

## Nudge-it: Understanding Obesity reflection instructions:

Typing text into the boxes is preferred. We encourage you to include relevant links to course forum posts or other resources to explain your context.

You do not need to attach images or external links, but if you do, think about whether they are accessible - for example, be aware that if you link to a video on YouTube this may be unavailable in Germany, China and other countries. Attaching a PDF or photograph is fine but any important text should also be copied into the submission box to make sure the person assessing it will be able to read about it if they are unable to view the image. You can discuss the task in the forum.

Your submission and the peer assessment process is anonymous, so if you want your peer reviewers to be able to ask you questions about it, please include a link to one of your forum posts/your social media account (or create a new forum thread and link to it).

Remember you can return to this page and edit your submission or evaluations any time before the deadline for each phase. Just remember to press 'submit' to save your work each time you visit, because a saved, non-submitted piece of work will **not** enter the peer evaluation pool.

Your written submission should be a maximum of 800 words. Although there are ways to circumvent the word limit, please do not use them. There is no minimum word limit but writing a superficially short piece will open you to justified criticism from your peer-assessors. More importantly, writing with an approximate word count in mind is good training in concise and precise communication.

First, show how you have engaged with the course and how it has led to a change or refinement in your thinking about the problem of obesity (if, indeed, it has). Think back to how you responded to the opening survey in Week 1. Would you respond differently now? What have you learned from the course materials and discussions with your classmates? What has surprised or challenged you? Have your pre-existing ideas been reinforced? Have some been overturned? If your thinking has changed, describe why and how. If it hasn't, write about why.

This first section is your personal, subjective view. You may wish to use phrases like "I used to believe that x, now I think that y...", "My view changed because...", "I was surprised to discover that...", "Learning about x was useful because...".

Despite the subjective theme of this first section, you must approach these broad questions with some degree of objectivity. You can do this by supporting your arguments with evidence. You can write "I originally believed x, but the evidence does not support this view...", "Study x showed that...", "There is good evidence to support the idea of...", "It is still unclear whether x or y is more important in understanding this problem...". Bring together the evidence and consider what it tells you in its totality. What conclusions can you make based on this evidence?

Second, describe how you might translate your thinking and understanding into action. How might you use what you have learned to respond to the problem of obesity? How could you share your understanding and encourage others to respond to this problem? What positive action could you take locally with your family, your friends, in your workplace or community? What positive impact could you or a group of like-minded individuals have on scientists, healthcare professionals, the food industry, the diet industry, the media, or politicians and policy-makers?

Here, we are looking for suggestions for imaginative solutions to this problem. They can be on the small scale or large, grassroots or top-down, expensive or inexpensive. We don't expect you to solve the obesity crisis in its entirety! It's perfectly fine to focus on one aspect that interests you.



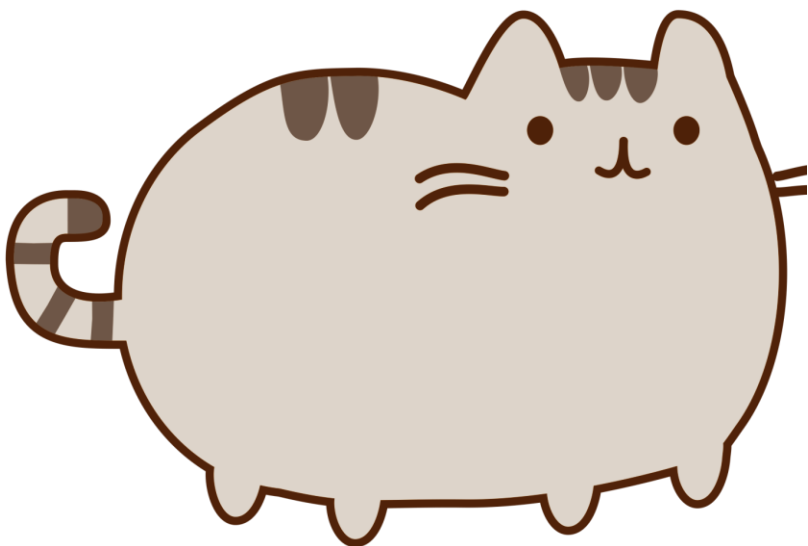
I originally thought that obesity was simply a matter of an energy imbalance. I thought someone becomes obese if that person consumed more calories than the amount of calories that is burnt on a daily basis. Over time if this imbalance continued then there would be increasing weight gain. This led me to believe that losing weight was therefore a matter of correcting the energy balance, and that someone would lose weight if that person consumes less calories and or burn more calories through increase physical activities.

This course Nudge-it: Understanding Obesity by John Menzies has changed my perception of this concept. I now understand that the problem of obesity is far more complex than I thought and that there is no simple solution to the obesity epidemic.

Professor Gareth Leng presented some very interesting concept. I found the set point of body weight to be fascinating. He stated that this set point is the weight at which our body thinks we ought to be and it will fight to maintain it. This set point is partly genetically determined and partly influenced by neurohormonal and other physiological processes within the body.

I was surprised to discover that it is not known what has contributed to the obesity epidemic, and why it is so difficult to lose weight. I had no idea that the brain would switch off vital functions like temperature control, reproduction and the immune system in order to conserve energy when someone goes on a calorie restriction. This course has certainly highlighted how uncomfortable it is for anyone to maintain calorie restriction over the long term and why weight loss diet does not work. I have personally seen the yo-yo effect in people who have attempted calorie restriction diet. Periods of weight loss followed by weight gain with the resultant effect of more weight gain than weight loss.

I was somewhat disappointed by the revelation that exercise, like dieting, did not offer any better solution to the obesity problem. The other benefits of exercise were however noted.



Medical treatment for obesity has been less effective than was hoped due to the significant side effects of the medications as noted by Professor Leng.

I learned that bariatric surgery has been effective to date with 85% of person who have undergone this procedure maintaining a stable body weight after surgery. I was surprised to learn that it is not known how or why it worked. The hypothesis put forward by Professor Leng is that there appears to be a missing signal from the gut to the brain following bariatric, surgery that usually drives hunger. He stated that it was not due to decrease absorption as I originally thought.

From the physiology of appetite segment presented by Professor Suzanne Dickson I learned about how the brain engages in decision on what and why we eat. I understood how our eating behaviour is influence not only by conscious actions but predominantly by unconscious decisions, and that we eat not only for survival but also for the reward value of food.

Before taking this course I was leaning toward the notion that sugar is an addictive substance. However I now know that there is no good evidence that any specific substance in food is addictive. Some evidence was presented in the course to suggest that the act of eating could be addictive (Moocast 2.2 and 2.3.).

I found Moocast 4 on stress eating and diet fascinating. It was truly an eye opener to learn of the role that stress, from the prenatal life to the adult life, plays in our eating habits.

Amy Warnock presented some very important incite on how early life experience affects food choice. Learning about how foods consumed in pregnancy influence the infant food preferences and how flavours in childhood influence food choice later in life was useful. It has practical application that could be used to get children to choose more healthy foods.

How can my thinking and understanding be translated into action to respond to the problem of obesity?

As I alluded to in the previous paragraph the problem of obesity has to be tackled from the prenatal and early childhood stages of life. Maternal food choices influences infant food choices and infant food choices influences adult food choices. We first need to determine what are the healthy foods that we would like children to eat that are least likely to result in obesity. Our food scientist should then come up with a list of foods and flavours that represent these foods and our policy-makers should ensure that all pregnant women are educated about these through publications and media campaigns. If the problem of food choices and food security can be address then we may be able to start the process of reversing the growing obesity epidemic.