



# FACTS ABOUT CARBOHYDRATES

Everything you need to  
know about carbohydrates

## CARBS – GOOD OR BAD?

---

Carbohydrates are the sugars, starches and fibres found in fruits, grains, vegetables, and milk products. Though often removed in trendy diets, carbohydrates – one of the basic food groups are important to a healthy diet. It's important to state from the start that not all carbs are the same and not all of them are bad for you! What matters most when it comes to carbs is the type, quality and quantity in our diet that is important.

### TYPES OF CARBOHYDRATES

- **SUGAR** - Found naturally in most foods such a fruit, honey, milk (lactose)
- **STARCH** - Comprised of many sugar molecules bonded together. Very common in food that come from plants. Bread, rice, potatoes, and pasta all release their energy slowly throughout the day
- **FIBRE** - Cover the diverse range of compounds found in the cell walls of foods that come from plants. Good sources include fruit and veg with skins on, wholegrain bread, whole-wheat pasta, and pulses (beans, lentils etc.)

In a healthy balanced diet, carbs should be the body's main source of energy and 1 gram of carbs provides 4kcal.

To provide this the carbohydrate molecules are broken down into glucose (a form of sugar) before getting absorbed into the bloodstream. Once in the bloodstream insulin helps the glucose enter your body's cells which, in turn, provides the fuel your body needs.

**HOWEVER!** Excess glucose will be converted to glycogen and stored in the liver and muscles; any excesses of glycogen will be converted to fat. Long term this can lead to Obesity, High Blood Pressure, Type II Diabetes, and other such health issues!

*The two main forms of carbohydrates are:*

- **Simple Carbs** - sugars (such as fructose, glucose, and lactose).
- **Complex Carbs** - starches, which are found in foods such as starchy vegetables, grains, rice, breads, and cereals.

The body breaks down (or converts) most carbohydrates into the sugar glucose, which is absorbed into the bloodstream.

Foods that are high in fibre and starchy carbohydrates will release glucose slower than the carbohydrates found in sugary drinks and food.

It's well reported that we do not eat nearly enough fibre in our daily food intake, just 18g on average. The government guidelines are that we should have at least 30g of fibre a day!

## SHOULD I CUT OUT THE CARBS? - NO!

---

Our bodies can function well enough without sugar, but we cannot eliminate carbs from our diet.

Carbohydrates help to fuel your brain, kidneys, heart muscles and central nervous system. For instance, fibre is a carbohydrate that aids in digestion helps you feel full and keeps blood cholesterol levels in check. A carbohydrate-deficient diet may cause headaches fatigue weakness difficulty concentrating nausea constipation bad breath and vitamin and mineral deficiencies.

Carbohydrates are also the body's main source of energy and the without them our body will to turn to fat and protein for energy instead. This means if you are trying to maintain muscle, increase muscle or speed up your metabolism, you don't want to be burning up protein / muscle. Losing the carbs means you will also lose vital nutrients needed by the body, such as calcium, iron, and B vitamins.

As stated above, if there are no carbs in your diet your body will use protein or any non-carbohydrate substances into glucose. This in turn will raise your blood sugar and insulin levels!



## BOTTOM LINE

---

### IF YOU EAT MORE CALORIES (REGARDLESS OF THEIR SOURCE) YOU WILL GAIN WEIGHT.

According to the Government's 'Eatwell Guide', just over a third of your diet should be comprised of starchy food (potatoes, pasta, rice etc. and another third should be fruit and veg which means that over half your daily calories should come from starchy foods, fruit, and veg.

### COMMON QUESTIONS -

#### • WILL CARBOHYDRATES MAKE ME FAT?

Whilst carbs, protein, and fat all provide your body with energy, your exercising muscles solely rely on carbs as their main source of fuel. However, there is a limit to how much glycogen can be stored in your muscles; therefore, they need to be topped up regularly to maintain energy levels. A low carb diet will lead to a lack of energy during exercise, fatigue will set in earlier and your recovery time will be delayed. Eating too much of anything will lead to an increase in weight.

#### • CARBOHYDRATES & EXERCISE

Whilst carbs, protein, and fat all provide your body with energy, your exercising muscles solely rely on carbs as their main source of fuel. However, there is a limit to how much glycogen can be stored in your muscles; therefore, they need to be topped up regularly to maintain energy levels. A low carb diet will lead to a lack of energy during exercise, fatigue will set in earlier and your recovery time will be delayed.

#### • WHEN IS THE BEST TIME TO EAT CARBS?

When you should eat carbohydrates particularly for weight loss is the subject of much debate, but there's little scientific evidence that one time is better than any other. It is recommended that you base all your meals around starchy carbohydrate foods, try and choose higher-fibre, wholegrain varieties when you can.

## EATING CARBS IN MODERATION MAY HELP YOU LIVE LONGER

---

While a low-carb diet might be beneficial for weight loss, a 2018 study found overweight dieters who cut their carbohydrate intake lost an average of 13 pounds..... cutting carbs could also cut years from your life.

### THE LATEST RESEARCH

Two new studies found connections between low-carb diets and premature death. In a study published in The Lancet, researchers followed 15,428 adults and found a connection between carbohydrate consumption and the risk of dying during the 25-year study period.

Moreover, research presented at the 2018 European Society of Cardiology conference reviewed the results of seven studies with 447,506 participants over 15 years and found an association between low-carb diets (defined as fewer than 26% of daily calories from carbohydrates) and an increased risk of premature death, including death from cardiovascular disease and cancer.

*The reduced intake of fibre and fruits and increased intake of animal protein, cholesterol and saturated fat with these diets may play a role in increased mortality risks.*



## THE BIGGEST RISK

The participants who adopted low-carb diets and replaced carbs with animal proteins and fat were at the greatest risk of premature death. In other words, cutting out bread and pasta but eating beef and pork instead is a recipe for health issues.

That's because it's not just about adding unhealthy foods but cutting those that are full of nutrients. Joan Salge Blake, RD, clinical associate professor of nutrition at Boston University and author of "Nutrition & You" believes the potential for weight loss leads a lot of dieters to cut carbs but warns, "You end up eliminating a lot of foods like fruits, vegetables, whole grains, nuts, beans and dairy products — all carbohydrates — that are part of a healthy diet."

## HOW MUCH AND WHAT TYPES OF CARBS SHOULD YOU AIM FOR?

You should get between 45–65% of your daily calories from carbohydrates, according to the U.K. Dietary Guidelines. In fact, in a 16-week study, increasing your healthy carbohydrate intake helped participants lower their body mass index, weight, fat mass and insulin resistance.

The Lancet research found the risks of premature death were minimized when filling up on healthy complex carbs from fruits, vegetables, and whole grains.

Fad diets often lead people to fear carbohydrates. But the research continues to show healthy carbohydrates are the healthiest fuel for our bodies," Dr. Hana Kahleova, study author and director of clinical research for the Physicians Committee for Responsible Medicine explained in a statement.

## THE BOTTOM LINE

---

A low-carb diet might help you lose weight in the beginning but, over the long-term, there is no benefit and there might even be significant risks. Instead, try eating everything in moderation, including carbohydrates, and making sure to opt for complex over refined sources.

Ensuring that you are not eating in a calorie excess is key.

