



Overcoming Fat Phobia

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Since the 1970s, it became awfully fashionable to cut out fats – promotion of the low-fat diet has since been a flagship policy of the uninformed masses; ignorant journalists, indifferent supermarket chains and diet club leaders desperate for some sort of strategy to impart into their naïve charges. It is no coincidence that, since fat phobia took a grip, obesity has shot through the roof and shows no sign of easing off.

The culture of ignorance remains rampant, even from people who should know better. Just recently, whilst doing paperwork in the presence of daytime TV, I was stunned to hear the comments of Rosemary Conley, an eminent figure in the world of diets and exercise videos. Rosemary's words of advice were: "Eat a low fat diet – remember, all the fat you eat is stored as fat on your body." Perhaps she would like to explain this nonsensical drivel to Eskimos!

Eskimos eat approximately 2500 extra calories per day in animal blubber (fat) to help meet their energy requirements in staying warm, yet do not suffer from obesity or other typical health problems. In fact, they did not even have a word for cholesterol until we gave them one! Of course, we live different lifestyles from Eskimos and naturally need to feed ourselves differently. However, this example shows that fat can be perfectly healthy provided it is in sync with your personal requirements. Most people's requirements are a lot more moderate, although their biology is identical. Ask your grandparents if their intake during the war – a diet based on lard dripping – caused them to get fat, or develop high blood pressure. (The answer is No).

Fats are an essential part of any good diet. Your body was designed and has evolved to function best on a balance of the three macronutrients – carbohydrates, protein and fats. To take any one out would be disrupt the biology of your body. Fats will never be the reason why you are having trouble shifting that weight that just will not go. However, too much fats (like anything) or the wrong types of fats can wreak havoc with your health (and physique).

An important thing to understand is the way that fats react inside the body. They are broken down slowly within the digestive tract and then processed by the liver, where they can be stored or released directly into the blood stream as triglycerides (blood-borne fat). Once in the blood stream, they can be used by the muscles for low-intensity work or the internal organs to power the daily processes of life.

Because fats are released slowly (and slow down the rate energy-release of foods they are consumed with) they are extremely good at stabilizing blood sugar levels. Controlling blood sugar levels is arguably the most important aspect of weight management, and any clients of mine will be all too familiar with lectures on how to achieve this.

However, fats can have their downside, too. If you eat the wrong types of fat, you are getting almost no nutritional value for your increased energy consumption. You can also distort the profile of fats within your body so that biological processes become compromised and the bloodstream starts to become clogged-up. What I am referring to is Saturated Fats and, in particular, to the modern phenomenon of Trans-Fats.

Saturated are so-called because of their genetic structure; they are a hydro-carbon and every carbon molecule available attaches itself to the maximum number of hydrogen molecules, basically 'saturating' itself in hydrogen molecules. Saturated fats are found in products like animal meat, butter, etc and are generally referred to as the 'bad fats'. Eaten to excess and this is entirely accurate. Because of their molecular shape they clump together very well, becoming quite hard – if you are left with build-up of unused saturated fats, they will find their way into your blood stream and accumulate as hardened surplus, furring up your arteries and making themselves available for fat storage.

Choosing 'bad' saturated fats over their healthier unsaturates causes problem on a more general scale, too. You replace every cell in your body at least every six months, and, when you create a new cell, the cell membrane is made out of fat. The fluid-like properties of polyunsaturated fat make it perfect for the job. When a deficiency of polyunsaturated fat exists (caused by an intake of the wrong type of fats, or a complete phobia of dietary fat) your body is forced to use badly-suited saturates. Their hard, clumpy properties ensure that homeostasis (your body's process of balancing) is compromised, potentially causing problems.

However, saturated fats are not entirely bad – we need a small amount for everyday biological functions (which is why there is saturated fat in breastmilk) and it can be well-utilised by the body for energy. The key thing to remember is that it is an *excess* of saturated fats within the diet that can cause problems – but if you adhere to the common-sense balance that nature dictated, as cavemen did, you will not have to deal with the issues mentioned above.

Trans fats, on the other hand, have absolutely no value to the human body and their consumption should be avoided. Trans fats are those that began life as healthy polyunsaturates but have been chemically changed (*transformed*) through the processes of heating, oxidation and hydrogenation. Food manufacturers do this on purpose because it turns the oils rancid, thus preserving its lifespan. However, the change in state means that these oils' healthy C-shaped molecules into I-shaped molecules, which now easily stick to one another in clumps, making an oil turn solid.

It is this 'clumping together' to solidify that explains why trans-fats tend to be solid at room temperature, just like saturated fats, whilst their saturated brothers remain liquid/oil. An example of this is margarine – and whilst the adverts cheerfully tell us that there are Omega 3s in their wonderful product, they do not publicize the fact that they are in fact corrupted beyond use within this man-made toxin. The traditional choice of butter would be much wiser.

Clearly, there are plenty of fats worth sidestepping. However, so keen are we as a society to do this, we marginalize the intake of the 'good' fats. These are the mono-unsaturates and poly-unsaturates – our essential fatty acids (EFAs). An essential fatty acid is so called

because these are fats that the body cannot manufacture on its own, so they have to be introduced in the diet for optimum health.

There is plenty of promotion within the media of Omega 3s and Omega 6s – these are both forms of polyunsaturated fat and good for health. What is not always communicated to the public is that the ratio between these two is extremely important. The ratio should 4:1 – that is to say, 4 parts Omega 6 to every 1 part Omega 3. However, the average Western diet has a ratio of 20:1 – therefore it is vital to increase the Omega 3s within your diet – this comes with eating the right fats.

Flaxseed oil and other undamaged oils, nuts, seeds and fish will all help to bring back this balance to provide the right amount of EFAs within the body. (They will all also help stabilize your blood sugar levels, aiding weight control amongst other benefits). This will help in many ways, but there are two generic benefits that will help everyone. First, they are converted within the body to a hormone-like substance called prostaglandins; as well as having a calming effect on the individual, they lower cholesterol and ‘purify’ the bloodstream. Second, taking in enough EFAs ensures there is enough available for production of new cells (the cell membrane of every new cell should be made out of oily EFAs) – this avoids many issues, including insulin resistance. There are many other benefits on top of these two, including alleviating joint pain and skin conditions. The message is that you will find your body becoming increasingly out of balance, unless you eat the fats that nature intended us to.

When it comes to your consumption of fats, the message is to use common sense and take in an appropriate amount for your needs. For almost all of the population, this means plenty of oils, fish, nuts, seeds; a sufficient intake of meats; moderate use of cheese; and complete avoidance of pastries, sausage rolls and margarine. All non-athletes who are looking to lose weight would benefit from the moderation (*not* elimination) of carbohydrates/increasing fats and proteins, as this move has a beneficial effect on stabilizing blood sugar levels.

Any expert who promotes an extreme diet is clearly anything but. There are examples of diets based on sound science that become useless and dangerous in the long-term because they ignore the body’s need for a sensible mixture of both macronutrients (carbs, proteins and fats) and micronutrients (vitamins and minerals). Extreme regimes will necessitate a change in your body’s function – only ignorant or arrogant people would want to change something that has operated perfectly for thousands of years.

Therefore, it is vital that you follow a balanced eating plan, making use of the bounty nature has bequeathed us – this includes fats. To get the right balance, I suggest you follow nature’s lead and eat to match the mixture that evolution dictated (eg. the Paleolithic diet). Like many things, be it diet choices or even your exercise order, you should always make your choice based on facts, not the opinions of others. Most importantly, the facts tell us not be scared off healthful fats by the ignorance of others.

Glossary

Trans-fats = a type of fat that began life as a poly-unsaturated oil but has been chemically changed. A good example of trans-fats is the oil used in deep fat fryers (eg. Sunflower or vegetable oil) which, due to the extreme temperatures suffered in frying, is converted to unhealthy trans-fats. Trans-fats are structurally closer to plastic and impair lipoprotein process, which leads to elevated LDL levels in the blood.

Monounsaturated Oils

Oleic Acid = Omega 9 Oil. Is highly prominent within olive oil and canola oil. These are the best choices for cooking oils, because oleic acid, as a monounsaturated fatty acid, is far more stable under heat than polyunsaturated acids (that easily break down into trans-fats).

Polyunsaturated Oils (Essential Fatty Acids)

Alpha Linolenic Acid (ALA) = Omega 3 Oil. Prevalent in Nuts and Seeds. Once digested in the body, is converted to Eicosapentanoic Acid.

Eicosapentanoic Acid (EPA) = Omega 3 Oil. Prevalent in Fish Oil. Converted to Series 3 Prostaglandins (favourable).

Docosahexaenoic Acid (DHA) = Omega 3 Oil. Prevalent acid Fish Oil. Converted to Series 3 Prostaglandins (favourable).

Linoleic Acid = Omega 6 oil. Once digested in the body, is converted to Gamma Linolenic Acid.

Gamma Linolenic Acid (GLA) = Omega 6 Oil. Utilized well in a balanced body and eventually converted to Series 1 Prostaglandins (favourable). If a deficiency of Omega 3 oils occurs, GLAs may be converted to Arachidonic Acid and then to Series 2 Prostaglandins (unfavourable) .

Arachidonic Acid = an unfavourable fatty acids that will potentially be manufactured in the body from GLA. However, most of the Arachidonic Acid in the body comes from overconsumption of meat fats.

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