

ASTHMA, ALLERGIES, HAY FEVER

If you would like to better control or even eliminate symptoms of asthma naturally, it helps to first understand what it is and how healthy baseline breathing is critical to any improvement and management of symptoms.

It will also support in understanding how hay fever and allergies can be improved with correct breathing.

What is Asthma?

The word 'asthma' goes back a long way. Derived from the Sanskrit *vayu* meaning 'wind', it found its way into Greek as $\alpha' \lambda\omega$ (to blow)¹, and subsequently in ancient Greek the word 'asthma' meant laborious breathing, shortness of breath, or panting.²

Through Latin it entered Middle English as *asma*.¹
 In ancient Hebrew, Egyptian and Indian medical records, asthma attacks are recorded.



In more modern times, asthma, hay fever and allergies first became known as the rhinitic diseases (rhinitis refers to inflammation of the nasal tissues), and today, they are broadly referred to as the **atopic diseases** (atopy refers to the production of IgE immunoglobulin E antibodies after exposure to common allergens), and there are many subcategories assigned to asthma:

- Allergic asthma
- Nonallergic asthma
- Adult-onset asthma
- Exercise-induced asthma
- Eosinophilic asthma
- Cough-variant asthma
- Work-related asthma
- Night time (Nocturnal) asthma
- Asthma with obesity
- Brittle asthma – less common, unstable, difficult to control, may not respond to usual medications
- Allergic bronchopulmonary mycosis
- Aspirin-induced asthma
- Asthma with fixed airflow obstruction



Medically, asthma is considered a condition that causes breathing difficulties resulting from inflammation of your airways, narrowing and swelling and excess production of mucus in your airways. Symptoms are wheezing, shortness of breath, and coughing.

Medical professionals rank asthma into four types from mild to severe. These types are determined by the frequency and severity of your asthma symptoms.

Asthma is a serious problem in New Zealand

Statistics in New Zealand (NZ) are high for asthma, allergies and hay fever, some of the worst in the world in fact³.

In November 2019, 33% to 50% of all preschool children in NZ are predicted to develop asthma-related wheezing⁴; in 2016 more than 11% of adults and 12% of children had asthma and this has not improved. Statistics were similar in Australia⁵. Death rates of 80 annually from asthma have not improved in the last 20 years despite changes to management and medication.

Allergies and Hay fever

An allergy to a substance is the result of IgE antibodies being created to 'protect' against a substance that is not usually seriously harmful.

The antibodies trigger mast cells to release histamine and other chemicals. Histamine causes tissue to swell and leak, skin to become red & itchy (inflamed).

Hay fever is medically known as **allergic rhinitis** and is an **allergic reaction** to **airborne substances** such as pollen so in fact it is a type of allergy.

Having an allergy used to be considered fairly rare. However now, about 40% of New Zealanders have an allergy to something, whether to food or an environmental substance such as pollen or dust and as alarmingly, 10% of babies have a food allergy by 10 months old.

In Australia 11% of children have allergies by 10 years of age, and in Europe predictions are that 50% of the population will have some form of allergy by 2050⁶.



Allergic rhinitis (hay fever) is the most common allergy symptom and it can range from mild to annoying to severe:

- 50-80% of patients with asthma have allergic rhinitis
- 20-30% of patients with allergic rhinitis have asthma

So why do some people get asthma and not others?

Just as with many illnesses, a number of variables come together to give someone more or less propensity or risk of developing it, and the degree of severity they'll experience.

Both genetic and epigenetic (environmental) factors play a part with the atopic diseases.

Genetic factors – the asthma gene

Dr Konstantin Buteyko (read more under the About Us: Buteyko section) and others subsequently, discovered that genetically predisposed asthmatics are likely to develop symptoms from babyhood or a young age, and will have:

- Stronger, thicker smooth muscle lining the airways ⁷
- More than five times as many mast cells as non-asthmatics ⁸
- More mucous-producing cells lining the airways ⁹

It's almost become an old adage that we can't change our genes – what we know now is that some genes or gene 'snips' (SNP's) can get 'turned on' or 'off' due to environmental or lifestyle – epigenetic factors.

What are some of these epigenetic factors or triggers?

- respiratory infections including flu, bronchitis, common cold and sinusitis
- physical exercise
- stress – physical or mental
- cold, damp
- introduction of or changes to medication/s
- tobacco smoke
- pollen, mould, yeast
- beer, wine
- some foods eg dairy products, soy milk, nuts
- contact with animals (dander, fur, feathers)
- kapok in pillows and mattresses, dust mites



When anyone experiences an overload of triggers for their particular body and genetic makeup, then they may develop a number of illnesses such as asthma, allergies and hay fever.

But what if asthma and hay fever are as much or even largely symptoms of disordered breathing, and that learning to breathe well can help prevent or reduce the body's reactivity to environmental triggers and/or the effect of a genetic predisposition to react more severely to trigger.

Breathe Free Clinic believes that breathing well is a basic pillar of health that should rank alongside diet, exercise, lifestyle, and psychoneurology, and until this is more fully recognized and widely understood, we are doing ourselves a health dis-service. This is actually good news because we can make changes for ourselves. Sound far-fetched?

In fact New Zealand GP, Dr Peter Parkinson discussed this in his 2015 book 'Smash Asthma' ¹⁰. He and a research colleague suggested that wheezing, which until now has been considered the main symptom of the disease asthma, may in fact be a normal and essential bodily function.'

Dr Buteyko also believed that wheezing may well be a result of the body trying to protect itself rather than being a symptom of a disease.

It's only when you understand how changes to your breathing alter your biochemistry that this starts to make sense.

Breathing well supports efficient delivery of oxygen to where it's needed in the body, and aids in balancing arterial pH (the acid-base balance in your blood), which in turn supports a healthy inflammatory response to triggers and promotes calming of the body which also helps to aid digestion.



These are just a few of the benefits from breathing well.

To learn how well you are breathing [book yourself in for a Breathing Assessment](#).

Asthma and Allergy Treatment

Nowadays the main treatment for asthma, allergies and hay fever is medication.

Yet, Sir William Osler, the first physician in chief at the Johns Hopkins University hospital and medical school ¹¹, and who is now regarded as the 'Father of Modern Medicine' wrote the following:

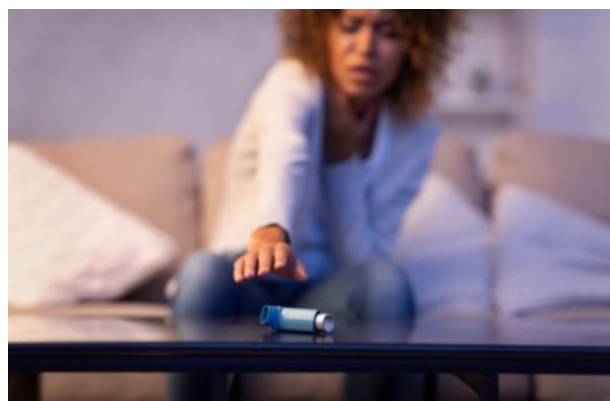
*"no matter how severe the attack of asthma the attendant must maintain a calm and confident atmosphere because the outcome is never lethal"****



However, as Dr Parkinson writes in his book, it is not easy to watch a child wheezing and finding it hard to breathe without being fearful of a serious outcome and wanting to administer whatever help is available. When **reliever** medication (**bronchodilators**) were first introduced they were like a magic elixir because they provided instant relief and provided a powerful tool in the medical professional's arsenal. They work by relaxing (or relieving) bronchospasm of the airways and an increase in heart rate.

Unfortunately it wasn't long before there was concern that these early bronchodilators (also known as short acting beta-agonists or SABA's), were causing a spike in deaths - far more than had ever been recorded previously ^{12 & 13}. Not only was this serious, but over time it was found that these relievers 'down regulate' – in other words the more you use them the less effective they are ¹⁴. Consequently an asthmatic would often be taking more and more of their reliever to less effect and putting their life in danger without realising it.

* This may have been true during Sir Osler's life (1849 to 1919), however some forms of asthma such as brittle asthma (which is rare), can be life threatening as is the case with an anaphylactic (severe) reaction to a trigger.



As a result of growing concern in the medical world about the dangers of overuse of relievers, **preventers** (or **corticosteroids**) were introduced and quickly became the preferred management prescription for asthmatics to be used daily in order to reduce the need for reliever usage. Corticosteroids are a form of immune-suppressant. The way these work is to help dampen the body's reaction to triggers and reduce inflammation occurring; relievers were then prescribed alongside to be used only as needed when asthma was not adequately controlled with the preventer.

More recently, due to incorrect and over-usage of relievers, which remained prevalent amongst asthmatics, combination drugs have been introduced. These combine long acting beta-agonists (relievers) and corticosteroids in metered dose inhalers such as Symbicort, Advair and Breo Elliptica.

Natural Asthma Management

Well-trained Buteyko practitioners work to help you improve every aspect of your breathing health and have found this to be a highly effective way of both reversing and reducing symptoms naturally.

The Buteyko breathing method has helped thousands of people of all ages in New Zealand alone, to manage their asthma, hay fever and allergies naturally after attending a course run by a qualified practitioner. *

To read some of the published studies which have demonstrated the effectiveness of the Buteyko breathing method for asthma, email the clinic: info@breathefreeclinic.co.nz .

Breathe Free Clinic's director, Felicity Campbell, was trained by practitioner Glenn White under the international BIBH (Buteyko Institute of Breathing and Health) programme. Glenn's teaching has been repeatedly endorsed by a number of medical professionals. (www.buteykobreathing.nz/Medical-Professionals-Feedback.html.)

* Breathe Free Clinic advises clients to consult their doctor before making any changes to prescribed medication or sleep aids and wherever possible will liaise with them to help achieve the best possible control of your asthma.

Find out how Breathe Free Clinic can help you to control your asthma **book in for a free 20 minute phone consult or Book in for a Breathing Assessment.**

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