Overview of Course Paradigm

All human cells receive their nutrition and have their waste removed by the fluid they are surrounded by. This fluid is called the **extracellular fluid** and must be maintained within relatively constant temperature, pH range, volume, and concentration of the dissolved particles within it.

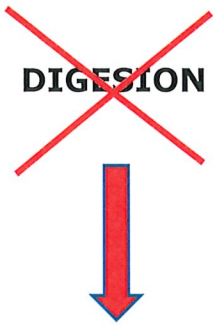
The extracellular fluid is referred to as **the internal environment** and the processes used to maintain its constancy are collectively called the process of homeostasis.

The **hypothalamus** uses the **autonomic nervous system**, with its two divisions, sympathetic and parasympathetic, as well as the **endocrine system** to direct the body's ten organs systems and maintain relatively constant conditions within the extracellular fluid.

The essence of health care is to recognize and understand the effect that mechanical, nutritional, and/or emotional stress is having on the body's ability to maintain homeostasis. This process allows the **correction and avoidance of chronic degenerative processes** before they become obvious.

We begin by analyzing and **improving the diet** by reducing obvious excesses and using nutritional supplements to relieve deficiencies:

1. Improve digestion to move nutrients past an incompetent digestive system and to reduce cravings.
2. Normalize bowel function
3. Nourish the immune system to provide for an adequate inflammatory response.
4. Assist with the 2nd phase of recovery and tissue repair.
5. Provide nutrients for the autonomic nervous and endocrine systems so they can maintain normal function.

NUTRITION IS THE SCIENCE OF FOOD **What is ingested, digested, absorbed, transported, utilized, and eliminated.** *American Medical Association, Council on Nutrition*		
COMPOSITION OF FOOD		**DIETARY SUPPLEMENTS**
Found in nature in various combinations and classified by caloric content		**Isolated and concentrated ingredients found in food**
Carbohydrate		Carbohydrate
Protein		Protein
Lipids		Lipids
Vitamins		Vitamins
Minerals		Minerals
(Enzymes)	**IMMUNE RESPONSE**	(Enzymes)