**THE 3 E’s CANCER vs. THE BODY**

In the 1950s, researchers thought the immune system did two things: it protected your body against bacteria and viruses, and it looked for abnormal cells and killed them before they could become tumors. Called the cancer immunosurveillance theory, it was initially rejected. In the last 10 years, however, studies have shown that immune cells are indeed important in the prevention of cancer. Although tumors may develop in a functioning immune system, the way a tumor grows and develops is influenced by the body’s immune response. Based on this new evidence – and confirmed by the mouse tumor studies conducted by Dr. Robert Schreiber – the theory has been renamed “cancer immunoediting.”

The three E’s of Dr. Schreiber’s theory of cancer immunoediting are elimination, equilibrium and escape:

**1 ELIMINATION** – In this phase, the immune system sees and destroys cancer cells. This phase suggests that our bodies may be regularly introduced to cancerous changes and that our immune systems are capable of handling and eliminating them.

**2 EQUILIBRIUM** – If the cancer cells are not destroyed right away, they may exist in a delicate balance between growth and control by the immune system. During equilibrium, the body’s immune system is able to keep the cancer cells under control but is unable to kill them completely. In this phase, a tumor may remain dormant for an unknown length of time and may evade medical testing.

According to the theory, however, the constant interactions between the tumor cells and the T cells of the immune system may actually lead to tumors that can adapt to the immune response. This means the immune system may no longer be able to find tumors and attack them. Tumors that avoid the immune response can no longer be controlled and move on to the third phase.

**3 ESCAPE** – The escape phase refers to the disruption of equilibrium (balance) that leads to immunosuppression. This allows the tumors to escape and begin growing in an environment of immune “tolerance.”

It’s at this point that the symptoms of cancer begin to appear. Tumors in the escape phase use a number of methods to alter the body’s immune response in such a way that actually allows them to grow.

Reference: <http://www.patientresource.com/>