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HEALTH

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Has the calorie had its day?

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Counting calories is an addictive pastime for many a dedicated slimmer. Croissant or toast? Curry or pizza? Sandwich or salad?

Food labels help millions of people decide what to buy and what to eat. So it's important that they are accurate but, according to some experts, the system on which they are based is flawed and misleading.

A calorie is the energy we get from food. Too much energy and we end up getting fat. But how is the calorie content of food calculated?

Back in the 1800s an American chemist, Wilbur Atwater, devised the system on which calorific values on our food labels are still based.

Basically, he burned food and then measured how much energy it gave off.

He then estimated the amount of energy the body used up by calculating the amount of energy in undigested food in waste products.

That thankless task prompted Atwater to conclude that every gram of carbohydrate produced four calories, every gram of fat produced nine, and every gram of protein produced four calories.

These figures have been used as the basis for calculating the calorie content of food ever since.

Energy usage

Nutritionists have always known that these calorific values are approximate.

But recently some nutritionists, including Dr Geoffrey Livesey, are saying that the calorie content of items in our shopping baskets could be up to 25% out.

This is because the texture of the food, its fibre content, and how it is cooked can all affect the amount of energy the body is able to get from food, he says.

Even the process of chewing food uses up energy and, therefore, calories.

The more protein or fibre in a food, for example, the harder the body has to work to process it.

So when we are weighing up which ready meal to buy in the supermarket, we need to think about more than just the calories contained in food before we eat it - we need to consider how our body digests and processes it too.

Dr Livesey says: "People need to be given the right information to make the right choices, following the latest scientific understanding, because if you are not following the science, you're following something else.

"When you consider calories have been used as the only measurement for understanding foods' impact on weight loss for nearly 200 years, despite our huge advancement in nutritional science, you realise how outdated calorie counting is."

'Calorie conscious'

So is it time to overhaul the current system of food labelling?

Dr Susan Jebb, head of nutrition at the Medical Research Council, says it's right to say that some calories are more filling than others but, "in the grand scheme of things, we're talking about really small differences here."

She added: "When it comes to advising the public and getting people to eat fewer calories, I'm not sure this is going to be helpful."

"If you're trying to lose weight you have to be calorie conscious, not calorie counting all the time.

"In any case, we need to test if this is better way of advising people than the current way."

Gaynor Bussell, a dietician and spokesperson for the British Dietetic Association, agrees that overhauling the whole system on which calories are calculated doesn't make sense without backing from scientists and governments.

What matters is eating healthily and that is "not a precise art anyway", she says.

"What's important is to eat fewer calories so that the body is in negative energy balance. How you calculate it doesn't matter."

Weight Watchers is proposing a new system called ProPoints, which it says is a more accurate alternative to calorie counting.

It's based on a daily allowance which takes into account gender, age, weight and height. All fruits and most vegetables contain zero ProPoints.

The system tells you "the amount of energy that is available in a food after you've eaten it," the weight loss organisation maintains.

The UN Food and Agriculture Organization looked at the issue a few years ago and decided

that changing the way calories are calculated would need huge upheaval and lots of money - all for marginal gain.

So don't fret too much over the labels at the supermarket - eating sensibly is far more important.

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