

## **Love Handles: Causes and Cures, Get the Abs You Want.**

'Love handles' are the nickname for fat storage above your hip bone. This site is more specifically your suprailiac (supra = above, iliac = hip bone). They have become an ever-growing problem in today's society and without proper intervention will continue to do so.

The amount of people who are overweight is continuing to grow and doesn't show signs of slowing down. Irrespective of your body frame the chances are you can pinch more fat from your suprailiac or abdomen than you can elsewhere on your body. For a lot of people this will be noticeably fatter than the rest of your body, even. This can still be the case with size 4 women and men with a 30" waist, it is just on a smaller scale.

The World Health Organisation (WHO) describes obesity as something that has "reached epidemic proportions globally" and currently states the fact that there are more than 1 billion overweight adults and 300 million obese worldwide. This is obviously a huge number. One of the most startling ways of looking at this is that the goalposts for being overweight and obese are much further away from being healthy than most realise. Just because people have a healthy BMI (Body Mass Index, which is based on height and weight readings alone) doesn't mean you have healthy levels of fat itself. It has been shown that people with a normal BMI who have a large waist circumference (excess fat around the abdomen and suprailiac) were at a higher risk of death (1). In short this means you don't have to be extremely overweight to be at risk, as long as you are carrying more around the midsection you are in a group associated with higher mortality rates. You must remember there is a difference between the so-called average 'healthy weight' and an ideal fat percentage.

It doesn't matter if you step on the scales and fall into your ideal weight for height measurement. This does not take into account your levels of body fat, where you store your body fat and your lean mass (muscle, water, hair, skin, bone etc). It has been shown that increased muscle mass will lower mortality rate as it is associated with age-related deterioration (2). This is enough to convey to people that you simply cannot rely on weight alone to predict your health status. You must look at your fat percentage.

Now we have got away from that common misconception we can go back to love handles in greater detail. Central obesity is where your fat storage is around the abdomen and is "the most relevant risk factor" for metabolic syndrome (3). Abdominal obesity, the extreme form of fat around the abdomen is one of the major heart attack risk factors associated with metabolic syndrome/syndrome x/insulin resistance syndrome".

Now, insulin resistance is when your cells become less sensitive to insulin. (Insulin is the hormone produced by the pancreas which is responsible for getting sugar out of the blood). High levels of insulin and glucose in the blood are highly correlated with the level of fat you store on your suprailiac (4). This means that the more sugar that is in your blood the more fat you are going to store on your stomach. Now you see why central obesity is regarded as one of the highest risk factors for diabetes as it is a disease related to insulin and glucose function.

The correlation between fat on the stomach and insulin levels has been shown so you can see what strategies you need to use to reduce the fat and to get the abs so many people strive for. Whether my clients are male or female, in good shape or morbidly obese the hormonal implications for this fat storage pattern stay the same.

You need to improve your glucose and insulin levels.

If you are savvy with this you will immediately be thinking of the GI (Glycemic Index) diet which promotes fat loss through eating foods with a low GI. This in turn regulates your blood sugar, lowering the hormone which has been proven to inhibit fat loss and increase fat storage, insulin.

GI is backdated as it doesn't take into account portion size, I shall not go into this now. If you are interested you should look for glycemic loads of meals as well as insulin index of foods.

Eating meals which result in negligible changes in blood sugar is a sensible strategy for fat loss in general and works specifically well for those who store it around the stomach. This is why there is an abundance of low carbohydrate style diets around. Some are better than others but they all tend to work in similar ways. I recommend a nutritional approach to keep insulin level although the approach changes on the individual as some clients can tolerate more starch than others.

Here are some other dietary tips which help you regulate your blood sugar;

- Eat more fibre. Fibre is a gastric inhibitor (delays the rate of gastric emptying) and therefore curbs blood sugar rises (5).
- Eat more protein
- Eat more fat (sensible choices)
- Eat more frequently
- Adding 1g of acetic acid (from vinegar) can lower the blood glucose response from a meal by 31.4% (6).
- Add lemon juice to a meal. 4 teaspoons of lemon juice with a salad can lower blood sugar levels by up to 30%.

The hormonal benefits of a healthy diet will occur whether or not you exercise, you can lose fat (not just weight) through healthy eating and a lack of exercise but there is no question that there will be limits to where you can get to and that proper training will speed the process up dramatically. "Similarly to insulin, a single bout of exercise increases the rate of glucose uptake into the contracting skeletal muscles" (7). This makes exercise a crucial strategy for fast fat loss.

Types of training will have varying effects on insulin sensitivity. Shorter rest periods, higher volumes of work and compound exercises are strategies you should implement. You should aim to perform growth hormone (GH) stimulating workouts as growth hormone and insulin are shown to be inversely correlated (8).

Then you have supplement strategies. For obvious reasons I am not going to recommend specific brands or dosages irrespective of what I use with myself and my clients. Common ingredients are forms of Alpha-Lipoic Acid (ALA), fish oil, cinnamon, fenugreek, bitter melon, chromium, zinc, magnesium and humulus lupulus.

A good supplement strategy can help you lose fat without any changes to diet or training. It is a bold statement to make and one I am willing to back up.

There are lesser known strategies which can also help. One is stress reduction techniques due to the strong link between cortisol and insulin.

Appropriate sunlight to maximise vitamin D in the body is also good. Vitamin D levels are proven to have a direct effect on insulin secretion (9).

Now you can understand how improvements in insulin are crucial for obtaining the abs you strive for. A good approach is multifaceted and a great approach should be systematic in optimising all of these.

- 1- Source: American Journal of Epidemiology. 'Waist circumference and mortality'. Authors: [Koster A](#), [Leitzmann MF](#), [Schatzkin A](#), [Mouw T](#), [Adams KF](#), [van Eijk JT](#), [Hollenbeck AR](#), [Harris TB](#).
- 2- Source: Applied Physiology, Nutrition and Metabolism. 'Resistance exercise and nutrition to counteract muscle wasting'. Authors: [Little JP](#), [Phillips SM](#)
- 3- Source: [Endokrynol Diabetol Chor Przemiany Materii Wieku Rozw](#). 'Influence of fat tissue distribution on metabolic complications in children and adolescents with simple obesity'. Authors: [Firek-Pedras M](#), [Małecka-Tendera E](#), [Klimek K](#), [Zachurzok-Buczyńska A](#).
- 4- Source: [Acta Paediatr Scand](#). 'Relationship of body fat distribution to metabolic complications in obese prepubertal boys: gender related differences.' Authors: [Legido A](#), [Sarría A](#), [Bueno M](#), [Garagorri J](#), [Fleta J](#), [Ramos F](#), [Abos MD](#), [Perez-González J](#).
- 5- Source: Acta Medica Scandinavica. 'Effect of dietary fibre on blood glucose, plasma immunoreactive insulin, C-peptide and GIP responses in non insulin dependent (type 2) diabetics and controls'. Authors: [Hagander B](#), [Scherstén B](#), [Asp NG](#), [Sartor G](#), [Agardh CD](#), [Schrezenmeir J](#), [Kasper H](#), [Ahrén B](#), [Lundquist I](#).
- 6- Source: European Journal of Clinical Nutrition. 'Effect of neutralized and native vinegar on blood glucose and acetate responses to a mixed meal in healthy subjects'. Authors: [Brighenti F](#), [Castellani G](#), [Benini L](#), [Casiraghi MC](#), [Leopardi E](#), [Crovetto R](#), [Testolin G](#)
- 7- Source: Annual Review of Medicine. 'Exercise, Glucose Transport and Insulin Sensitivity'. Authors: LJ Goodyear, BB Kahn.
- 8- Source: Journal of Clinical Endocrinology & Metabolism, Vol 81, 555-564. 'Insulin resistance in growth hormone-deficient adults: defects in glucose utilization and glycogen synthase activity'. Authors: FL Hew, M Koschmann, M Christopher, C Rantzau, A Vaag, G Ward, H Beck-Nielsen and F Alford
- 9- Source: International Journal of Clinical Practice. 'The effect of vitamin D<sub>3</sub> on insulin secretion and peripheral insulin sensitivity in type 2 diabetic patients'. Authors: Borissova A-M, Tankova T, Kirilov G, Dakovska L, Kovacheva R.