VIRUSES

These are tricky little fellows. Much trickier than bacteria. First you must realize that they only way they can propagate is to get inside a cell and duplicate itself within the cell. Seven hours after breathing in a virus, one virus cell has duplicated into 10,000 virus cells which then enter more cells and continue their propagation. Within 2 hours 5,000 of your cells can be affected.

Your natural protection against viruses rests with your Natural Killer Cells, the Macrophages and the T and B cells.

In the early stages of the virus, the Natural Killer Cells patrol your body, looking for trouble, see the damage from the virus and spray a poison on the virus in the cells. It kills the virus, but also the cell. The waste left from the death of virus and cell is toxic debris. That's where Macrophages enter the picture, roaming along, they see the debris and eat it up. Any debris not eaten up is carried away into areas like your digestion to be disposed of.

Unfortunately, in the process of killing the virus (along with our own cells), the tissue affected can become sore, swollen and inflamed. The Macrophages release interleukins which surge through the blood stream looking for the big guns to help out (T and B cells). This causes the temperature of the body to rise which is a good defense against the virus, causing fever and chills. Unfortunately the fever usually swells the brain a bit and you may have a headache. In the meanwhile, the ol' Natural Killer Cells are still working, but millions of virus are being manufactured. You are losing the war, so the next line of defense comes out (this may take 2 days or more to get to this stage). Dendric cells pick up the information from the infected area and go on a mission looking for the big guns to help: T cells and B cells.

The dendritic cell travels into the lymph and finds a T cell, who reads the message and goes into action. The T cell goes into the blood stream, travelling to the affected area, it targets the virus and destroys it with precision. Meanwhile, a B cell in the lymph fluid has discovered the problem and starts to clone itself - it doesn't travel to the problem but instead manufactures antibodies which actually smother new born free floating viruses, paralyzing them.

Now we have a different picture: The T cells are killing the virus within the actual cell, and the B cells are neutralizing the newborn and floating viruses. The virus is effectively overcome, it is wipes out. The symptoms won't disappear right away, our cells need to repair and heal the affected area.

In the end, most of the T cells die, but some become 'memory' cells and hang around forever in case the virus returns. They give you immunity in that the returning virus will be quickly wiped out.

In order to survive however, virus are clever. It may mutate and look like a different

invader, so the memory cells don't recognize it, and the battle starts again.

If you have a viral infection avoid foods that leave the pH of the body acidic: coffee, pop, sugar in foods, dairy. Viruses seem to like the atmosphere of an acid pH, therefore to alkalanize your body focus on citrus foods or juices, tomato juice, steamed vegetables, raw salads.