

## **The key to a healthy child is a strong immune system.**

We live in an age where we try to protect our children from anything and everything. We use anti-bacterial sprays on worktops, anti-bacterial soaps to wash our hands. We keep them away from other children when they have a cold or cough, but is that the way to keep your children healthy? The key to good health is a strong immune system. Our job is to help our children build their immune system from the moment they are born.

### ***What is immunity?***

A strong immune system identifies and destroys anything that the body perceives as foreign. This can be bacteria, viruses or defective body cells. Our first line of defence is the skin and healthy, strong mucous membranes in the respiratory and digestive tract which watch out for and destroy anything that might harm us.

Should anything get past this there are special white cells in the blood that are called upon. These are T Cells, B Cells and macrophages. B Cells make unique antibodies for every invader and the T Cells and macrophages kill them off. Once the B cell has made the specific antibody you have that for life. This is known as acquired immunity.

### ***Immune boosting nutrients***

Your immune strength is dependent on an optimal intake of vitamins and minerals. If your diet is low in vitamins A, C and E, zinc, and selenium your immune system becomes suppressed. These are known as antioxidants and are particularly powerful when fighting off an infection.

**Vitamin A** also helps to maintain the integrity of the digestive tract, lungs, and all cell membranes, preventing foreign agents from entering the body and viruses from entering cells. Food sources: *carrots, watercress, cabbage, squash, sweet potatoes, melon, pumpkin & pumpkin seeds, mangoes, tomatoes, broccoli, apricots, tangerines, asparagus, beans.*

**Vitamin C** is the best-known immune booster. It helps immune cells to mature, improves the performance of antibodies and macrophages and is itself anti-viral and anti-bacterial, as well as being able to destroy toxins produced by bacteria. Food sources: *Red Cabbage, Strawberries, Potatoes, Tangerines & other mandarins, Red Peppers, Kiwi fruit, and Pineapple*

**Vitamin E** improves white cell function. Food sources: *sunflower seeds, sesame seeds, beans, peas, wheat germ, tuna, sardines, salmon, sweet potatoes.*

**Zinc** is critical for immune cell production and proper functioning of B and T cells. Zinc should only be supplemented during a viral infection. Food sources: *Barley, Chicken, Lamb, Crab, Beef, Turkey*

## **Garlic**

Garlic helps regulate mucus flow, and may help reduce congestion caused by the common cold.

## **Probiotics**

The balance of the bacteria in your digestive tract influences your ability to fight off infections. The beneficial bacteria (probiotics) eat nutrients that the bad guys need and prevent harmful bacteria from taking hold. They are also important in the treatment of cancer, allergies and infections caused by viruses, parasites and yeasts. Food sources: *plain live yoghurt*.

## **Top Ten Immune Boosters**

1. Serve at least five servings of organic fruit and vegetables a day.
2. Make sure your child sleeps enough as sleep deprivation can make you more susceptible to illness. A newborn may needs 18 hours a day, toddlers 12 to 13 hours, and preschoolers about 10 hours.
3. Breast feed your baby for as long as possible, especially the first few days after birth as colostrum, is especially rich in antibodies. Nursing helps protect against ear infections, allergies, and diarrhoea.
4. Exercise regularly. Go for walks in the woods, country or parks. Exercise increases the number of immune cells in adults and children. Be a good role model by exercising with them rather than just telling them to go outside and play. Fun family activities include bike riding, walking, football, and tennis.
5. Don't pressure your GP for antibiotics – they only work with a bacterial infection. Giving antibiotics whenever your child has a cold, flu, or sore throat is a bad idea as the majority of childhood illnesses are caused by viruses. Strains of antibiotic-resistant bacteria have flourished as a result.
6. Use natural cleaning products to reduce the toxic load on your child. Exposure to chemicals can damage the immune system and make it more difficult to fight off common infections.
7. Avoid cigarette smoke which contains more than 4,000 toxins. Second-hand smoke increases a child's risk of bronchitis, ear infections, and asthma.
8. Food intolerance or allergy puts additional strain on a child's immune system. Get them tested if unsure.
9. During a viral infection avoid mucus forming meat, dairy produce and eggs.
10. Avoid sugar as it suppresses the immune system.

Children will always come in contact with viruses and bacteria and by following my guidelines a strong immune system means they only get a cold rather than flu, a tummy ache rather than food poisoning.