rude food

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Fat Of The Matter

Processed food – like instant noodles, commercially produced white bread or fast food French fries – is the real enemy as it contains unhealthy trans-fats

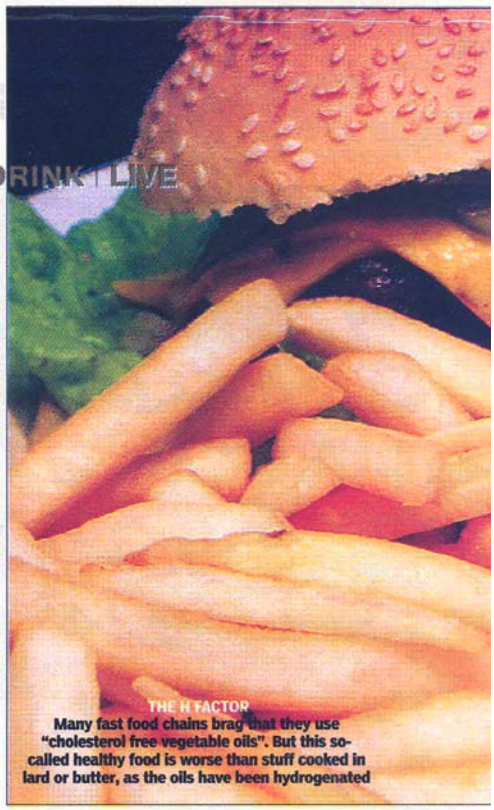
OKAY, I guess the time has come for me to put my science where my mouth was. In last week's paen to the glories of delicious, golden butter, I said that the old food orthodoxy (i.e. butter is poison) was dead and that scientists had now conceded that many of the butter substitutes that were once considered super-healthy (things like margarine and Dalda-type cooking mediums) had been shown to be worse for you than butter. The real enemy I said, was not butter — consumed in moderation, of course — but processed food which was full of unhealthy trans-fats. This is why French people who eat lots of butter have a lower rate of heart disease than Americans who steer clear of butter but eat lots of processed food.

This week I am going to try and explain the science behind these seemingly outrageous claims.

Let's start with the basics. All fats fall into two broad categories: saturated and unsaturated.

Lay people believe that saturated fats are animal fats (butter, lard etc.) and are bad. This is not entirely correct. An excess of saturated fats can clog your arteries but nobody says that small quantities do any harm. The American Heart Association says that up to ten per cent of your daily calorific intake can take the form of saturated fats. If, like most Indians, you are not big on animal fat (as in bacon fat or big fat-marbled steaks or fatty sausages and pies) then it is hard to see how the saturated fats we do eat — butter on toast, a little *ghee* in a few sweets etc — can exceed this allowance. Europeans tend to eat cheese and cook with cream (which are rich in saturated fats) so they may have a problem (though actually, as we have seen, practice suggests that they are better off than Americans) but we are okay.

BREAKFAST TIME
There are trans-fats in in breakfast cereal (below) and chocolate bars



THE H FACTOR
Many fast food chains brag that they use "cholesterol free vegetable oils". But this so-called healthy food is worse than stuff cooked in lard or butter, as the oils have been hydrogenated

Nor is it true that all saturated fats come from animals. A fair number of vegetable oils are also saturated: coconut oil, palm oil etc. Logically these should be as bad as butter is supposed to be but no American doctor has ever explained, as far as I know, why countries where coconut fat is an essential part of the diet — in Thailand, for example, coconut milk and coconut cream are liberally used — have lower rates of heart disease than much of the West. (And they are also much thinner).

The second category of fats — and the ones promoted by doctors for years — are unsaturated fats. These are divided into mono-unsaturated fats, which include olive oil and are health neutral, and poly-unsaturated fats which include soya, safflower and sunflower oil. We believe that poly-unsaturated fats are good for us and yes, in some ways, they are. The Omega oils (called essential fatty acids) which the body needs, but cannot produce, are all poly-unsaturated fats (fish oil is a good source of Omega 3, for instance).

But when we talk of poly-unsaturated fat, we don't really mean fish oil. We mean Saffola or sunflower oil. Doctors suggest that these will lower cholesterol but because the evidence is mixed, the suggestion is carefully phrased: "may help lower your blood cholesterol level" etc.

Our problems begin with the medical establishment's over-simplifications. Even if unsaturated fats are not bad for you (everybody shies away from saying "good for you"), it depends on the form in which they are consumed.

The food business has taken the vegetable-is-better-than-animal-fat orthodoxy promoted by doctors and manufactured products that are actually *bad* for you.

The food industry needs to invent products that have a shelf-life and sometimes it needs to turn liquid vegetable oils (such as sunflower oil) into a solid product (like margarine or Dalda-type *ghee* substitutes). To achieve this, it uses chemical processes that add hydrogen.

If you add hydrogen to an unsaturated oil, you end up with what is called a hydrogenated oil. You want the science? Okay. When unsaturated fats are hydrogenated, some of the hydrogen atoms are added on opposite sides of the molecule to the already attached hydrogen. CIS double-bonds convert to trans double-bonds and the fatty acids become saturated.