The truth about carbs!

Article contributed by Edinburgh Community Food

Carbohydrates are in the news. We hear an awful lot about them these days. There are low carb diets — some championed by celebrities — and high carb diets. We see people eating burgers without the bun and Olympic athletes consuming huge amounts of pasta. There are complex carbs, simple carbs, digestible carbs, non-digestible carbs, white carbs and brown carbs. But what is a carb, why do we hear about them so much and do we need to worry about them?

What is a carb?

Simple (white) Carbs Complex (brown) Carbs

Sugar Brown flour

Glucose Brown bread + rolls

White flour Brown pasta

White bread + rolls Brown rice

White pasta Oats

White rice Fruit and vegetables

Cakes Whole grains (e.g. buckwheat, couscous, millet)

Biscuits Beans and pulses (e.g. lentils)*

Pastries Seeds*

Pizza bases Potatoes (with skins!)

Soft drinks

Honey + jams *Although 'protein' foods, they contain large amounts of good carbs

Simply put a carbohydrate is a molecule made out of carbon and hydrogen. Whether it's brown rice, pasta or sugar, our bodies convert carbs into glucose and it is glucose that we use for energy. Carbs are what give us 'get up and go', what power us through our day. So far, so good. But when it comes to the

human body and what we put into it nothing is ever easy! There is a bewildering array of carbs which do all sorts of different things. And not all of them are good for us, either.

There are two basic types of carbs: simple and complex. You can also think of them as 'white' or 'brown'. If you have a wee look at the table you'll see what I mean. 'White' carbs are things like white bread, white pasta and table sugar. 'Brown' ones include brown bread, brown flour and oats. When you hear about 'bad' carbs people are talking about the simple 'white' ones. Good carbs are brown!

The 'good' carbs

What's so good about these brown carbohydrates? Brown carbohydrates contain far more vitamins and minerals than white ones. They also contain lots of fibre. When we make white flour (a fairly modern invention) we remove nearly all of the goodness from the plant, all the stuff that we've evolved over millions of years to eat and to need. What's left in the white stuff is only refined carbohydrate.

Besides missing out on all the great nutrition, white carbohydrates are also digested very quickly, so we get a sudden peak in energy (a kind of 'high'). But it's quickly followed by a slump and by tiredness. And these 'highs' and 'lows' have quite a serious effect on our overall mood, too. Brown carbs, on the other hand, give us a slow and gentle release of energy and keep us full for longer. Additionally, they are meant to help keep our mood stable. So, complex brown carbs at breakfast (porridge or brown toast, for example) mean that we are less likely to go for that mid-morning energy drink and chocolate bar!

Good 'brown' carbs have two main parts: digestible fibre and non-digestible fibre. Hang on, not digestible? Do we really need to be eating something which we can't even digest? Yes we do! Let me explain. The non-digestible fibre provides 'bulk'

for the food as it passes all the way through our system, meaning that — not to put too fine a point on it — our toilet habits are regular and our bowels remain healthy. Fruit and veg contain quite a lot of this non-digestible fibre. It is often found in the skins, which is why it is recommended that we don't peel them. The digestible part also has functions in the body: it helps to lower our cholesterol and 'ferments' in our bowels, producing vitamin K (to make our blood clot) and some B vitamins. Both types of fibre help us to process sugars in a healthy and natural way and may help reduce the risk of type 2 diabetes and bowel cancer.

But there's more: a lot of evidence suggests that fibre has a really good effect on blood pressure. By eating 2 or 3 portions of complex carbohydrates each day we can significantly lower high blood pressure! A diet high in these carbs can also help to lower artery-clogging cholesterol. High cholesterol, along with high blood pressure, is what increases the risk of heart attacks and strokes. So you can see that a diet high in brown carbs is a good thing!

How much should we eat?

But just how much carbohydrate should we be eating? Have a look at the eatwell plate. The large yellow section of the plate represents carbs and, as you can see, it's huge! It is recommended that roughly one third of our diet is carbohydrate — and remember, they should be brown — so, when planning your meals, base them around carbs!

Hidden carbs?

OK, so now we know that brown carbs are good and white ones are bad. But trying to lower our intake of white carbs isn't that easy. Yes, making the switch from white to brown will have a significant effect on our health. However, there is a lot of sugar hidden in really common foods we buy. Labels on food packets can be difficult to make sense of. While some

manufacturers tell you simply that e.g. this tomato ketchup has 22 grams of sugar per 100 grams you eat, other manufacturers are a bit sneakier. There is a daunting list of alternative names for 'sugar', 257 of them in fact!

Here are some common ones:
Different names for sugar
High fructose corn syrup
Dextrose
Fructose
Glucose
Fruit juice concentrates
Honey
Invert sugar
Maltose
Malt syrup
Molasses
Barley malt
Maltitol
Treacle

So, what can we do? When looking at food packets use the 'traffic lights' on the front. Aim for foods that are 'green' for sugars (and beware of low fat or zero fat products − they are often laden with sugar to make them taste nice!). And − if there is one thing you take away from this article − make the switch from white to brown. You won't regret it!

If you have any carbohydrate-related queries feel free to contact Chris at cmantle@edinburghcommunityfood.org.uk

With lentils, nuts, veg and wholemeal flour, this delicious recipe is chock full of great complex carbohydrates!

Lentil and Cashew Nut Roast

Ingredients:

- 200g red split lentils, rinsed
- 450ml vegetable stock
- 1 bay leaf
- 100g unsalted cashew nuts
- ½ tbsp oil
- 1 large onion, finely chopped
- 1 large or 2 small leeks, trimmed and finely chopped
- 1 red pepper, deseeded and chopped
- 100g mushrooms, finely chopped
- 1 garlic clove, crushed
- 1 tbsp lemon juice 75g mature Cheddar cheese, grated
- 100g wholemeal breadcrumbs
- 3 tbsp chopped fresh parsley
- 1 egg, lightly beaten

TOMATO SAUCE:

- 1 tbsp tomato purée
- ½ tsp paprika
- 400g can chopped tomatoes
- 150ml vegetable stock
- ½ tsp dried mixed herbs

Method:

- 1. Add lentils to a saucepan. Add the stock and bay leaf and bring to the boil. Reduce the heat to a gentle simmer, then cover and cook for 15 minutes until the lentils are soft and pulpy and the stock has been absorbed. Stir once or twice towards the end of to prevent the lentils sticking. Discard the bay leaf
- 2. Meanwhile, put the cashew nuts in a non-stick frying pan and toast over a moderate heat until lightly browned, stirring frequently. Set aside to cool, then roughly chop. Preheat the oven to $190^{\circ}C/gas$ 5. Line the bottom of a 1.4 litre loaf tin with a piece of greaseproof paper
- 3. Add the oil to the frying pan and cook the onion over a moderate heat for 5 minutes. Remove half the onion and set

aside for the sauce. Add the leeks, red pepper, mushrooms and garlic to the pan and cook for a further 5 minutes, stirring occasionally, until tender. Stir in the lemon juice

- 4. Tip the lentils and veg into a mixing bowl. Stir in the breadcrumbs, cashew nuts and 2 tbsp of the parsley, followed by the grated cheese and beaten egg. Spoon into the loaf tin. Level the top and cover with a piece of lightly oiled foil
- 5. Bake the loaf for 30 minutes, then remove the foil and bake for a further 30 minutes or until a skewer (or knife) inserted into the centre comes out clean. Remove from the oven and leave to cool for 10 minutes before turning out and cutting into thick slices
- 6. While the loaf is baking and resting, make the tomato sauce. Put the reserved onion and remaining sauce ingredients in a small pan. Bring to the boil, then reduce the heat, and simmer for 20 minutes, until slightly reduced. Stir in the remaining chopped parsley before serving with the loaf

Submitted by Christopher Mantle



