

## **Autoimmune:**

### **Your immune system works to keep you healthy 24 hours a day.**

The immune system is responsible for distinguishing between “self” and “non-self.” It then responds accordingly — supporting and defending the parts it perceives as “you” (your cells, tissues, organs, etc.), and blocking or attacking anything it perceives as “not you.”

Our bodies’ first line of **defence** in this effort is known as the “innate” immune system, which includes skin, hair, eyelashes, stomach acid, sweat, tears, and cilia in your lungs and nose.

Your entire immune system (and your body) is protected from the toxic environment in **your gut** by a layer only one cell thick. This thin layer covers a surface area the size of a tennis court. If that **barrier is damaged**, you will get sick and create an overactive immune system, producing inflammation throughout the body.

The second line of defence is the “adaptive” immune system, which includes antibodies, antigen presenters (dendritic cells and macrophages), attack cells (lymphocytes), and your own surveillance team of proteins and peptides (cytokines).

Our immune system requires **ongoing maintenance** to function properly; if it doesn’t get it, the immune response can malfunction

**Gut Reaction** -The small intestine functions as the epicentre of the adaptive immune system. Here, billions of healthy bacterial organisms kill off invading bacteria; help digest food; produce immune molecules, vitamins and cancer-prevention compounds; and even help to regulate your hormonal metabolism.

The most effective way is to build up Immunity and good gut flora. A diet rich in plant foods and fibre will nourish your bacterial flora and supply your immune system’s other nerve centres with a steady supply of antioxidants, vitamins, minerals, amino acids and other nutrients.

As a nutritional therapist who works within the **functional medicine model**, part of my job is to try and uncover inflammatory factors unique to each person and to see how various lifestyle, environmental, or infectious factors may have been the trigger to spin the immune system out of control.

These could be factors in the immune response.

- Poor diet—mostly sugar, refined flours, processed foods, and inflammatory fats such as trans fats
- Stress
- Hidden or chronic infections with viruses, bacteria, yeasts, parasites

- Hidden allergens from food or the environment – gluten for example
- Toxins such as mercury and pesticides
- Mould toxins and allergens