



Fruit Sugar is Still Sugar

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“Are you saying I should stop eating fruit?” I was asked this in a recent consultation. The questioner, a lady in her 40s, was understandably dismayed with what I had just told her; specifically, that the effort she had put into increasing her fruit intake may have been a major factor in her struggle to lose weight.

I had just pointed out that her carbohydrate intake was high by anyone's standards, let alone someone who wants to lose weight. At seven servings of fruit a day, much of this carb overload was the direct result of her intake of her 'healthy choices'. My suggestion to reduce this amount was, naturally, going against all that she had been told.

It's not that fruit is bad, only that it's advantages are oversold as a simple panacea to the burger-and-chips culture that dominates our nation's food choices, and that it's disadvantages are seldom mentioned; equally, the nutritional differences between fruit and vegetables is simply not discussed. Like many things, eating the right amount for your aims is our best bet.

The lady in question, whose primary aim was weight loss, was not doing this. Since starting her New Year health kick three months previously, her typical daily diet was:

Breakfast: Fruit smoothie – 1x banana, large handful blueberries and an apple

Lunch: 'Light' sandwich, 2x satsumas, 1x banana

Afternoon Snack: Yoghurt and so-called 'healthy' crisps

Evening meal: Normal meal - Shepherds Pie / Chicken Stir Fry / Rice dish

Drinks: Several coffees, 1 Orange juice

I calculated her daily carbohydrate intake at around 240g per day. This represents more than double the amount I would suggest for someone her size (despite the aims to lose weight, her lean mass was 42kg, which is on the small size). Equally, her intake of protein and essential oils was dismally low, a common factor in individuals who over-consume carbohydrates. We agreed on the dietary changes and met again three weeks later. Whereas four months of focused 'healthy eating' had not delivered any weight loss at all, the new regime had already seen a drop of 3.4kg.

The big problem with eating lots of carbohydrates is that doing so causes the release of insulin. Insulin is a hormone that shuttles carbohydrates into the body's energy producing cells. It also shuts down fat-burning in an instant. Fat cells continually break down triglycerides (stored fat) into fatty acids to make them available for energy production; this is done so under the control of hormone sensitive lipase, which is inhibited by insulin release. Insulin also increases the conversion of carbohydrate into stored body fat. Eating too many carbs over a period of time makes you fat and insulin resistant, something even mainstream schools of nutrition now accept.

When it comes to the nutritional concerns associated with the high consumption of carbohydrates, fruit is often excluded from the picture. In fairness, the density of vitamins,

minerals, phytonutrients and antioxidants is often far higher per calorie of fruit than it is in a calorie of rice, bread or other grains. Fruit generally provides impressive . However, the produce still contains significant amounts of sugar and mainstream nutritionists, whose knowledge is made up entirely of what the textbooks tell them, have developed a habit of discounting sugar intake if comes from fruit. Their attitude suggests that the body somehow does not recognise sugar if it is supplied in a fruit-shaped vehicle. This is not true. The difference between fruit and vegetables is rarely pointed out.

Fruit sugar is actually fructose, whereas the sugar found in vegetables is sucrose. There are chemical differences between these compounds and they have (slightly) different effects in the body; fructose is a monosaccharide, a single six-carbon unit of sugar. Sucrose is a disaccharide, a combination of two monosaccharides, namely fructose and glucose. When processed in the liver, fructose turns to fat quicker than other sugars and stimulates more fat synthesis than other sugars (1, 2, 3, 4, 5). While there is likely a number of factors that are responsible for this effect, the most important appears to be that the rate of fructose breakdown cannot be controlled by the phosphofructokinase enzyme the way other sugars are. The result of this – together with excess production of glucose, glycogen, pyruvate and lactate – is the uncontrolled production of the glycerol and acyl portions of the acyl-glycerol molecule, which forms triglycerides to fill waiting fat cells. In short, too much fructose overloads the liver and makes you fatter.

In summary, excessive intake of carbohydrates and sugar is a reliable way of blocking fat burning, especially in the presence of low dietary protein and oil. Excessive intake of fruit is at least as likely to be an obstacle as other forms of sugar and, as seen in the complex procedures explained above, more so when supplied in excess. My generic recommendations are to consume a wide variety and a high quantity of vegetables and salads, which deliver a low amount of fructose and other sugars in relation to their nutrient content, and to intelligently balance your overall carbohydrate content. The take-home message is that carbohydrates can make you fat and, whilst it does provide a lot of benefits too, fruit is no exception.

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