

Introduction to Anatomy & Physiology

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Homeostasis

When we talk about homeostasis is trying to be able to maintain a degree of balance, so whenever something is out of balance. We'll use two particular examples. Some some things like glucose. The glucose levels are too low or they're too high well that's a state of imbalance. How do we help to counteract the imbalance. we use something called the negative feedback mechanism. So I want you to think about the mechanism as the counter response. as a response to a high glucose level. The pancreas will make a very special type of hormone called insulin.. insulin binds onto receptors on different cells in the body.. insulin is then going to go and act on an effector. In this case these tissue cells and when it acts on the effector. It's going to produce a particular response. low glucose was the stimulus it will then. act on the glut receptor, which is going to be the receptor. The pancreas will be the control center, who will then release glucagon. Glucagon will then be the efferent signal to another particular target organ or an effector that effector is the liver. what will happen my friends. The glucose will increase so that is the concept that I want you guys to understand.

I do n't want to cool my body. I'm already too cold so what I want to do is to vasoconstrict this vessel. I "m going to send signals to my muscles. You know my skeletal muscles when they helped when you know whenever we shiver it actually generates atp it's these incomplete kind of contractions. homeostasis is maintaining a state of balance many different disease processes do n't allow for that counterbalance. negative feedback is to counteract a response so low glucose high glucose low temp low temp high temp we get the point. positive feedback mechanism amplifies the response to the initial stimulus would actually be. during the birthing process that baby be stretched in the cervix is a powerful stimulus that activates stretch receptors within the uterus.. These stretch receptors then send afferent signals to your control center and in this case that control center. Guess what it is the hypothalamus and the posterior pituitary structures..