Welcome to Week 10

Stress and weight

Cortisol is a particular culprit. Cortisol is produced by the adrenal glands and does a useful job regulating blood pressure and strengthening the immune system at times of stress. The problem is when we have too much stress too often cortisol hangs around the system for too long.

Nutritional Biochemist Shawn Talbot describes what happens: When cortisol spikes, it tells the body to eat something with a lot of calories - a great survival tactic if you need energy to flee a predator, but nor if you’re fretting over how to pay bills,” http://www.amazon.co.uk/Cortisol-Connection-Stress-Makes-Health/dp/089793492X

Increased cortisol also reduces testosterone (present in both men and women) and that increases body fat.

So stress can not only increase appetite, it also increases the desire to eat fattening food in particular.

Other studies have shown that turning to food when stressed is a very common response. The American Psychological Association found stress is major reason why people over-eat. And those people who over-eat also fail to exercise, vegging out in front of the TV instead.

http://www.apa.org/news/press/releases/stress/2013/eating.aspx

And it is not just over-eating and being lazy. Stress increases cravings as well. The term ‘comfort food’ is no accident. Research has shown that when rats are stressed (and making more cortisol) they developed a stronger liking for fats and sugars. There is some recent evidence that the same is true of humans.

And that is not the end of the story. If you are stressed you will probably have trouble sleeping. A disturbed sleep cycle will interfere with the functioning of the chemicals ghrelin and leptin, and guess what? They have an effect on appetite control.

http://www.ncbi.nlm.nih.gov/pubmed/17212793

On top of these chemical and hormonal reactions in our bodies, there are also our emotions and feelings. Often we identify food with childhood experiences of care love and comfort and it is easy to turn to food in a subconscious desire to recreate this love when we feel the adult world is against us.

And lastly, there is the demon drink. Many of us turn to alcohol as a quick fix if we feel stressed or unhappy. It doesn’t work in the long term, as we will see later. But all alcohol is calorific so drink and you will pile on the pounds.

In short stress makes you fat.

And the good news is reduction of stress can reduce fat. A study in the Journal of Obesity reported a research project where a group of women were given 'mindful' eating advice and stress-reduction techniques. They not only lost weight, they lost that particularly dangerous abdominal fat which had been identified as causing diabetes and heart disease. http://www.hindawi.com/journals/jobe/2011/651936/



The evils of sugar

You may have read just how many calories some drinks from the major coffee chains contain. You can be quite literally taking in all the calories you would need just in drinks. But of course these are not healthy calories so you are almost certain to put on weight if this is what you are consuming.

More and more health experts are linking consumption of sugar, and especially sugary drinks with increased obesity and it is these sugary drinks that are all round bad news.

The website Authority Nutrition gives the low down on this (you can find them at <https://authoritynutrition.com>

They explain one of the main reasons sugar is so dangerous

“Sugar supplies large amounts of the simple sugar fructose, which does not lower the hunger hormone ghrelin in the same way as glucose, the main [carb](https://authoritynutrition.com/how-many-carbs-per-day-to-lose-weight/) found in starchy foods ([1](http://press.endocrine.org/doi/abs/10.1210/jc.2003-031855)).

Studies have also shown that fructose does not seem to stimulate the satiety centers in the brain in the same way as glucose.”

So if you eat food you will get full and not want to eat any more, but if you drink sugary drinks this mechanism doesn’t work. You will take in all those calories and still want to eat your lunch afterwards.

Fructose is the real villain here. We are beginning to understand that not all sugars react in the same way. As Authority Nutrition say

Fructose in particular appears to dramatically increase the dangerous fat around the belly and organs. This is known as visceral fat, or [belly fat](https://authoritynutrition.com/6-proven-ways-to-lose-belly-fat/)

In a 10 week study, 32 healthy people consumed beverages sweetened with either fructose or glucose

Glucose consumers only had an increase in [subcutaneous fat](https://en.wikipedia.org/wiki/Subcutaneous_tissue) (not linked to metabolic disease), while fructose drinkers had a significant increase in the harmful visceral fat.”

So sugary drinks lead directly to increase in the sort of fat which can lead to diabetes, some cancers, heart diseases and other problems.

And it is not just cola type drinks that are the problem. Squashes and fresh fruit juices can also be sugar laden. Some smoothies can have as much sugar as three donuts. Flavoured milks can have the amount of sugar equivalent to 10 sweet biscuits and a milkshake can have a much sugar as a family sized dessert. Even flavoured waters have a similar amount of sugar as a couple of marshmallows.

So stick to water, milk if you fancy and tea and coffee.