

WHAT DO YOU KNOW ABOUT OBESITY?

by John Appleton

If any of us are not aware of how obesity has crept up on us in New Zealand, a recent NZ Herald article made it very clear. The headline – “Obesity doubles over 30 years” could not be more unequivocal. Somehow our clean green little country of 4 million people has got itself in the records as 6th fattest among western nations.

We sit just behind Australia on the (OECD) list for adult obesity, which is headed by the United States.

The shocking figures tell us that 21% of adults in New Zealand are obese but when we take all those who are overweight into consideration, the figure is 56%

The talk today is of a worldwide epidemic often referred to as ‘Globesity’ and scientists seem to be unable to reach a consensus on what is driving the problem.



So why is that in today’s world everything is 99% fat free apart from the people?

The answer to this question is (to quote Al Gore) ‘an inconvenient truth’. We have been led up the garden path by a massively powerful food processing industry to believe that fat is the demon and thus highly addictive junk foods loaded with sugar have been consumed in increasingly large quantities. Anyone who dares to suggest that sugary cereals, snack foods, white flour products, yoghurts and ice cream (which can be up to 50% sugar) are major contributors to our woeful health statistics, is attacked by institutionalized nutritionists and dieticians who are paid by industry.

Meanwhile obesity which leads to diabetes heart disease arthritis and cancer becomes an ever increasing burden on our health budget. So great is this problem that in the not too distant future health issues that are directly related to poor food choices will all but bankrupt western economies.

While there are processed food lobbyists gaining the ear of politicians across the political spectrum, there will be no easy solutions. The reason - processed foods are very profitable; they are made from very cheap ingredients and they will sit on supermarket shelves for months. One doesn’t need to have a PhD in biochemistry to understand that these foods have no place in a healthy human body.

The reason that fat consumption has been so easy to target is because when we talk about energy the number of calories in our diet are used as the yardstick. A calorie is defined as the amount of energy required to raise the temperature of one gram of water by one degree Celsius. At 9 calories per gram, fat supplies more than twice the calories per gram as carbohydrates and protein which weigh in at around 4 calories per gram.

Using this comparison, the food processing industry has found it easy focus the attention on fat but there is **one very important fact that has been conveniently overlooked.**

It's the effect of the calories on your hormones, and the effect of the hormones on how your body decides to use the calories you're eating that is behind the problem.

When we consume calories by way of carbohydrates (refined) which are converted in the body to glucose our blood sugar rises and our pancreas responds by releasing the hormone insulin which is needed to regulate the blood sugar. When we eat fat we **don't** raise blood sugar levels and thus insulin is not required.

Insulin has an evolutionary role to store excess nutrients and thus it is often referred to as 'the storage hormone'. We come from a time of feast and famine when if we couldn't store the excess energy during times of feasting, we would not be here because all of our ancestors encountered famine. We are only here because our ancestors were able to store nutrients (excess carbohydrates) in the form of fat in case of future famine. When we raise our insulin production in response to consumption of carbohydrates we are sending a hormonal message to store fat.

Not only does an increased insulin level tell the body to store carbohydrates as fat, it tells it not to release any stored fat. It does this by **activating** an enzyme called lipoprotein lipase. This enzyme acts as a roadblock for the removal of triglycerides (fat) out of the fat cells. To make it even worse, insulin **inhibits** another enzyme called hormone sensitive lipase which is responsible for the breaking down of stored fats, on the waistline thighs and buttocks.

So the excess carbohydrates in your diet not only make you fat, they make sure you stay fat. This is why most people see very little or no results in weight reduction, even though they exercise.

A recent Harvard School of Public Health study may stand dieting wisdom on its head, after low-carbohydrate dieters lost more weight than low-fat dieters despite eating 25,000 extra calories over a 12-week study period. And on 1st February a New Zealand Herald article reported on research conducted at the Albert Einstein College of Medicine in New York by saying that "dietary recommendations particularly those on fat may have done more harm than good". They say "the collective waistline has continued to expand and many experts have expressed concern that Americans have simply replaced their fat intake with sugar often in the form of heavily marketed low-fat snack foods".

Dr Steven Wolf of Virginia Commonwealth University and Dr Marion Nestle of New York University say "A disturbing trend occurred during the years when the public was advised to limit dietary fat; food companies substituted sugars for fat in many processed foods and the prevalence of obesity rose".

Anyone who is genuinely concerned about the issue of obesity and everything it means to society has to look beyond the misinformation that is pumped out ad-nauseam by industry spin doctors and focus on the biochemistry of the problem. Consumption of Carbohydrates (in the form of refined grains and sugars) = increase in blood sugar levels = insulin production = sugar stored as fat.

The Calories in these items could:

