of Aloe vera- A miracle gift of nature*. Phytomedicine, 152996. doi:10.1016/j.phymed.2019.152996



free
nose[®]

3

SPECIFIC **TREATMENTS**

Anti Allergy

Nasal spray without propellant gas, based on **hypertonic solution** with 2.2% of sodium chloride combined with **Aloe Vera** and the freshness of **essential oils**, together with the mucosal protection against allergens thanks to the incorporation of **xanthan gum** to the formula as a filmogenous agent.

- The spray due to the dragging effect of hypertonic saline solution, helps to the elimination of excess mucus.
- It has a protecting action thanks to the film forming properties of xanthan gum the product forms a protective film over the nasal mucosa preventing the contact of allergens.
- It can maintain the mucosa fresh and moisturized due to Aloe Vera and essential oils of eucalyptus, niaouli, peppermint and lemon.



Medical Device Class IIa	
20 ml	Purified water, glycerin, sodium chloride (2.2%), dipotassium hydrogen phosphate, ethoxylated hydrogenated castor oil, aloe vera, potassium dihydrogen phosphate, xanthan gum (0.3%), vitamin c (ascorbic acid), EDTA disodium salt dehydrate, benzalkonium chloride, lemon essential oil, eucalyptus essential oil, niaouli essential oil, peppermint essential oil and sodium hydroxide.
+6 years	
Shelf life	3 years

Effective as a treatment for an allergic crisis, from the appearance of the first symptom and as a preventive treatment.

Virprotect

Designed to quickly help alleviate the pathological processes that occur with a runny nose in situations such as the flu or cold. It forms a protective film over the nasal mucosa preventing the contact of virus and external agents.

The product thoroughly cleans the nasal passages and prevents the infection of germs thanks to its composition:

- The spray due to the dragging effect of **hypertonic saline solution**, helps to the elimination of excess mucus and microorganisms, while moisturizing the nasal mucosa by helping removing scabs thanks to **sesame oil and glycerol**.
- It has a protecting action thanks to the film forming properties of **xanthan gum** the product forms a protective film over the nasal mucosa preventing the contact of viruses.
- It catches viruses thanks the **sesame oils** due its lipophilic nature.
- Due **the acid formulation (pH 3-4)** helps to inactive the viruses.



Medical Device Class I	
20 ml	Purified water, polysorbate 80, sesame oil, glycerin, benzyl alcohol, sodium chloride, xanthan gum, tea tree essential oil, citric acid, EDTA disodium salt dihydrate, benzalkonium chloride 50% solution, lemon essential oil, potassium sorbate and mix of natural tocopherols.
+12 years	
Shelf life	30 months

It reduces 3 logarithms (up to 1.000 times) the active amount of adenovirus.

Study carried out by Bio Basic Europe S.r.l. in order to evaluate the efficacy in protection and the barrier effect in the nasal cavity of the medical device VIRPROTECT against Adenovirus. Study reference number: 2101L09M-1.

Propolis

Isotonic nasal saline solution recommended for the pathological processes occurring with secretions. Indicated for clearing the nasal cavity when experiencing pathologies such as rhinitis, excessive secretions, colds and the flu.

Numerous bibliographical references describe the antibacterial, antiviral and antifungal action of **propolis**.

Thyme is an aromatic plant that contains essential oil, rich in phenols such as thymol and carvacrol, and flavonoids, among other components. Thyme has been reported to have an antiseptic effect. and antibacterial, in addition to anti-inflammatory activity.

Eucalyptus help to relieve discomfort associated with nasal congestion acting as a balm and has a freshness effect.



Medical Device Class IIa	
20 ml	Purified water, sodium chloride (0.9%), propolis glycerinated extract, EDTA disodium salt dehydrate, thyme glycerinated extract, benzalkonium chloride and sodium hydroxide. (with Eucalyptus): Purified water, sodium chloride (1%), propolis glycerinated extract, EDTA disodium salt dehydrate, thyme glycerinated extract, benzalkonium chloride, eucalyptus fluid extract and sodium hydroxide.
+1 years +12 years (with Eucalyptus)	
Shelf life	3 years

Relieves symptoms of runny nose and nasal congestion in infectious processes.

Mc Marcucci. Propolis: chemical composition, biological properties and therapeutic activity. Apidologie, Springer Verlag, 1995, 26 (2), pp.83-99. hal-00891249

Luengo López T.M. Tomillo. Propiedades farmacológicas e indicaciones terapéuticas. OFFARM. Ámbito farmacéutico Fitoterapia. 2006; 25 (1):74-77.

Deep Breath

Potent decongestant nasal spray without propellant gas, based on **hypertonic saline solution** with 2.5% of sodium chloride, **natural essences and Aloe Vera**.

Designed to aid ease pathological processes that occur with nasal discharge, with improved moisturizing and relief from discomfort of a stuffy nose thanks to Aloe Vera and natural essences which providing a pleasant and fresh aroma. Its effectiveness is due to two characteristics:

- The spray provides vigorous irrigation, due to the dragging effect of **saline solution**, helping to the elimination of excess mucus and microorganisms, while moisturizing and protecting the nasal mucosa by helping removing scabs.
- The hypertonic saline solution has a high moisturizing effect, powered by **Aloe Vera** that facilitates and prolongs the hydration. **Eucalyptus radiata** and **balsam fir** natural essences helps to relief from discomfort associated to stuffy nose providing fresh air feeling.



Medical Device Class IIa	
20 ml	Purified water, sodium chloride (2.5%), 1,2-propylene glycol, ethoxylated hydrogenated castor oil, aloe vera, <i>eucalyptus radiata</i> essential oil, balsam fir essential oil, benzyl alcohol, EDTA disodium salt dehydrate, mixture of natural tocopherols, trisodium citrate dihydrate and benzalkonium chloride.
+6 years	
Shelf life	3 years

Intense decongestion without rebound effect to help during pathological processes that occur with secretions and excess mucus.

Sesame Oil

Treatment for effective relief of dry and crusty noses, lubricating the tissues, reducing irritation, itching and burning. Suitable in cases of sinusitis and to relieve inflamed, dry, and crusted nose.

One of the several benefits of **sesame oil** is its function as an emollient. Emollients are defined as a moisturizing ingredient that helps hydrate. Sesame oil also has occlusive properties, so it forms a protective layer on your skin while trapping in moisture.

Mint provides freshness and pleasant aroma to the formula.



Medical Device Class IIa	
15 ml	Sesame oil and mix of natural tocopherols. (with mint): Sesame oil, mix of natural tocopherols and mint aroma.
+3 years +6 years (with mint)	
Shelf life	3 years

Long-lasting protection to treat severe nasal dryness, lubricating and protecting the mucosa and reducing irritation, itching and burning.

Wu, Ming-Shun et al. "Anti-Inflammatory and Anticancer Properties of Bioactive Compounds from Sesamum indicum L.-A Review." Molecules (Basel, Switzerland) vol. 24,24 4426. 4 Dec. 2019.
 Lin TK, Zhong L, Santiago JL. Anti-Inflammatory and Skin Barrier Repair Effects of Topical Application of Some Plant Oils. Int J Mol Sci. 2017 Dec 27;19(1):70. doi: 10.3390/ijms19010070. PMID: 29280987; PMCID: PMC5796020.

Dexpanthenol

Designed to prevention and treatment of dryness for its moisturizing effect. It hydrates and protects the dry nasal mucosa. Recommended in situations that require the moisturizing of dry nasal mucosa as consequence of various causes such as rhinitis from flu, allergies, and dry nostrils after surgery, air conditioning and drug treatments.

Dexpanthenol absorbs and retains a high-water level. This property is beneficial for prompt repair of the mucosa, so it can improve epithelial hydration.

Dexpanthenol promotes fibroblast proliferation and increases the rate at which epithelial regrowth occurs to cover damage to the skin. Moreover, it is topically protective, adds moisture, and has been shown to decrease the inflammatory response.



Medical Device Class IIa	
20 ml	Purified water, dexpanthenol, (0.9%) sodium chloride, potassium dihydrogen phosphate, dipotassium hydrogen phosphate, EDTA disodium salt dehydrate, benzalkonium chloride and sodium hydroxide.
+1 years	
Shelf life	3 years

Long-lasting protection to treat severe nasal dryness, lubricating and protecting the mucosa and reducing irritation, itching and burning.

Necati Develioglu O, Dilber M, Bayar Muluk N, Veyselova Sezer C, Mehtap Kutlu H, Topsakal V, Cingi C. The superiority of Dexpanthenol or Vaseline as excipient in nasal formulations. Eur Rev Med Pharmacol Sci. 2022 Dec;26(2 Suppl):124-133. Haselmann G, Pulfrich K, Haselmann H. Zur Behandlung von Epithelschäden der Cornea. Ophthalmologica 1952; 123: 29-34.

Gehring W, Gloor M. Effect of topically applied dexpanthenol on epidermal barrier function and stratum corneum hydration. Arznei Drug Res 2000; 50: 659-672.

Proksch E, de Bony R, Trapp S, Boudon S. Topical use of dexpanthenol: a 70th anniversary article. J Dermatol Treat 2017; 28: 766-773. Proksch E, Nissen HP. Dexpanthenol enhances skin barrier repair and reduces inflammation after sodium lauryl sulphate-induced irritation. J Dermatol Treat 2002; 13: 173-178.

Hyaluronic 0.2%

Designed to help and restore the nasal mucosa due to its high moisturizing power. It is recommended in situations that require the moisturizing of dry nasal mucosa as consequence of various causes such as rhinitis from flu, allergies, and dry nostrils after surgery, air conditioning and drug treatments.

Hyaluronic acid is a physiological component of the nasal mucus. Hyaluronic acid and its solutions are highly osmotic and form a scaffold that several sulfur proteoglycans can bind to. Such structures can reach large size and are able to trap large quantities of water and ions, providing hydration and tissue turgescence.

Some studies indicate that hyaluronic acid enables the control of tissue hydration during inflammatory processes and/or the response to tissue injury.



Medical Device Class IIa	
20 ml	Purified water, 0.9% sodium chloride, sodium hyaluronate, potassium sorbate, sodium methylparaben and hydrochloric acid.
+1 years	
Shelf life	3 years

Powerful hydrant that helps to repair nasal mucosa in cases of dry nose or as an adjuvant of aggressive nasal treatments.

Thieme U, Müller K, Bergmann C, Bock B, Wurzer-Materna N, Shahab T, Zeman F, Eberhardt Y, Huppertz G, Koller M, Meiser P. Randomised trial on performance, safety and clinical benefit of hyaluronic acid, hyaluronic acid plus dexpanthenol and isotonic saline nasal sprays in patients suffering from dry nose symptoms. *Auris Nasus Larynx*. 2020 Jun;47(3):425-434. doi: 10.1016/j.anl.2020.01.008. Epub 2020 Feb 14. PMID: 32067777.

Tachibana M, Morioka H. A hyaluronate secretor in the nasal mucosa: a cytochemical study using hyaluronidase-gold. *Eur Arch Otorhinolaryngol*. 1990;247(4):237-9. doi: 10.1007/BF00178993. PMID: 2375867.

Casale M, Moffa A, Sabatino L, Pace A, Oliveto G, Vitali M, Baptista P, Salvinelli F. Hyaluronic Acid: Perspectives in Upper Aero-Digestive Tract. A Systematic Review. *PLoS One*. 2015 Jun 29;10(6):e0130637. doi: 10.1371/journal.pone.0130637. PMID: 26120837; PMCID: PMC4487693.

Hyaluronic Plus

Designed to help and restore the nasal mucosa due to its high moisturizing power. It also moisturizes the dry and stressed nasal mucosa helping to its healing. It is recommended as additional therapy in the rhinitis treatment.

Thanks to the incorporation of **xanthan gum** to the formula as a film forming agent, the product forms a protective film over the mucosa helping restore the natural barrier of the mucous membrane.

Additionally, includes **hyaluronic acid** and **dexpanthenol** that thanks to its cosmetic moisturizer properties, making it ideal for the prevention and treatment of nasal mucosa dryness.

Some studies shown the perception of nasal moisturisation was significantly higher assessed by the patients receiving the hyaluronic acid plus dexpanthenol nasal spray as compared to patients receiving the hyaluronic acid and the isotonic saline nasal spray.



Medical Device Class IIa	
20 ml	Purified water, dexpanthenol, (0.9%) sodium chloride, potassium dihydrogen phosphate, dipotassium hydrogen phosphate, (0.3%) xanthan gum, sodium hyaluronate, EDTA disodium salt dehydrate, benzalkonium chloride and sodium hydroxide.
+1 years	
Shelf life	
	3 years

This unique formula with two powerful hydrants and a film forming agent, helps to heal nasal mucosa after aggressive nasal treatments or surgeries.

Thieme U, Müller K, Bergmann C, Bock B, Wurzer-Materna N, Shahab T, Zeman F, Eberhardt Y, Huppertz G, Koller M, Meiser P. Randomised trial on performance, safety and clinical benefit of hyaluronic acid, hyaluronic acid plus dexpanthenol and isotonic saline nasal sprays in patients suffering from dry nose symptoms. *Auris Nasus Larynx*. 2020 Jun;47(3):425-434. doi: 10.1016/j.anl.2020.01.008. Epub 2020 Feb 14. PMID: 32067777.

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