

# Beer and Health

## Bliss Up in a Brewery

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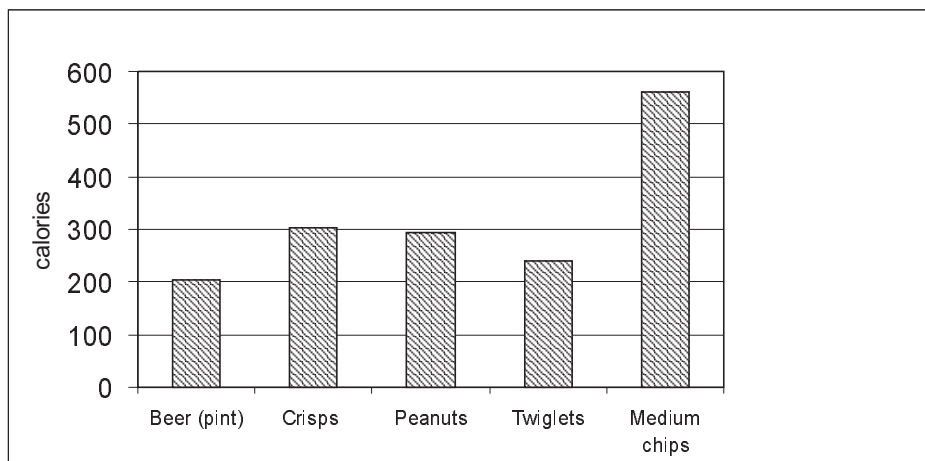
### Does beer make you fat?

This has to be the question I am asked most frequently. To start with, beer is fat and cholesterol free. Compare this to a serving of semi skimmed milk which contains 6 g of fat and 22 mg cholesterol (250 ml)!

Whether or not a food is 'fattening' depends on how many calories it has, and of course how much of it one consumes! A 330 ml bottle of beer (4.5% ABV) contains on average 130 calories. This value is fairly close to that for a glass of wine (120), but much less than for premix drinks (150- 200 calories) that often contain high amounts of sugars (comparison based on ~1.5 units alcohol).

Beverage	Calories/portion
Beer	130
Wine	120
Barcardi Breezer	220
Smirnoff Mule	155
Gin and Tonic	205

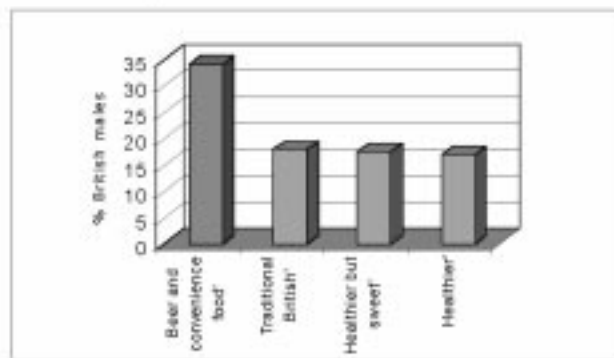
Pints of beer are often ordered in pubs with a bag of crisps, or some other bar snack. Its not usually appreciated that these snacks have more calories than the pint itself! For example, a bag of crisps may have about 250 calories, whereas a pint of beer has about 200 calories. If one can resist the temptation to nibble, the trip to the pub does not have to be fattening!



Calorie values of typical pub snacks

So why is there the persistent image of the beer belly? A problem lies in the food choices and lifestyles associated with beer drinking. For example, if you look at the dietary patterns of British men you find that many of them fall into a dietary group that has been called the 'beer and convenience food' diet group. Lots of high fat foods and low amounts of vegetables typify the food choices in this group. In other words, these men have an unhealthy diet! So yes, there is a link between beer drinking and fatty foods, but why blame the consequences of a high fat diet (i.e. the belly) on the beer? Beer is not a high calorie or high fat food – the evidence for beer causing the belly is purely circumstantial! Why not call it a 'chip belly' or 'burger belly' instead? I rest my case.

### Dietary Patterns of British Males



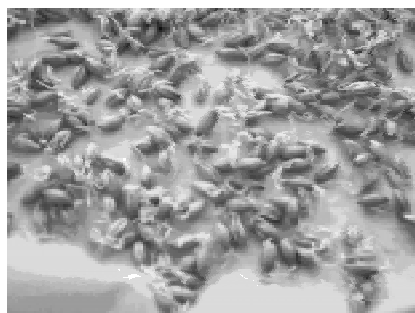
Pryer et al 2001 J. Epid. Comm. Health 55:29-37



Putting beer bellies aside, there is another issue that is important: beer calories are not 'empty' calories. In fact, since beer is made from cereal it has significant amounts of fibre, antioxidants, minerals and vitamins. Yes, VITAMINS! For most people this is a startling discovery, and bears further examination (unlike the belly) and for those now shaking their heads, please go and consult your nutritional tables – this is not a joke!

The reason why many people think I am talking rubbish at this point is they don't realise that the main ingredient in beer is barley. Most people accept that cereals have vitamins, but they don't make the logical leap to appreciate that cereal products such as beer must also contain vitamins. Many of these vitamins, in particular the B vitamins carry through into the bottle.

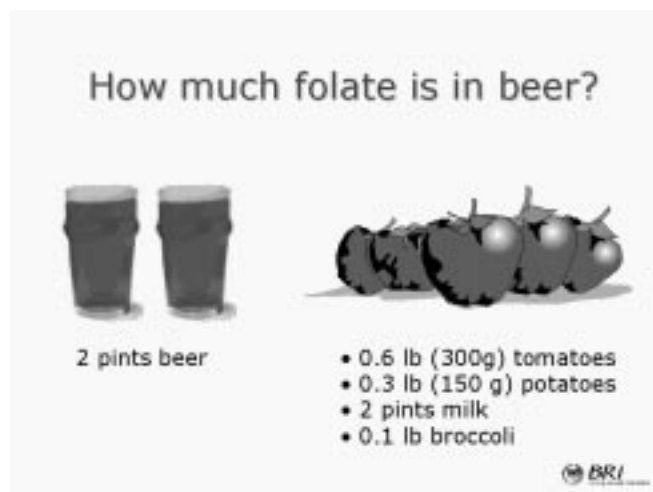
### Beer is made from malt - sprouted barley



So what is the relevance of this to our every day diet? Surely we are well-nourished and are all getting enough vitamins anyway? On the whole, this is correct, but there are some vitamins that are quite likely to be lacking in the diet – and one of these happens to be folate.

Folate has been recommended for a long time for pregnant women in order to protect against birth defects, and obviously beer drinking is not something that is recommended for pregnant women! However, in the last decade, it's become clear that increasing folate intake may provide protection against cardiovascular disease and cancer. Cardiovascular disease kills about 40% of us in Western society, so this has to be taken seriously – in fact, increasing the folate intake of the population is now an important public health issue.

To put this into context: For a man, two pints of beer would be classified as 'moderate' beer consumption. In these two pints, the amount of folate he would consume would be the equivalent to the amount of folate in 0.6 lb (300g) fresh tomatoes, or 0.3 lb (150 g) potatoes, or 2 pints of milk or a small serving (0.1 lb, 50g) of broccoli.



The amount of folate in beer has not gone unnoticed in the medical community either. A few years ago Frommel and Mobarham, a pair of Canadian physicians, commenting on public health said that ' beer accounts for 10% of the total folate intake of adults in the UK. Encouraging temperance, at least in regard to beer, would produce a net effect which would not be beneficial'. Don't forget that they are talking about the population as a whole and this would include many non beer drinkers. Two pints of typical UK beers would provide nearer to 25% of the daily folate intake! Getting back to our 'beer and convenience food ' diet men – they do at least have some of the highest folate intakes!

'Beer and health' may seem like a contradiction in terms, but hopefully I have been able to provide you with some surprises and new information that may cause you to think again. So, please take home with you the following messages:

- Beer is a cereal food
- It is fat and cholesterol free
- It is not a high calorie drink
- It contains vitamins
- Beer can make a *positive* contribution to a healthy diet

And as for the 'beer' belly.....it's just a lifestyle issue. Honest.