

healthy

LIVING

ARE YOUR **HORMONES** MAKING YOU FAT?

There is more to weight loss than the often publicised “energy in = energy out” equation; a low calorie diet alone is not enough, we need to make sure that our body uses the food that we eat for energy, and doesn't put it into fat storage.

If you're finding it difficult to lose weight, regardless of how little you eat and how much exercise you do, then it may be that your body isn't responding to your metabolism and appetite regulating signals, causing your body to store energy rather than use it. There are 3 major hormones involved in regulating these signals: Insulin, Leptin & Ghrelin.

Insulin

When we eat the body releases the hormone insulin to assist in the uptake of glucose into cells to be used for energy. If we eat a diet high in refined carbohydrates and other simple sugars we have a high level of glucose for the body to deal with. The body responds by releasing more and more insulin. Excess levels of insulin make the body think that it is starving; this inhibits the body's ability to burn fat, stimulates the growth of new fat cells, increases appetite and reduces the desire to expend energy (exercise). Having high levels of insulin encourages storage of energy as fat.

Leptin

Leptin is a hormone produced by fat cells that tells the brain when to stop eating; thereby adequate levels are essential for the regulation of our appetite. Excess levels of insulin can block leptin signals to the brain, this means our appetite is not regulated and we continue to eat. Over time this leads to leptin resistance where the body loses the ability to receive or respond to the hormone signals. This results in poor appetite regulation and increases fat storage, particularly around the belly.

Ghrelin

The hormone ghrelin is secreted by cells in the stomach and is involved in regulating our hunger signals. When our stomach is empty our ghrelin level rises, telling the brain we need to eat. Once we've eaten the ghrelin level reduces, signalling to stop eating. Some studies have shown obese people to have low levels of ghrelin, meaning that they may actually have only a small appetite indicating that there are other factors involved in their weight gain.





It is most likely because of high levels of insulin and leptin in the blood, as well as the body's resistance to these hormones. Although you aren't eating very much, when you do, the body thinks it is in survival mode and stores the food as fat for energy later on.

Here are the top 3 things you need to do to normalise your insulin and leptin levels:

1. Restrict dietary carbohydrates & avoid refined, simple sugars

- Confectionery
- Sugar, honey other sweeteners
- Rice, pasta, noodles, bread, crackers
- Potatoes, kumara
- Biscuits and cakes
- Bakery products e.g. pies, pastries, muffins, slices and buns
- Sauces e.g. teriyaki, BBQ, sweet chilli, tomato (often have hidden sugars)
- Soft drinks, alcohol, sports drinks, flavoured water
- Artificial sweeteners e.g. Splenda, diet drinks
- Dried fruit

2. Increase fibre - this slows the conversion of glucose & increases sensitivity to insulin

- Vegetables, vegetables and more vegetables!

3. Exercise more - this enhances insulin sensitivity & aids weight management

- Move for at least 30 minutes most days
- Introduce more intensity as you become more fit

You see, it isn't fat making you fat. It's more likely related to a diet high in refined carbohydrates that is playing havoc with your hormones and causing your body to store rather than shed weight.

Studies have shown that the type of food you eat is more important than amount of food you eat. A diet low in sugar, grains and soda but high in non-starchy vegetables with moderate protein and good quality fats will help to balance your insulin and leptin and assist with ongoing health, wellness weight management.

Sources:

Murray M, Pizzorno J (1998), Encyclopaedia of Natural Medicine, 2nd Ed, Little Brown, Great Britain
Rosedale R 'This Hormone Makes Counting Calories Irrelevant' 2009 Accessed: March 12, 2010, Available: <http://articles.mercola.com/sites/articles/archive/2009/06/20/This-Hormone-Makes-Counting-Calories-Irrelevant.aspx>
'Calorie Restriction Not Key to Increasing Life, Lowering Insulin Level is' (2010 March), Accessed 30 April 2010, Available: <http://articles.mercola.com/sites/articles/archive/2010/04/29/calorie-restriction-not-key-to-increasing-life-lowering-insulin-level-is.aspx>
McCoy K (2009 March) 'Can Eating Too Few Calories Stall Your Metabolism?' Accessed 6 May, Available: <http://www.everydayhealth.com/weight/fewer-calories-stalls-metabolism.aspx>
Rosedale R, Westman E, Konhals J 'Clinical Experience of a Diet Designed to Reduce Aging', Journal of Applied Research, 2009 Jan 1; 9(4):159-165