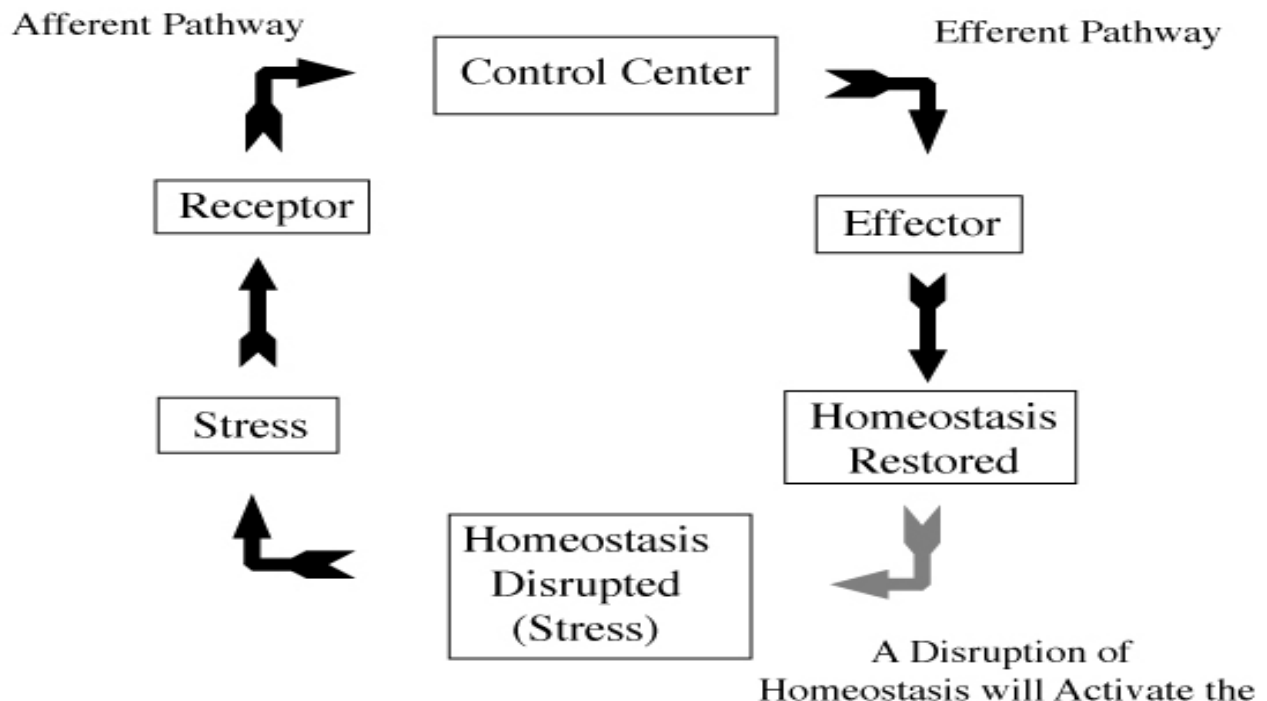


Control Paradigm (Negative Feedback System)



A Disruption of Homeostasis will Activate the System.

System Inactivated Once Homeostasis is Restored

The ability of the body to precisely control its own internal environment so that life and health can be maintained is called homeostasis. When homeostasis is disrupted this state is called stress. If stress is not corrected it will eventually lead to a state of disease, and ultimately death in many cases.

The body rectifies stress through a negative feedback system. Here, a state of stress is picked up by a receptor(s), and the information is sent to a control center. The control center will evaluate this information as well as any other pertinent information it receives. Finally, a signal is sent to an effector that restores homeostasis. This effect negates the original stressful stimuli and is therefore called a negative feedback system.