

# Immune System

In order to understand resistance and susceptibility, we need to be familiar with the system designed to protect us and prevent disease. This system is composed of three sequential parts:

1. Identification: The [Immune System](#) carries out this process.
2. Neutralization: The [Detoxification System](#) performs this task
3. Elimination: The [Elimination System](#) colon and kidneys work to remove toxins.

Since the health of the individual is crucial to his or her survival, the body uses these three systems. It also provides a back-up or “fail safe” plan in the event one part fails. The back-up not only assists the individual parts, but allows these parts to assist other systems. We refer to this as “compensation.”

The **Immune System** is the part of the body designed to recognize those aspects which are not part of the body, called “non-self” by immunologists. Under normal conditions, the immune system neutralizes toxins, micro-organisms, biotoxins (toxins made by micro-organisms) and other invaders. The Human Genome Project, which studied our DNA, discovered that all individuals are surprisingly similar, with the notable exception of the immune system. This system differs widely in all people, partly because of our biological individuality. It is this striking difference which partly accounts for resistance and susceptibility.

When the immune system encounters invaders such as toxins, it can act in a variety of ways.

- Under ideal conditions, it identifies the toxins or

micro-organisms which are then neutralized and excreted.

- If the toxic exposure is severe, the entire system may shut down and go into “flight” or survival mode.
- A less drastic response is chronic inflammation, which is the body’s attempt to contain or eliminate toxins without success. Chronic inflammation may progress into chronic degenerative diseases which include cardiovascular, pulmonary, periodontal and dental decay diseases, as well as cancer and other diseases.
- The immune system may also overreact, resulting in tissue or organ damage. These can be the result of allergies (caused by undigested food particles), autoimmune disease (caused primarily by mercury, chemicals and therapeutic agents), and hypersensitivity (caused mainly by mercury, metals, genetically modified foods and organisms, latex and other therapeutic agents).
- Finally, a shutdown of the immune system may occur as a result of toxic insult or therapeutic intervention. Once the immune system is compromised in any way, it is more difficult for the body to identify and eliminate toxins.