

## THE GERM THEORY VIEWED THROUGH A MICROSCOPE OF HOMEOSTASIS

In France, in the mid-to latter 19th century, Louis Pasteur had his differences with one Claude Bernard, the pioneering spirit of experimental physiology and medicine. Bernard was a renowned researcher and holder of the Chair of Science that Pasteur later occupied.

In postulating his germ theory, Pasteur stated that if crushed grapes were put in contact with fresh air they would ferment. He thought that microorganisms in the air would cause disease and give rise to fermentation. He erroneously postulated that this reaction was not a bio-chemical process but an interaction of oxygen and grapes molecules.

Bernard, on the other hand, said the "Terrain is everything, the microbe nothing". Terrain is the sum total of the body/mind/spirit, their interaction, and how this reacts to changes in the environment.

Interestingly, in 1895, the year Pasteur died, one of his students by the name of Buchner separated, under pressure, a substance from yeast cells, that when added to sugar, fermented into alcohol and CO<sub>2</sub>, thus finding the soluble ferment that Pasteur so vigorously denied.

In his book, Phenomena of Life, Common to Animals and Plants, Bernard states, "Cells within a living body, particularly higher organisms, are bathed by fluids which constitute an inner environment. Life is only possible if the condition of these fluids vary within extremely narrow limits. The tendency of the body is to maintain its limits, called equilibrium, or HOMEOSTASIS, and it will react to re-establish balance. A higher organism is therefore independent of its external environment, a freedom within limits."

Why do Westerners give so much emphasis to the eradication of microbes and not to strengthening the internal terrain, our immunity, and our intrinsic health? Antibiotics act as if the only good microbe is a dead microbe, indiscriminately killing beneficial bacteria along with pathological bacteria. Gerald Abrams of the University of Michigan says the difference between a good bug and a bad bug depends on the situation. "What you have to remember is that unless you believe there are bacteria to torment us, the real biological purpose of bacteria is to make little bacteria. It's totally trivial to them whether we get sick or not. The thing I'd like people to understand is that when we are healthy, we live in perfect harmony with these critters. A lot of them are really a part of us, and a good part."

A healthy blood stream, a healthy organ, and healthy tissues are relatively germ free. Microbes inhabit the body's surface (the intestinal tract is part of the surface as it is connected one end to the other). Germs will move to the interior

of the body through the intestinal walls but then are destroyed by the immune system. Replacement therapy pioneer Henry Shinefield said, "We found a less virulent strain (referring to staphylococcus aureus bacteria) that can cause boils, meningitis, abscesses, and pneumonia in infants and we found that if we put it on the nose and bellybutton of a newborn infant (the two centers from which the infection spreads), it was like laying down a healthy lawn to keep out the crabgrass."

Obviously, antibiotics are a blessing when needed, but over prescribing can be detrimental. Pelvic infections in women and inflammation of the bowel in both men and women are possible side effects of the antibiotic streptomycin. Beneficial bacteria such as acidophilus streptococcus is destroyed along with the target bacteria and allow aberrant bowel bacteria from the consumption of uncooked meat to proliferate in the intestines, weakening the digestive system and compromising the immune system.