

# Eating disorders: myths and physiology essay examples

[Health & Medicine](#), [Obesity](#)



“ Hi everyone, my name is counselor Marilyn and I am indeed very pleased today welcome each and every of you to this session of eating disorders. In this topic of today, I will mention the most common eating disorders such as obesity and anorexia and briefly describe them. Also, the myths behind hunger and satiety and the physiological factors that affect the two shall be revisited. Finally, I shall open the door for all your questions on this topic; please feel very free to ask any pressing question.”

### **Myths versus physiology**

“ Well, many years back a set of theories have been devised in an endeavor to clarify the hunger and satiety notion. The most common theory which had seemed to be feasible even to many scientists is the ‘ set-point’ theory. In the ‘ set-point’ theory, the energy level in the body always has a fixed (set) maximum level. When an individual consumes food, the energy level rises to this point. It then starts to drop again as the energy is being used by the body. The maximum level of energy in the body is the satiety while the decrease in this energy level is the hunger. However, this theory does not give an explanation for the energy used by the many body physiological processes. It does not also clearly state the minimum level beyond which the energy level can not drop.

This theory is similar to the ‘ glucostatic’ theory in their idea and some mechanism. In this latter theory, it is the amount of glucose in the blood that dictates hunger and satiety. When the glucose level drops, it would be hunger and only through eating that it would be restored. The restoration would be the satiety. This theory assumed that just before one takes in food, the level of glucose would slightly drop from its original level in preparation

for the consumption of the new food. After the consumption of the food, the level of glucose is supposed to rise to the set-point. However, if the food is not consumed at that time and the glucose level had gone down, it would automatically regain its initial level. This has not been easy to explain. It was also theorized that it a particular part of the hypothalamus was responsible for the increase in blood insulin. This would mean increase in production of fats in the body thereby causing obesity. Satiety was also thought to be the distention urge inside the stomach.

However, all the above were just myths. The truth is that the gastrointestinal release of the peptides into the blood is what sends the message to the brain that in return controls the nutritional level required by the body. It is through this reception and feedback mechanism in the brain that controls the hunger and satiety. Body mechanism may also be conditioned to feel hungry at certain specified times. This conditioning always comes as a result of the specified times we are used to taking our meals such that when that time reaches we tend to feel the urge of eating. Remember the Pablo experiment. Pablo would serve food to his dogs and ring a bell every time he delivered the food so as to alert the dogs. After some period of time, Pablo would just ring the bell alone in absence of food and the dogs would salivate at this cause their enzymes had been conditioned

There are also other factors that usually affect the amounts of food consumed by an individual. One of such factors is the age. An adult would consume more food than an infant. Next in the list is the activities one gets involved or the work one does. Those that do heavy duties that demand much of energy will always tend to take in more food than those that do

lighter jobs. This is because their energy is well utilized, and their body would require some more energy. This group of people also lower their chances of becoming obese since they burn a lot fats during such activities”

**Lindsey: “ my parents were both obese, is that why I am?”**

“ The answer to your question Lindsey would be a ‘ Yes’ and a ‘ No’. Let me say ‘ yes’ because a great percentage of the many obesity cases has been genetics. There are genes responsible for obesity and the genotypic parents are likely to pass these genes to their following generation. However, genetics is not the only cause of obesity. Poor eating habits are on the rise as another major reason of obesity. It is well known that consumption of excessive carbohydrates causes obesity, especially if taken from the infancy. Please watch what you eat and only eat when you are actually hungry. Let me give a piece of advice Lindsey; if your obesity may have been caused by just lifestyle and not the genes, then you better start doing some exercise along with eating healthy food ”

Robert: “ My girlfriend and I eat together all of the time, so we the same food and amounts of food, but she never gains weight as I do. Why is that?”

“ Well Robert, since you both consume the same amounts of food, there must be a physiological difference that influence the production and use of energy in your bodies. Unevenness in the amounts of glucose and insulin may hinder the use of energy in the body. Another reason could be that your girlfriend has relatively more leptons in her blood than you do thus inhibiting the production of more fats. Finally, Robert, you should try and involve yourself in activities that would help you utilize the energy more efficiently

and burn the fats. Your girlfriend might just be doing this while you are not”

Nancy: “ My mom says I became anorexic because I have been reading too many Cosmo magazines and want to look like those girls. Maybe I did, but I really don’t crave food. What do you think it is?”

“ Your mom might be right. Many adolescent girls would subject to pressure of wanting to become slender and ‘ attractive’ in aping some public model.

In the course of this, they will try to diet by skipping most meals. In the long run, the food loses its meaning as the body adapts to this starvation.

Physiologically, it could be said that may be your body secretes much serotonin agonists such as the fluoxetine that reduces hunger. This means that an individual would eat very little food, leading to weight loss.”

**Tyra: “ I do not eat because every time I do, I just feel sick! Do you know why this is?”**

“ Eating the same food consecutively for a span of time may cause the very food to lose its taste and appeal. Such food may cause a deleterious effect when taken by the same person, even in the future. Have you ever tried to induce vomiting by yourself Tyra? Because it could be another reason as the body would be conditioned to automatically reject such food thereby causing an urge to vomit

Well, if there are no more questions then we shall stop there for today. A final word for all of you is that you should eat health; remember you are what you eat. Let us all do away with the old eating myths and base our reasoning on physiology. Till we meet again, goodbye everyone”