
THE TONSILS AND ADENOID SUPPORT TOOLKIT: NATURAL STRATEGIES TO BREATHE, SLEEP & GROW BETTER



Enlarged tonsils and adenoids can seriously impact your child's breathing, sleep, and behavior. This guide outlines nine natural strategies that may help reduce tonsil and adenoid size.



The Boring (But Necessary) Disclaimer:

Before we dive into all the juicy tips and airway-supporting strategies, we've got to get this part out of the way. It's not as fun as nasal breathing or sunshine ☀️, but it's important — so here goes:

The information provided in this guide is intended for educational and informational purposes only. It is not medical advice and should not be used as a substitute for professional diagnosis, treatment, or care from your pediatrician, ENT, or other qualified healthcare provider.

We're sharing research, clinical experience, and natural strategies that may support airway health, immune function, and overall well-being in children. While every effort has been made to ensure accuracy, we encourage you to do your own research, work with trusted professionals, and use your best judgment.

Accessing or reading this guide does not imply a professional relationship with Functional Face, its team, or contributors.

Any actions you take based on this content are totally your call — and should be made in collaboration with your child's healthcare provider. Always consult a qualified professional before starting any new supplement, therapy, or intervention.

How to Use This Guide:

I know how overwhelming it can feel when you're worried about your child's breathing or sleep — especially if you've been told you must jump straight to surgery or “let's just wait and see.”

This guide was created to give you practical, natural steps you can start right away, so you feel confident taking action instead of just watching and waiting or rushing a surgery.

Think of this as your toolbox: you'll read through the options, choose the ones that fit your child's needs, and track their progress so you can make informed decisions with your care team.

Here's the best way to work through it:

1. Learn the “why”

Start with the next section to understand the role of tonsils & adenoids and why enlargement matters.

2. Explore your options

Read each strategy — some will apply, others may not.

3. Pick your priorities

Address what matters most first (e.g., low vitamin D, allergies, mouth breathing).

4. Track everything

Use the included tracker to record changes in symptoms and overall well-being.

5. Prep for provider visits

Bring your tracker + provider notes pages to every appointment.

6. Use the tools

Find recommended products and resources on the Favorite Products resource page.

By the end, you'll have:

- ✓ A clear record of what you've tried
- ✓ Data to guide your child's care
- ✓ Confidence in your next steps..... Let's get started

Note: The first 2 pages contain foundational information included in our free guide to provide full context. Feel free to skip ahead if you've already read it.

Understanding the Role of Tonsils and Adenoids

Your child's airway is protected by several important immune structures — including four main types of lymphatic tissue: the palatine tonsils (what we usually call “tonsils”), adenoids (high in the throat behind the nose), lingual tonsils (at the base of the tongue), and sometimes the tubal tonsils (near the eustachian tubes). These tissues help trap bacteria, viruses, and allergens, acting as a defense system at the entrance to the airway to help keep you healthy.

Sometimes the very tissues meant to protect us can become a problem. Chronic infections, bacterial overgrowth, or inflammation from allergies and irritants can cause them — especially the tonsils and adenoids — to become enlarged. When that happens, they can obstruct airflow, leading to mouth breathing, restless sleep, snoring, fatigue, behavior issues, and even slowed growth. While they serve an immune function, when they grow too large or become chronically infected, they can lose their immunity protection and cause more harm than help.

Enlarged tonsils and adenoids aren't just a “normal” part of childhood — they are the leading physical cause of obstructive sleep apnea in children yet are frequently untreated.

Parents often hope or are told by well meaning, but uninformed providers, their child will simply “grow out of it”. This delay can come at a cost. The longer airway obstruction is left unaddressed, the greater the risk for lasting health impacts. Gentle, natural strategies may help reduce tissue size and improve breathing — especially for families hoping to avoid surgery. But if your child's symptoms don't improve within 6-8 weeks, it's time to take action.

Clear breathing and healthy sleep now protect your child's future.

Consequences of Inaction/Delayed Action:

Delaying action on enlarged, obstructive tonsils and adenoids can lead to:

- Poor sleep quality
Disrupted sleep affects growth, immunity, and behavior.
- Obstructive sleep apnea
Can cause long-term heart, brain, and metabolic problems.
- Behavioral and learning challenges
Sleep-deprived children may show hyperactivity, inattention, or mood swings.
- Frequent infections
Chronic inflammation can make kids more prone to illness.
- Facial growth and airway development issues
Mouth breathing and blocked airways may lead to long-term dental (bad bites and crooked teeth) and skeletal changes.



References:

- Sleep quality & disruptive effects; behavior and learning challenges
Trosman et al., 2017; Kim, 2024; Goldbart et al., 2007
- Growth issues & immunity; frequent infections; facial development
Thomas, 2022; Goldbart et al., 2007
- Cardiovascular, metabolic, and long-term health risks
Blechner & Feferbaum, 2016; Kim, 2024; Thomas, 2022

Start Here: Your Personalized Natural Strategies Action Plan

Now that you understand what's at stake, it's time to take action. The next few pages will walk you through simple, research-backed strategies designed to support healthy tonsils and adenoids—naturally.

You'll find clear explanations for each approach, followed by a symptom tracker to monitor changes over time. Use the included provider notes to guide conversations with your care team, and keep the bonus resources handy to stay consistent and confident in your next steps.

You don't need to do everything at once—just begin. One small shift at a time can lead to meaningful change.

#1 Optimize Vitamin D Levels

Vitamin D is more than just the 'sunshine vitamin.' It plays a critical role in immune regulation, airway health, brain development, and sleep — all of which are vital for children with enlarged tonsils and adenoids.

Why It Matters:

Children with low vitamin D levels are more likely to have enlarged tonsils and adenoids, contributing to airway obstruction and sleep-disordered breathing. Low vitamin D levels are also linked to increased inflammation, poor immune function, behavioral issues, and fatigue.

Ideal Levels & U.S. Trends:

- In the U.S., many providers consider 30 ng/mL sufficient, but functional and integrative practitioners often recommend maintaining levels between 60–100 ng/mL for optimal immune and airway health.
- Countries like Japan and Canada also suggest higher target ranges than the U.S. standard.
- A significant number of U.S. children are estimated to be below ideal levels, especially those with limited outdoor play or darker skin pigmentation (which requires more sun to synthesize D3).

Best Sources of Vitamin D:

- **Sunlight:** The body makes vitamin D through sun exposure. Aim for 15–30 minutes of mid-morning to midday sun exposure (without sunscreen) on arms and legs, several times per week.
- **Food:** Cod liver oil, salmon, mackerel, egg yolks, liver, and fortified products.
- **Supplements:** Look for D3 with K2 for proper calcium utilization. Always take with a high-fat food like yogurt or avocado for better absorption.

Sunlight, Gut Health & Sleep:

- Morning sun exposure helps reset the circadian rhythm, which supports more restful sleep and melatonin production.
- Vitamin D supports the gut lining and microbiome — both of which are linked to immune resilience and inflammation levels.

Research also shows a link between vitamin D deficiency and pediatric sleep apnea severity.

Reminder:

- Ask your provider for a 25(OH)D blood test.
- Recheck levels after supplementing for 8–12 weeks.

#2 Correct Iron Deficiencies

Iron plays a critical role in your child's brain development, oxygen transport, and immune function. But it also has a surprising link to airway health. Studies show that low iron stores are associated with restless sleep, fatigue, mouth breathing, and—in some cases—enlarged tonsils or sleep-disordered breathing. This sheet walks you through what to watch for, how to get the right testing, and natural ways to support your child's iron levels.

How Iron Deficiencies Impact Tonsils & Sleep

Low iron can affect muscle tone, immunity, and oxygen delivery—contributing to poor sleep and enlarged lymphatic tissue. Children with iron deficiency may experience more frequent infections and inflammation in the tonsils or adenoids, increasing airway obstruction risk.

Signs of Iron Deficiency in Children

- Restless sleep or frequent nighttime waking
- Daytime fatigue, low energy, or frequent yawning
- Pale skin or dark under-eye circles (venous pooling)
- Cold hands and feet
- Irritability or emotional sensitivity
- Craving non-food items (ice, dirt—called pica)
- Short attention span or difficulty concentrating
- Mouth breathing or snoring
- Enlarged tonsils or adenoids

The Right Labs to Ask For

If you suspect your child might be low in iron, ask your healthcare provider for these labs—not just a standard CBC:

- Ferritin (ideal levels are often 50–100+ ng/mL for optimal health, even if your doctor says 10–20 is fine)
- Iron
- Total Iron-Binding Capacity (TIBC)
- Transferrin saturation
- C-Reactive Protein (to rule out inflammation that can falsely elevate ferritin)

Natural Food Sources of Iron

There are two forms of dietary iron: heme iron (from animal products) and non-heme iron (from plants). Heme iron is more easily absorbed.

- Grass-fed beef, lamb, liver
- Dark meat poultry
- Sardines or salmon with bones
- Cooked spinach, lentils, beans, tofu
- Pumpkin seeds, sunflower seeds, quinoa, molasses



Pro Tip: Pair iron-rich foods with vitamin C (like citrus, berries, bell peppers) to boost absorption!

#3 Tackle Allergies to Calm Inflammation and Keep Airways Clear

Allergies are one of the most overlooked contributors to chronic airway inflammation. They are especially important in children with enlarged tonsils or adenoids, as allergies can significantly worsen inflammation and tissue swelling.

How Allergies Affect the Airway

When a child has environmental or food allergies, their immune system becomes hypersensitive to triggers like dust mites, pollen, pet dander, or certain foods. This leads to persistent inflammation in the nasal passages, adenoids, and surrounding tissues — making it harder for them to breathe through the nose. This chronic nasal congestion can cause mouth breathing, poor sleep, behavioral issues, and even changes in facial growth and development.

Do Allergies Affect the Tonsils or Adenoids More?

Research suggests that allergies may have a stronger impact on the adenoids than the tonsils. Since adenoids are located high in the nasopharynx — where airborne allergens are filtered — they are often more directly inflamed by nasal allergens. This can lead to nasal obstruction and sleep-disordered breathing.

Should You Get Allergy Testing?

If your child has dark circles under their eye, frequent itchy or runny nose (clear), frequent nasal congestion, mouth breathing, or enlarged adenoids, allergy testing is an important next step. Even if you're trying natural strategies, knowing what your child is reacting to can help you make more targeted changes — like adjusting your diet, reducing specific exposures, or treating the root cause more effectively.

Common options include:

- Skin prick tests (most common and fast)
- Blood tests (less accurate for some allergens, but helpful if skin testing isn't possible)

Testing can identify common triggers like dust mites, pet dander, pollen, and mold — all of which may be inflaming your child's airway tissues.

Natural Allergy Support Strategies

In addition to testing and OTC medications , there are several natural ways to reduce allergen exposure:

- Use hypoallergenic, dust-mite-proof bedding
- Rinse (or wash) your child's hair after playing outside if they have outdoor allergies
- Keep windows closed during high pollen times
- Use an air purifier, especially where you sleep and regularly vacuum with a HEPA vacuum
- Try natural antihistamines like quercetin or nettles (with guidance from a healthcare provider)
- Support the immune system with proper nutrition, hydration, and nasal hygiene (like saline spray or nasal rinses)

What About Allergy Shots or Drops?

Many parents are hesitant about allergy shots — but here's the truth: they aren't just symptom suppressors. Allergy immunotherapy works with your child's immune system to reduce long-term sensitivity. Over time, this can calm inflammation and reduce swelling of tissues like the adenoids and turbinates.

Some children qualify for sublingual immunotherapy (drops under the tongue) — which is needle-free and easier to tolerate.

If your child's symptoms don't respond to lifestyle changes, immunotherapy is worth exploring as a long-term solution. It's not a quick fix, but it may help prevent surgery and reduce airway obstruction naturally over time.

#4 Clear the Plate: How Dairy, Gluten, and Sugar Could Be Fueling Inflammation

Many parents are surprised to learn that certain everyday foods can contribute to swelling in the tonsils and adenoids. While formal research connecting diet directly to tonsil size is still emerging, there is a growing body of evidence — and a lot of real-world experience — showing that these foods can increase inflammation, mucus production, and immune reactivity.

Three of the most common inflammation triggers are dairy, gluten, and added sugar. For some children, even a short break from these foods can mean fewer airway symptoms, better sleep, and improved energy.

Dairy

Dairy is one of the top foods parents are advised to trial removing when a child has chronic congestion or enlarged tonsils. Research shows that proteins in cow's milk can be harder for some children to digest, and in sensitive individuals they may promote mucus production and keep inflammation simmering in the upper airway.

What to try:

- Begin with a 2–4 week break from cow's milk, yogurt, ice cream, and most cheeses.
- Many parents notice the biggest changes when removing liquid dairy (like milk and yogurt) before harder cheeses. Some children react strongly to all forms, while others tolerate aged cheeses better.
- Goat's milk and sheep's milk are sometimes better tolerated, but for a true elimination trial, it's best to remove all dairy sources at first. You can test individual options later to see if they trigger symptoms.
- Some families report fewer issues with raw milk than with pasteurized milk, but raw dairy can still be inflammatory for some children — and it's safest to only reintroduce after your elimination trial is complete.

If you're concerned about calcium, some great non-dairy sources include fortified plant-based milks (almond, oat, coconut), leafy greens (collard greens, kale, bok choy), canned salmon or sardines with bones, white beans, almonds, and chia seeds. These foods can be rotated into meals and snacks to meet calcium needs during the trial.

Gluten

Gluten — found in wheat, barley, and rye — can provoke immune responses in some children, even if they do not have celiac disease. Research shows that gluten sensitivity can increase the body's inflammatory burden, which may worsen other issues like fatigue, skin rashes, or airway swelling.

What to try:

- A 4-6 week gluten-free trial.
- Use gluten-free grains like rice, quinoa, buckwheat, or certified gluten-free oats.
- Read labels closely — gluten can hide in sauces, seasonings, and packaged snacks.

Sugar

Added sugars can contribute to systemic inflammation, affect immune function, and disrupt sleep quality. High sugar intake can also promote bacterial growth and recurrent infections, which can keep tonsils irritated and enlarged.

What to try:

- Remove sweetened drinks, candies, desserts, and heavily processed snacks for at least 2 weeks.
- Offer naturally sweet foods like berries, apples, or grapes, and balance them with protein and healthy fats to keep blood sugar steady.



Note: An elimination diet doesn't have to be permanent unless your child has a confirmed allergy or sensitivity. The goal is to temporarily remove these foods, observe any changes, and use your tracker to document what you see. If symptoms improve, you can experiment with reintroducing foods one at a time to identify which ones cause problems.



#5 NAC: Clearing Mucus & Calming Tonsil and Adenoid Inflammation

N-acetylcysteine (NAC) is a powerful antioxidant and mucolytic (mucus-thinning compound) that has been used for decades in hospitals to support respiratory health. For children with swollen tonsils, adenoids, congestion, or mouth breathing, NAC can help calm inflammation and support airway drainage naturally.

Why It Matters

When mucus becomes thick and sticky, the tonsils and adenoids can stay chronically inflamed. NAC helps:

- Thin excessive mucus so the airway can drain properly
- Reduce oxidative stress and inflammation in lymphatic tissues
- Break down bacterial biofilm that contributes to recurring tonsillitis
- Support the immune system by boosting glutathione, the body's most important antioxidant

Research has shown that NAC may improve symptoms of nasal obstruction, snoring, and chronic adenoid inflammation — especially when used consistently for 8–12 weeks.

How It Works

NAC works by gently breaking apart the disulfide bonds that make mucus thick. This allows the mucus to drain more easily from the nose, sinuses, and adenoid tissue. At the same time, NAC increases levels of glutathione, which helps calm inflammatory pathways that keep tonsils and adenoids enlarged.

This “two-in-one” action makes NAC a uniquely helpful support for children experiencing:

- Chronic congestion
- Snoring or noisy nighttime breathing
- Recurrent tonsillitis
- “Adenoid face” or mouth-open posture
- Trouble transitioning to nasal breathing

How to Use It

Because NAC supports the immune system, mucus thickness, and inflammation, it is often used short-term as part of an airway-support plan, not necessarily as a forever supplement. NAC comes in many forms that may work well for your child. It's best to start on the low end and see how your child responds.

Forms:

- Powder (easy to mix into juice or applesauce; ideal for younger kids)
- Capsules or tablets (for children who can swallow pills)
- Effervescent tablets

Consistency matters more than the form — the best option is the one your child will take regularly.

Typical dosage ranges used in research:

- Young children: 300–600 mg once daily
- Older children & teens: 600–1200 mg daily
- Adults: 600–1800 mg daily



In the United States, NAC is available over the counter as a supplement.

In some countries, NAC is available by prescription only, especially in its mucus-thinning form. If you live outside the U.S., check local regulations.

Safety Notes

NAC is very well-tolerated for most children and has been used safely for decades.

Some may experience:

- Temporary increase in nasal drainage (a sign mucus is thinning)
- Mild sulfur smell
- Occasional stomach upset

Avoid NAC if your child is on nitroglycerin, unless cleared by their physician.

Parents of children with asthma should consult their provider before using NAC, as it can occasionally trigger coughing when mucus begins to move.

What to Watch For

As NAC begins to work, many families report:

- More open nasal breathing
- Quieter sleep
- Reduced snoring
- Less post-nasal drip
- Fewer “stuffy days”
- Improved daytime focus and energy

You can use the [symptom tracker](#) included in this toolkit to record weekly changes.

Action Steps

1. Choose a form your child will take consistently (powder is easiest for younger kids).
2. Ask your child’s provider about an appropriate dosage for their age and weight.
3. Use NAC once daily for at least 8–12 weeks before assessing results.
4. Reassess snoring, congestion, and breathing habits using the toolkit’s tracking sheets.



#6 Breathe Right to Thrive: Why Nasal Breathing, Myofunctional Therapy & Clean Noses Matter

Nasal breathing is how the body was designed to work—filtering, warming, and humidifying air, supporting oxygen delivery, and protecting against germs. When allergies or inflammation block this natural pathway, kids begin mouth breathing, which can worsen tonsil and adenoid swelling. Getting back to nasal breathing isn't just helpful—it's foundational.

Why Nasal Breathing Makes a Difference

- Nasal passages produce nitric oxide—a powerful antimicrobial that also helps the body absorb oxygen more efficiently.
- When kids breathe through the nose, their tongue naturally rests on the roof of the mouth, guiding proper palate and jaw development.
- Mouth breathing by-passes filtration, exposing tissues directly to irritants and allergens—leading to inflammation and more swelling.
- Habitual mouth breathing can reinforce airway obstruction, creating a cycle that's hard to break.

The Inflammation Connection

Reducing airway inflammation and treating allergies are essential first steps toward restoring nasal breathing. Swelling from allergies, chronic illness, or other irritants can make it physically hard for a child to keep their lips closed. Addressing these root causes (see earlier sections on diet and allergy management) helps open the airway so nasal breathing becomes possible again.

Daily Nasal Hygiene: Toothbrushing for the Nose

The nose is a major entry point for viruses, bacteria, and allergens — yet most families don't think to clean it regularly. Just as we wash our hands and brush our teeth, daily nasal hygiene helps keep the passages clear and reduces the chances of infection and inflammation.

Fun fact: Simply blowing the nose can reduce nasal airway resistance by up to 52%.

Use your [Clear Nose, Clear Nights™](#) Nasal Hygiene Guide included in this toolkit for clear instruction and tips to help your child incorporate nasal hygiene as part of your daily routine.

The Role of Orofacial Myofunctional Therapy

Myofunctional therapy (aka OMT) retrains oral and facial muscles—teaching the tongue, lips, and throat muscles to support proper breathing and posture. It's especially powerful when paired with inflammation reduction (think diet changes, allergy care), because it gives the body a chance to use the nasal pathway again.

What research shows:

- Kids who do OMT after tonsil/adenoid surgery are less likely to see sleep-breathing issues return over time
- In studies combining OMT with orthodontic support, children showed improvements in airway strength, sleep quality, and jaw alignment, as well as lower Apnea-Hypopnea Index (a measure of sleep-disordered breathing)

Restoring nasal breathing — especially when paired with inflammation reduction, daily nasal hygiene, and targeted therapy — can help your child breathe easier, sleep more soundly, and thrive during the day.



#7 Making Space to Breathe: How Palatal Expansion Supports Airway Health

Palatal expansion isn't just about creating a straighter smile — it can actually open the door to better breathing, healthier sleep, and improved overall growth. Traditionally used to correct crossbites or crowded teeth, expansion is now recognized, particularly by healthcare providers focused on airway health, as a powerful tool for children with mouth breathing, snoring, restless sleep, or other signs of airway restriction.

How It Works

An orthodontist uses a palatal expander to gently widen the upper jaw (maxilla) over several weeks. This guided widening separates the mid-palatal suture, creating more space in the dental arch and increasing the nasal airway volume. When the palate is narrow or high-arched, there's often less room for the tongue to rest in its ideal position and less space for air to flow through the nasal passages. Expansion addresses both issues at once — improving tongue space, nasal airflow, and the overall shape of the airway.



One example of a type of expander that may be used.

Why It Matters for Tonsils & Adenoids

Research has shown that palatal expansion can lead to measurable improvements in airway size and function — even in children with a history of enlarged tonsils and adenoids. In some cases, improving nasal airflow through expansion has been associated with a reduction in tonsillar and adenoidal tissue size, likely because the airway is less chronically irritated and inflamed.

Expansion doesn't just help with breathing — it can also impact other health concerns tied to airway obstruction. For example, children with sleep-disordered breathing sometimes struggle with bedwetting (nocturnal enuresis) due to disrupted sleep patterns, changes in bladder hormone regulation, and increased nighttime arousals.

Several studies have found that when the airway is improved — whether through expansion, tonsil/adenoid management, or a combination of treatments — many children experience significant improvements or complete resolution of bedwetting.

Some long-term follow-ups have found that expansion not only improved nighttime breathing and reduced apnea events, but also helped maintain those benefits for years after treatment.

Signs Your Child May Benefit

- Narrow or high-arched palate
- Mouth breathing or snoring
- Tongue crowding or low tongue posture
- Crossbite or crowded teeth
- History of enlarged tonsils/adenoids or chronic nasal congestion

Finding the Right Provider

Not all orthodontists approach expansion with airway health in mind. An airway-aware provider will look beyond just the teeth, evaluating facial growth patterns, tongue posture, and breathing habits. Even if your child doesn't meet traditional criteria for expansion, it's worth seeking a consult if they have signs of airway dysfunction.

One resource for finding an airway focused orthodontists is here:

<https://www.airwaycircle.com/directory>

The Goal

The ultimate aim of palatal expansion is to create a wide, well-developed roof of the mouth that allows the tongue to rest naturally against the roof of the mouth. This supports better nasal breathing, healthier swallowing patterns, and optimal facial growth — setting the stage for long-term airway health.

What expansion can do:

- Increase nasal airway volume
- Reduce airway resistance
- Support healthy tongue posture
- Improve oxygen saturation during sleep
- In some cases, reduce tonsil /adenoid size
- Help resolve bedwetting linked to sleep-disordered breathing

#8 Homeopathy for Happier Airways: Supporting Tonsil & Adenoid Health

Homeopathy is a system of medicine that uses highly diluted natural substances to stimulate the body's own healing response. It's based on the concept that "like cures like" — meaning a substance that could cause certain symptoms in a healthy person may help relieve those same symptoms when prepared in a specialized, highly diluted form.

While it's sometimes met with skepticism in conventional medical circles, homeopathy is widely used in integrative and holistic healthcare settings across the world. Many families choose it as a gentle, non-invasive option to support their child's overall health and immune function.

How Homeopathy May Help

When it comes to enlarged tonsils and adenoids, homeopathic remedies are sometimes chosen to:

- Reduce chronic inflammation in the throat and nasal passages
- Support the immune system in fighting recurring infections
- Promote healthy lymphatic drainage, which can ease swelling in tonsils or adenoids

Clinical observations and practice reports have noted that children receiving individualized homeopathic care for enlarged adenoids often experience improvements in airway symptoms, sleep quality, and overall wellness. Some cases have even shown a reduction in adenoid size when remedies are well matched to the child's unique symptoms.

Common Homeopathic Remedies

Some commonly used remedies for tonsils and adenoids include:

- Baryta carbonica – often used for chronic tonsillitis and swollen glands
- Calcarea carbonica – frequently used for children with enlarged tonsils who are prone to infections
- Belladonna – used for acute inflammation with fever
- Hepar sulphuris – for abscessed tonsils or painful swallowing
- Lycopodium – used when there is snoring or obstructed breathing during sleep



Consult a Homeopathic Provider

While over-the-counter remedies are available, working with a qualified homeopathic practitioner ensures a personalized approach based on your child's specific symptoms and health history. Homeopathy is highly individualized, and proper remedy selection is essential for best results.

Note: Homeopathy should not be used as a substitute for medical evaluation in cases of severe or persistent breathing obstruction. Always consult your child's healthcare provider to assess the airway and determine the appropriate course of action.

#9 Red Light Therapy for Tonsils & Adenoids: Shining a Light on Healing

Red light therapy — sometimes called low-level laser therapy (LLLT) or photobiomodulation — is a gentle, non-invasive treatment that uses specific wavelengths of light to support tissue healing and reduce inflammation.

Unlike surgical lasers that cut or remove tissue, red light therapy uses low-intensity light (usually in the red or near-infrared spectrum) to stimulate cells, improve circulation, and encourage the body's natural repair processes.

How It Works

When red or near-infrared light is applied to the skin, it penetrates into the underlying tissues, where it can:

- Stimulate mitochondria (the “powerhouses” of cells) to produce more energy (ATP)
- Improve blood flow and oxygen delivery
- Reduce inflammation and oxidative stress
- Support immune system function in targeted areas

Why It Matters for Tonsils & Adenoids

In cases of chronic enlargement, tonsils and adenoids are often in a constant state of inflammation. This can make them more sensitive to allergens, infections, and irritants — keeping them swollen and obstructive.

Early research suggests that targeted low-level laser therapy to the tonsil and adenoid area may help:

- Reduce tissue inflammation
- Improve lymphatic drainage
- Ease discomfort and congestion
- Potentially shrink hypertrophic (enlarged) tissue over time

Some studies have reported measurable decreases in tonsil and adenoid size, improved breathing, and better sleep quality in children after a series of red light therapy sessions. While more high-quality research is needed, these findings are promising for families looking for gentle, non-surgical options.

At-Home Red Light Therapy Options

While red light therapy is often provided by functional medicine practitioners, chiropractors, or other healthcare providers, there are also many FDA-cleared red light panels, handheld devices, and targeted wands available for purchase online or in stores. These at-home options are designed for personal use, typically with a lower power output for safety, and can be used daily or several times per week by following the manufacturer’s guidelines. They can be a more affordable long-term option and allow for consistent use without the need for extra appointments.



Safety & Best Practices

Red light therapy is considered a very safe treatment option when used as directed, with few reported side effects in either clinical or at-home settings. Still, it's important to follow the device's instructions for distance, duration, and frequency. Protect the eyes — both your child's and your own — with appropriate goggles if the light is used near the face. Avoid shining the light over areas with open wounds, active infections, or known cancers. And most importantly, choose devices from reputable companies with documented safety testing — you can check out some of our recommendations on the Favorite Products page in this guide.

Pro Tip: You can also give your child a natural dose of red and near-infrared light by spending time outside during sunrise and sunset. These times of day have higher levels of red light in the spectrum, which may support circadian rhythm and overall wellness — no device required.

Taking It a Step Further

Now that you've seen eight proven strategies to improve breathing, support healthy airway development, and reduce tonsil and adenoid inflammation, it's worth considering a few additional supports that can work alongside them.

We've already talked about two of the most common nutrient deficiencies that impact airway health — vitamin D and iron — but there are other nutrients and natural supports that may further strengthen your child's immune system, reduce inflammation, and promote long-term wellness.

On the next page, we'll explore a few of these options, including key minerals, targeted probiotics, and antioxidants that can help protect and heal airway tissues from the inside out.

Extra Support: Nutrients & Supplements for Healthy Tonsils & Adenoids

Zinc & Immune Balance

Low zinc levels — in either the blood or tonsil tissue — have been observed in children with recurrent tonsillitis and enlarged tonsils. When zinc is lacking, the immune system can become less effective, inflammation tends to linger, and lymphoid tissues like the tonsils and adenoids may remain swollen.

Ensuring your child has adequate zinc supports healthy immune cell function, helps regulate allergic responses, and encourages proper tissue repair. Children who are low in zinc may have trouble sleeping, feel fatigued, get sick more often, and experience ongoing tonsil inflammation.

Suggested action: Talk to your provider about testing serum zinc and considering supplementation if levels are low. Encourage zinc-rich foods such as meat, legumes, and pumpkin seeds, and pair them with vitamin C-rich foods to boost absorption.

Probiotic & Oral Microbiome Support

The health of the oral and throat microbiome plays a surprisingly important role in airway health. Certain oral probiotic lozenges — including those containing *Lactobacillus helveticus* MIMLh5 or *Streptococcus salivarius* ENT-K12 — have been linked to fewer upper respiratory tract infections and less tonsil inflammation in children.

Some studies have found that these probiotics can reduce the frequency of throat and tonsil infections, cut down the need for antibiotics, and improve overall clinical symptoms without notable side effects. Other research has shown that beneficial bacteria like *Lactobacillus rhamnosus* GG can actually colonize tonsil tissue, potentially improving immune balance and resilience over time.

.

Other Nutrients & Antioxidants

Nutrients like magnesium, vitamin C, vitamin E, and plant-based antioxidants such as quercetin can help reduce inflammation and protect airway tissues from oxidative stress. Higher levels of oxidative stress have been associated with pediatric sleep-disordered breathing, and antioxidant support may help restore balance

Summary for Parents

- Adequate zinc levels can help resolve stubborn tonsil inflammation and support better sleep.
- Child-specific probiotic lozenges may reduce infection frequency and boost immune defenses in the throat and airway.
- Antioxidants and nutrients can calm inflammation, lower oxidative stress, and support long-term airway health.



Where We're Aiming: Healthy Breathing & Sleep

While our initial aim may be to reduce the size of your child's tonsils and adenoids, the real goal is bigger than that — we want your child to breathe well and sleep deeply, so their body can rest, grow, and repair.

It's important to remember that tonsil and adenoid size alone doesn't always determine whether a child sleeps and breathes well. Some children with larger tissues have no breathing issues, while others with smaller tissues still struggle. That's why we measure success by healthy airway function — day and night — not just by size.

Signs of Healthy Nighttime Breathing:

Most parents don't realize what healthy breathing during sleep actually looks like. Recognizing these signs helps you know if your child is truly getting restorative rest:

- ✓ Mouth stays closed through the night (no mouth breathing)
- ✓ Lips are gently sealed without strain
- ✓ Breathing is quiet and calm — no snoring, gasping, or heavy breathing
- ✓ Sleeps peacefully without frequent waking
- ✓ No grinding teeth, tossing and turning, or bedwetting
- ✓ Wakes up rested and in a good mood
- ✓ No dark circles, puffy eyes, or morning grogginess
- ✓ Age-appropriate growth, focus, and behavior

Daytime Breathing Matters Too

Good breathing during the day sets the stage for healthy breathing at night. Look for:

- ✓ Lips together, tongue resting on the roof of the mouth
- ✓ Silent, steady nasal breathing (no audible sniffing or sighing)
- ✓ Posture that allows the head and neck to stay upright, not forward or tilted
- ✓ No frequent yawning, sighing, or breath-holding during tasks

If daytime breathing is poor, nighttime breathing almost always suffers — so address both.

How Much Sleep Does Your Child Need?

(National Sleep Foundation recommendations)

- Ages 1–2 years: 11–14 hours (including naps)
- Ages 3–5 years: 10–13 hours
- Ages 6–13 years: 9–11 hours
- Ages 14–17 years: 8–10 hours

Moving Forward

Now that you've learned eight proven strategies for supporting healthy tonsils & adenoids and what our goals are for healthy breathing and sleep, it's time to put them into action.

In the next section, you'll find:

- [The Better Breathing and Sleep Action Plan](#) — track your child's progress over 6–8 weeks, noting which strategies you've tried, changes in symptoms, and what's working best.
- [The Clear Nose, Clear Nights™ Guide](#) — step-by-step nasal hygiene routine to keep airways clear and breathing strong day and night.
- [The Confident Conversations Kit™](#) — prepare for appointments, ask the right questions, and stay organized with provider-specific prep sheets and note pages.
- [Our Favorite Products](#) — hand-picked tools and resources for better breathing and sleep, so you can skip the guesswork and start with proven options.

Start by picking one or two natural strategies to focus on, track your child's progress, and adjust as needed. Small, consistent changes can make a big difference over time.

READY....SET....LET'S GO!

Clear Nose, Clear Nights Nasal Hygiene Guide™

Simple, effective nasal care routines to support healthy breathing
and deep sleep..



Clear Nose, Clear Nights

A step-by-step guide to keeping your child's nasal passages open and healthy for easier breathing and better sleep.

Just like we brush our teeth and wash our hands, our noses need daily care too!

Your nose has a special air filter — it catches dirt, dust, germs, and allergens before they can get into your lungs. But if it gets dirty and clogged, it can't work as well, and breathing (especially during sleep) can get harder.

Why it's important:

- A clean nose helps you breathe better during the day and at night.
- It keeps the “air filter” in your body working at its best.
- People who regularly and easily breathe through their nose are healthier

Your Daily Nose-Cleaning Routine:

Morning & Evening

1. Blow your nose – gently, into a tissue, until both sides feel clear.
2. Use a saline spray or rinse – this helps wash away tiny particles and keep your nose moist and happy.
3. Blow again – to clear out anything the spray loosened.

During the day

- Blow your nose anytime it feels stuffy.
- After playing outside, especially in dusty or pollen-heavy areas, use your spray or rinse again.

Parent Pro Tips for Kids



- Make it part of the bedtime routine — Pair it with brushing teeth or reading a story.
- Let your child “spray” a stuffed animal's nose first to model the process.
- Try warming the bottle slightly in your hands first if your child is sensitive to cold sprays.
- Use a simple tracker or sticker chart to reward consistency.
- Aim to do nasal hygiene about 30 minutes before bed for best results.



Clear Nose, Clear Nights

How to Use Nasal Spray Properly (Step-by-Step)

What to Do

1. Blow the nose gently first
2. Shake the spray bottle if instructed
3. Tilt the head slightly forward
4. Insert nozzle into nostril, aiming outward toward the ear, not straight up the septum
5. Spray once or twice per nostril (as directed) while breathing in gently through the nose
6. Avoid sniffing hard after spraying

Why It's Important

1. Clears out mucus and improves spray effectiveness
2. Ensures even distribution of ingredients
3. Prevents spray from dripping down the throat
4. This targets the spray to the sidewall of the nasal passage
5. Allows the mist to reach deeper without forcing it up
6. Prevents the medicine from draining into the throat instead of staying in the nose



Note: For more severe or stubborn congestion, your provider may recommend a saline nasal rinse or sinus flush. These can be highly effective for clearing deeper nasal passages but should be done with proper guidance to ensure safety and comfort. See our Favorite Products page for child-friendly options.

The Better Breathing & Sleep Action Plan™

Your all-in-one tool for mapping progress, spotting patterns,
and guiding your child toward easier breathing and better sleep.



The Better Breathing & Sleep Action Plan™

Print out this and the next 4 pages and use them to monitor progress as you try the natural strategies each week. If mouth breathing, snoring, restless sleep, or other symptoms persist, please consult a medical provider.

Early action protects your child's brain, body, and long-term well-being.

Signs and Symptoms to Watch For:

Put a check mark in the boxes that match what your child is currently experiencing. Monitor these symptoms over the coming 6 weeks.

- ☐ Snoring
- ☐ Sleeping in odd positions (neck tilted back/ head needing propped up)
- ☐ Mouth breathing
- ☐ Gasping or pauses in breathing, choking or coughing during sleep
- ☐ Teeth grinding during sleep
- ☐ Restless sleep
- ☐ Nighttime waking
- ☐ Nightmares/ terrors
- ☐ Daytime fatigue or low energy
- ☐ Bedwetting
- ☐ Difficult to wake in the morning
- ☐ Morning headaches
- ☐ Dry mouth upon waking/ needing a drink at bedside/first thing in the morning
- ☐ Drool on pillow
- ☐ Poor appetite or picky eating
- ☐ Venous pooling (dark circles under eyes)
- ☐ Chronically chapped lips
- ☐ Frequent sore throats
- ☐ "Tired but wired" behavior
- ☐ Irritability or hyperactivity



Week 1

✓ What strategies did you try this week?

-
-
-
-

🧠 Did you notice any improvements or challenges this week?

Symptoms noticed this week:

Week 2

✓ What strategies did you try this week?

-
-
-
-

🧠 Did you notice any improvements or challenges this week?

Symptoms noticed this week:



Week 3

✓ What strategies did you try this week?

-
-
-
-



Did you notice any improvements or challenges this week?

Symptoms noticed this week:

Week 4

✓ What strategies did you try this week?

-
-
-
-



Did you notice any improvements or challenges this week?

Symptoms noticed this week:



Week 5

✓ What strategies did you try this week?

-
-
-
-

🧠 Did you notice any improvements or challenges this week?

Symptoms noticed this week:

Week 6

✓ What strategies did you try this week?

-
-
-
-

🧠 Did you notice any improvements or challenges this week?

Symptoms noticed this week:



Week 7

✓ What strategies did you try this week?

-
-
-
-



Did you notice any improvements or challenges this week?

Symptoms noticed this week:

Week 8

✓ What strategies did you try this week?

-
-
-
-



Did you notice any improvements or challenges this week?

Symptoms noticed this week:



Final Reflection

What got better over the last 6-8 weeks?

What symptoms or concerns are still present?

Next step:

- ☐ Continue current strategies
- ☐ Book a myofunctional therapy evaluation
- ☐ Schedule ENT / airway-focused provider visit
- ☐ Other: _____

What to Do Next — (Whether Symptoms Improve or Persist)

If your child's breathing **has improved** after trying the strategies in this guide — that's **fantastic!** Consistent nasal breathing and restful sleep are powerful foundations for growth, learning, and development.

But even if symptoms have resolved, it's important to understand this: Lingering oral dysfunction or dysfunctional breathing patterns can still remain — and may lead to relapse or other problems if left unaddressed.

Chronic mouth breathing, enlarged tonsils or adenoids, and disrupted sleep can affect facial growth, tongue posture, chewing, and swallowing. These patterns don't always self-correct, even after breathing improves. That's why a **myofunctional therapy evaluation** is highly recommended whether your child is currently experiencing symptoms or has in the past.

If your child's symptoms **have not improved after 6-8 weeks of trying these strategies** — or if they continue to snore, mouth breathe, or struggle with sleep — it's **time to take further action**. Bring your tracker and any notes to a trusted ENT or airway-aware provider.

Along the way, you'll likely connect with providers — from ENTs to myofunctional therapists — who can play an important role in your child's airway health journey. The Confident Conversations kit is here to guide you so you can walk into every appointment feeling prepared, calm, and empowered to get the answers your child needs.

The Confident Conversations Kit™

A printable kit to help you advocate for your child's airway health
— from the ENT to the Orthodontist



Provider Prep Cheat Sheet

Your quick guide to getting the most out of every specialist visit

When you're advocating for your child's airway health, preparation is everything. Use this cheat sheet before every appointment — whether it's with an ENT, orthodontist, allergist, myofunctional therapist, or other specialist — so you leave with answers, clarity, and a plan.

Before the Appointment

- ✓ **Gather records:** Previous sleep study reports, allergy testing, imaging, growth charts, and any provider notes.
- ✓ **Print your notes pages:** Bring your ENT, orthodontist, allergist, or myofunctional therapist sheet from this kit.
- ✓ **Know your goal:** Be clear on the main outcome you want from this visit (e.g., “rule out need for surgery,” “identify allergies,” “discuss airway expansion options”).
- ✓ **Track recent patterns:** Note changes in symptoms using your Breathe & Sleep Success or tracker pages.
- ✓ **Bring photos or video:** Short clips of your child sleeping, breathing, or showing symptoms can be more persuasive than a description.

During the Appointment

- ✓ **Lead with your main concern:** Start by briefly stating what you've observed and what you hope to learn.
- ✓ **Ask open-ended questions:** Instead of “Is this normal?” try “What could be causing this?”
- ✓ **Take notes:** Use your specialist-specific notes page to capture details.
- ✓ **Clarify next steps:** Before leaving, restate the plan in your own words to ensure understanding.

After the Appointment

- ✓ **Review your notes:** Highlight action items and deadlines.
- ✓ **Schedule follow-ups:** Book the next visit or set reminders to check progress.
- ✓ **Share updates with your care team:** Make sure all relevant providers have new test results or treatment changes.



Pro Tip:

If you feel rushed, politely say, “Before we wrap up, I have two more important questions.” This signals you're engaged and helps ensure your priorities are addressed.

Preparing for your visit with the ENT (Ear, Nose, & Throat Dr.)



While every provider plays a role in supporting your child's airway health, the ENT is the one who evaluates whether surgery to remove tonsils or adenoids is appropriate. Being prepared for this visit is essential. The questions in this section will help you understand the ENT's perspective, explore all options, and feel confident about the path forward — whether that includes surgery, continued monitoring, or further conservative care.

It's important to know that not all ENTs are trained in sleep-disordered breathing from a developmental, functional, and airway-focused lens. Being prepared can help you get the best care for your child. Bringing a few short videos of your child sleeping, especially if you've noticed snoring, gasping, pauses in breathing, or restless sleep, can be very helpful in their assessment and can be more telling than what's seen in a quick in-office exam.



Questions to Ask:

- Based on your evaluation, how enlarged are my child's tonsils and/or adenoids?
- Are they obstructing airflow during the day, at night, or both?
- Do you see signs of chronic inflammation or infection?
- What are the non-surgical options we can try first?
- If surgery is recommended, what criteria are you using to make that decision?
- How do you assess the risk vs. benefit for a child my child's age?
- What outcomes should we expect if we remove the tonsils and/or adenoids?
- How will you assess post-surgery breathing and sleep quality?
- Would you consider ordering a sleep study if symptoms like snoring or mouth breathing persist?
- Do you assess for nasal obstruction — including the turbinates — or only look at tonsils and adenoids?
- Do you recommend or offer allergy testing to rule out contributing inflammation or congestion?
- What are the potential consequences of waiting, if my child still shows airway-related symptoms?
- What if symptoms come back — like mouth breathing or snoring — after surgery?

Preparing For Your Visits With Other Specialists:

In addition to your ENT, these providers can play an important role in supporting your child's breathing, airway health, and overall wellness. Consider asking the following questions at your visit.

The Orthodontist or Airway Dentist

- Is my child's jaw size and shape giving the tongue enough room to rest properly?
- Do you see any signs of a narrow palate or crowding that could affect the airway?
- How do you evaluate airway health in your orthodontic assessments?
- Would orthodontic expansion benefit my child's breathing and facial growth?
- If expansion is recommended, what method and timeline do you use for children my child's age?
- Do you work with other providers (like ENTs or myofunctional therapists) to address root causes of crowding or bite problems?

The Allergist

- What allergy testing do you recommend for my child's symptoms?
- Could allergies be contributing to enlarged tonsils or adenoids?
- What are the best non-sedating, child-friendly allergy treatments?
- Are there environmental changes we should make at home?
- How will we track whether allergy treatment is improving my child's breathing or sleep?

Orofacial Myofunctional Therapist

- Based on what you're seeing, is there anything blocking my child's airway or making it harder for them to breathe well at night?
- How do you measure progress over time, and what signs should I watch for at home?
- Do you see any tongue posture, swallowing, or breathing patterns that could be affecting sleep or airway health?
- How can I support my child's therapy goals at home between visits?
- When do you recommend involving an ENT, orthodontist, or allergist?

ENT / Ear, Nose & Throat Specialist Appointment Notes

What have we already tried?

Questions I want to ask:

Notes from the appointment:

Next steps or referral plans:

What I'm feeling after this Visit:

Orthodontist or Airway Dentist Appointment Notes

What have we already tried?

Questions I want to ask:

Notes from the appointment:

Next steps or referral plans:

What I'm feeling after this Visit:

Allergist Appointment Notes

What have we already tried?

Questions I want to ask:

Notes from the appointment:

Next steps or referral plans:

What I'm feeling after this Visit:

Orofacial Myofunctional Therapist Appointment Notes

What have we already tried?

Questions I want to ask:

Notes from the appointment:

Next steps or referral plans:

What I'm feeling after this Visit:

Other Specialists Appointment Notes

What have we already tried?

Questions I want to ask:

Notes from the appointment:

Next steps or referral plans:

What I'm feeling after this Visit:

Our Favorite Products for Better Breathing and Sleep

Choosing the right tools can be overwhelming. We've simplified the process by gathering some of our most trusted products for airway health, allergy relief, and better sleep—all in one place. These are items we regularly use and recommend to our clients, chosen for their quality, effectiveness, and ease of use. Explore our curated list and find the right solutions for your family.

Visit our full Amazon Store here:
amazon.com/shop/functionalface

Categories:

1. [Supplements for Airway & Immune Health](#)
2. [Nasal Hygiene & Congestion Support](#)
3. [Airway Wellness Support Devices](#)
4. [Better Sleep Essentials](#)



Intake Nasal Dilators for ages (Ages 8+) are a simple, non-invasive way to help kids breathe more easily through their nose. They gently lift and open the nasal passages from the outside, making it easier for air to flow in — especially helpful at night when congestion or narrow nasal passages make breathing harder.

Get 15% off Intake Nasal Dilator Starter Kit here:
<https://www.intakebreathing.com/FUNCTIONALFACE15>

*Links are affiliate links. We only recommend products we love, use, & trust.

Closing & Next Steps

You've taken an important step toward helping your child breathe, sleep, and grow better. These strategies can make a big difference — but you don't have to navigate this journey alone. With expert guidance, you can be sure your child is making the most progress possible and addressing every piece of the airway health puzzle.

Work With Us

Schedule a Myofunctional Therapy Evaluation with Functional Face™

 Visit: <https://www.functionalfaceomt.com/>

 Call/Text: 812-549-0183

 Virtual sessions available

Not in Our Area?

We can still help! If we can't work together directly or online, here are trusted directories to help you find a qualified provider near you:

- Airway Circle Directory – airwaycircle.com
- MyofunctionalTherapist.com – [worldwide listing of therapists](#)
- IAOM Directory – iaom.com/find-a-professional

We'd love to hear from you!

Has this guide helped your child breathe, sleep, and feel better? Click here to share your results — it only takes 2 minutes!

[Share your experience with the Toolkit here](#)

References

The information in this guide is based on current research, clinical experience, and trusted sources. Selected references are listed on the next few pages for your further reading.

References:

Savastio S et al. (2017). Vitamin D and tonsil hypertrophy in children with obstructive sleep apnea syndrome. Clin Nutr ESPEN.

Kheirandish-Gozal L, et al. (2014). Vitamin D deficiency and pediatric obstructive sleep apnea. J Clin Sleep Med.

- Bahrami A, et al. (2020). The interplay between vitamin D and gut microbiota in children: Implications for health and disease. Nutr Res Rev.

Ersu R et al. found that iron deficiency was common in children with obstructive sleep apnea and associated with lower oxygen saturation. [Ersu R, et al. Chest. 2004;125(1):209–217. doi:10.1378/chest.125.1.209]

Kheirandish-Gozal L, et al. showed that supplemental iron improved sleep quality and decreased periodic limb movements in children with low ferritin. [Sleep Med. 2008;9(4):432–438. doi:10.1016/j.sleep.2007.06.007]

De Noni, I., Cattaneo, S., Ghiselli, L., Masotti, F., Pellegrino, L., Resmini, P., ... & Ferranti, P. (2019). Milk proteins and human health: A perspective on the evolving science. Nutrients, 11(9), 2039. <https://doi.org/10.3390/nu11092039>

Catassi, C., Elli, L., Bonaz, B., Bouma, G., Carroccio, A., Castillejo, G., ... & Fasano, A. (2022). Diagnosis of non-celiac gluten sensitivity (NCGS): The Salerno experts' criteria 2021. Frontiers in Pediatrics, 10, 925781. <https://doi.org/10.3389/fped.2022.925781>

Khan, T. A., & Sievenpiper, J. L. (2020). Effects of dietary sugar on biomarkers of inflammation: A systematic review and meta-analysis of intervention studies. Nutrients, 12(1), 293. <https://doi.org/10.3390/nu12010293>

Camacho, M., Certal, V., Abdullatif, J., Zaghi, S., Ruoff, C. M., Capasso, R., & Kushida, C. A. (2015). Myofunctional therapy to treat obstructive sleep apnea: A systematic review and meta-analysis. Sleep, 38(5), 669–675. <https://doi.org/10.5665/sleep.4652>

Villa, M. P., Rizzoli, A., Miano, S., & Malagola, C. (2014). Efficacy of myofunctional therapy in children with enlarged tonsils and adenoids: A pilot study. International Journal of Pediatric Otorhinolaryngology, 78(6), 987–995. <https://doi.org/10.1016/j.ijporl.2014.03.008>

Villa, M. P., Evangelisti, M., Martella, S., Barreto, M., Del Pozzo, M., & Malagola, C. (2017). Can myofunctional therapy increase the effectiveness of rapid maxillary expansion? Sleep and Breathing, 21(4), 1025–1032. <https://doi.org/10.1007/s11325-017-1506-7>

References Cont:

- Guimarães, K. C., Drager, L. F., Genta, P. R., Marcondes, B. F., & Lorenzi-Filho, G. (2009). Effects of oropharyngeal exercises on patients with moderate obstructive sleep apnea syndrome. *American Journal of Respiratory and Critical Care Medicine*, 179(10), 962–966. <https://doi.org/10.1164/rccm.200806-981OC>
- Villa, M. P., Rizzoli, A., Miano, S., & Malagola, C. (2007). Efficacy of rapid maxillary expansion in children with obstructive sleep apnea syndrome: 36 months of follow-up. *American Journal of Orthodontics and Dentofacial Orthopedics*, 132(6), 818–823. <https://doi.org/10.1016/j.ajodo.2006.05.031>
- Fastuca, R., Meneghel, M., Zecca, P. A., Caprioglio, A., & Lione, R. (2015). Rapid maxillary expansion in growing patients: Effects on nasal function and tonsillar hypertrophy. *Progress in Orthodontics*, 16(1), 1–7. <https://doi.org/10.1186/s40510-015-0089-6>
- Kakimoto, N., Shibasaki, C., Nagata, H., Hara, S., Hirabayashi, M., & Takahashi, T. (2016). Effect of rapid maxillary expansion on nocturnal enuresis in children with obstructive sleep apnea syndrome. *Pediatrics International*, 58(10), 1042–1048. <https://doi.org/10.1111/ped.12988>
- Villa, M. P., Evangelisti, M., Martella, S., Barreto, M., Del Pozzo, M., & Malagola, C. (2015). Can myofunctional therapy increase the effectiveness of rapid maxillary expansion? *Sleep and Breathing*, 19(4), 1265–1272. <https://doi.org/10.1007/s11325-015-1148-5>
- Nayak, C., Singh, V., Singh, K., Oberai, P., Choudhury, K., & Yadav, A. (2011). Management of adenoid hypertrophy in children with homeopathy: A prospective observational study. *Homeopathy*, 100(3), 138–146. <https://doi.org/10.1016/j.homp.2011.05.001>
- de Souza, R. M., de Freitas, J. L., da Costa, M. R., & Teixeira, M. Z. (2018). Homeopathic medicines for the treatment of upper respiratory tract infections in children: A systematic review. *Complementary Therapies in Clinical Practice*, 33, 85–92. <https://doi.org/10.1016/j.ctcp.2018.08.002>
- Kumar, P., Sharma, P., Sharma, R., & Dhupar, V. (2013). Effect of low-level laser therapy on chronic tonsillitis: A clinical study. *Photomedicine and Laser Surgery*, 31(9), 447–453. <https://doi.org/10.1089/pho.2012.3450>
- Rogovik, A. L., Goldman, R. D., & Vohra, S. (2009). Safety considerations and applications for low-level laser therapy in children. *Paediatrics & Child Health*, 14(9), 511–515. <https://doi.org/10.1093/pch/14.9.511>
- Baljošević, I., Šušteršič, O., Janković, S. M., Čomić, L., Kostić, M., & Mandić, B. (2024). Paraprobiotic lozenges in children with recurrent pharyngotonsillitis: A randomized, placebo-controlled trial. *Medicina*, 60(8), 1235. <https://doi.org/10.3390/medicina60081235>

References Cont:

Gozal, D., Kheirandish-Gozal, L., Serpero, L. D., Sans Capdevila, O., & Dayyat, E. (2007). Obstructive sleep apnea and endothelial function in school-aged nonobese children: Effect of adenotonsillectomy. *Circulation*, 116(20), 2307–2314. <https://doi.org/10.1161/CIRCULATIONAHA.107.696385>

Somuk, B. T., Ozturk, O., Kuran, G., Soylu, E., Ugur, K. S., Genc, S., ... & Celik, M. (2016). The role of zinc in recurrent tonsillitis and tonsillar hypertrophy in children. *International Journal of Pediatric Otorhinolaryngology*, 86, 102–105. <https://doi.org/10.1016/j.ijporl.2016.04.001>

Vitali, B., Brigidi, P., Matteuzzi, D., & et al. (2004). Recovery of probiotic *Lactobacillus rhamnosus* GG in tonsil tissue after oral administration: A randomized, placebo-controlled, double-blind clinical trial. *British Journal of Nutrition*, 92(5), 861–866. <https://doi.org/10.1079/BJN20041273>