

GI – Glycemic Index Explained

Over the last couple of months I have been asked about the Glycemic Index commonly called the GI. And the other favourite Cholesterol, now whilst I am not an expert on either, I know some people who are.

Firstly the GI explanation and how it's used for both Diabetics and for older people who would like to keep trim and fit without dieting to within an inch of their lives.

The GI range is a measure of the carbohydrates which are normal everyday food types that we all eat on a regular basis. Whilst the concept of GI may be new to many of us. It's actually been around since the late 70s early 80s! At that time it was used mainly by elite athletes to control energy levels in both training and competition. And just for you I have contacted the University of Ontario where the Discovery was first made public by Dr David Jenkins 28 years ago. I can recommend a superb book written very accurately by Rick Gallup in conjunction with Tesco, who has over 500 products with a GI classification of High- Medium- and Low. The publisher is Virgin Books online at www.virgin.com/books for information price £3.99.

For Diabetics and those who wish to add the GI foods to their Healthy living list you will need to aim for: LOW or MEDIUM with HIGH being a treat. Look for the GI logo  on products. It's no point in going into great detail, as I would recommend you buy the book or see your own dietician.

As an example though: Glucose is the highest at an index of 100, with Sucrose (sugar) 59 = Medium. Fructose (fruit sugar) 20 =Low. The lowest fruit is the Apple at 39; so an apple a day will keep the doctor away.

Cholesterol is back in the news, it's probably never been out of it, but every now and again we are reminded that it still lurks in the arteries of the population. But, from the questions raised I do sense elements of confusion, which may relate to overload on the information front. For example we are now told that Dietary Cholesterol should be avoided if we are at risk of Hypercholesterolemia, which is usually a genetic problem of high Cholesterol levels in the blood. One company cashing in on the cholesterol bandwagon has even produced lists of Foods that contain Cholesterol. Suffice to say the FSA Guidelines are that Dietary Cholesterol has little or no bearing on Cholesterol within the body; Cholesterol is produced in the liver from Saturated Fat and from animal or dairy sources. So if you see a list of so called Cholesterol containing foods that make you want to fall on the sword straight away, ignore them and just check out the "**Saturated Fat**" content of the foods you are buying, always remembering this - whilst Cholesterol is the villain of the piece, the human body could not survive without it! It's the excess and type that's the problem and usually if a reasonably Healthy Person can keep the levels at or below what your Health Professional would recommend for you, which is usually below 5. You should be OK if you keep eating sensibly i.e. Fish and Chips and loads of dairy products every day is certainly a **no-no!** The following extracts from readable science journals should hopefully ease your Cholesterol worries:

How Cholesterol affects the body.

Cholesterol is a fat-like substance or lipid that is present both in the diet and in the human body. Some important facts about Cholesterol are:

- It is present only in foods which are of animal origin; e.g., meats, dairy foods and egg yolks.
- It is an important structural component of all cell membranes.
- It is produced in the liver and other tissues of both humans and animals.
- It is required for the formation of certain hormones and the synthesis of vitamin D in the skin

The difference between "Good" and Bad" Cholesterol

*The "good" and "bad" terms refer to the forms in which Cholesterol is transported in the blood and **do not refer to Dietary Cholesterol.***

Good Cholesterol

*Cholesterol is associated with protein carriers in the blood known as lipoproteins. A lesser amount of blood Cholesterol bound to protein is in the form of **HDL or High Density Lipoprotein**. In contrast, the "**good**" or **HDL-Cholesterol** functions in the transport of **cholesterol back to the liver for subsequent breakdown and elimination from the body**. Thus, increasing the level of **HDL-Cholesterol** can be protective against cardiovascular disease.*

Bad Cholesterol

*Approximately two-thirds of the total blood cholesterol is in the form of LDL or Low-Density Lipoprotein, referred to as "**Bad Cholesterol**", since elevation in the blood levels, over many years, can lead to the formation of plaque on the walls of arteries. Progressive plaque formations increase the risk of myocardial infarction.*

How to reduce total & LDL-Cholesterol

Lowering the dietary intake of the following "fats" can significantly lower total and LDL-Cholesterol levels. For example, reduce the consumption of:

- saturated fats from fatty meats and dairy products, as well as;
- "trans" fatty acids which are found in processed and fast foods containing vegetable shortenings or partially hydrogenated vegetable oils.

In general, the risk of Heart Disease increases as the total LDL-Cholesterol level rises and decreases with the improvement of HDL levels;

So there you have it in a nut shell! Which have been proved to reduce bad Cholesterol! The nuts (providing they are almonds) and not the shells, which may reduce Cholesterol, but would probably break your teeth.