

# National Cereal Day – March 7th

## Health Benefits of Breakfast

It is often said that breakfast is the most important meal of the day. Overnight the body is in a state of fasting. During this time the body uses up all available energy to keep your organs working as you sleep. In the morning, your energy levels are severely reduced after 8-10 hours of no food and therefore, breakfast is vital to provide your body with energy to start your day<sup>(3)</sup>. Eating breakfast provides you with energy, boosts your concentration and mood, helps with weight maintenance and ensures you meet your recommended daily requirements of the different nutrients.

Many studies have consistently reported health benefits from consuming breakfast<sup>(4, 5)</sup>. Breakfast is often a significant contributor to overall daily nutrient intake<sup>(4)</sup>. A recent study reported an association between frequently skipping breakfast and inadequate fruit and vegetable intake, increased fizzy drink intake and inadequate physical activity, among other things<sup>(5)</sup>. Breakfast may help prevent large fluctuations in blood glucose levels helping to regulate appetite resulting in a lower risk of obesity and weight gain<sup>(4)</sup>.



## National Cereal Day

March 7<sup>th</sup> is National Cereal Day. Cereal refers to cereal crops from which many carbohydrate foods are made up of, including breakfast cereals. Cereals are a staple in the Irish diet and contribute a large proportion of our daily food consumption. Breakfast cereals are a quick, convenient breakfast and often evoke childhood memories, however, it must be noted that some breakfast cereals are high in sugar and provide little nutritional value to your diet and should therefore be consumed sparingly. Healthier cereal options include bran flakes, Weetabix and porridge oats – these all provide fibre which aids digestion and keep you feeling fuller for longer.

### Fun Fact!

Breakfast cereal was invented by accident! John Harvey Kellogg and Will Keith Kellogg were experimenting with boiled wheat. They accidentally left a batch out over-night and by the next morning it was stale. They decided to do the same thing with corn and created what we know today as “Kellogg’s Cornflakes”<sup>(1)</sup>.

High-fibre nutritious cereals on the market include:

Muesli – usually contains a mixture of grains, fruit and nuts. No added salt and sugar options are best. Sweetness is usually provided by the dried fruit which also contributes towards your fruit consumption for the day. Keep an eye out for muesli that contains sweetened dried fruit as this involves the addition of added sugar, commonly seen with banana chips. Well-known muesli brands include Alpen, Kellogg’s, Crownfield and Flahavan’s.



Figure 1-- Examples of well-known high-fibre, no added sugar muesli brands

Shredded whole wheat cereal is a great high fibre, low salt and sugar breakfast option. Watch out for added ingredients that may contain added sugar such as chocolate pieces or added flavourings such as strawberry or banana. Pay attention for words such as ‘frosted’ as this implies the addition of sugar. Natural sweetness may be added by using fresh fruit such as raspberries, blueberries and bananas. Brands providing this type of cereal includes Nestle, Kellogg’s and store brands such as Tesco and Supervalu.



Figure 2- Examples of shredded wheat brands

Bran flakes – another healthy, wholegrain cereal option that are high in fibre and low in fat. Flaked cereal is commonly coated with sugar and is often marketed as “frosted flakes” which is important to

be mindful of when choosing a healthy breakfast cereal. Fresh or dried fruit can be added to bran flakes for some sweetness.



Figure 3- Examples of well-known bran flakes brands

When reading labels on a breakfast cereal, the important things to look for are the fibre and sugar content. Ideally you want a cereal that's high in fibre and low in sugar, salt and fat. A food product must contain less than 3g of fat per 100g to be considered “low in fat”<sup>(2)</sup> and less than 0.5g of sugar per 100g to allow the packaging to state “no added sugar” or “sugar-free”<sup>(2)</sup>. Therefore, becoming familiar with the nutrition labels on food packaging can help you to compare products and choose more nutritious foods. However, a food labelled ‘low in fat’ may be high in sugar or vice versa and so it's important to also look at the nutrient content of the food and not just the writing on the front of the packaging as more often than not one beneficial quality of a food may be counteracted by the increase of another ingredient.

## Carbohydrates

It is recommended that 50% of our daily energy intake comes from carbohydrates<sup>(6)</sup>. Carbohydrates are one of the three macronutrients needed by the body alongside protein and fat. There are many myths about carbohydrates being ‘unhealthy’ and ‘fattening’, but carbohydrates contain less calories per gram than fat, 4g versus 9g respectively.

### Fun Fact!

The brain is the only organ in the body that is dependent on carbohydrates for energy. The brain exclusively uses glucose to function<sup>(7)</sup>.

There are 3 types of carbohydrates, starch, sugar and fibre<sup>(8)</sup>. The majority of your carbohydrate intake should consist of starch and fibre. Sugars should be consumed sparingly as they are calorie dense and provide little nutritional value.

Starch is a complex carbohydrate, and it takes the body time to break it down. Starchy foods are a good source of energy and contain other nutrients such as fibre, calcium, iron and B vitamins<sup>(10)</sup>. Starch is found in plants and is made during photosynthesis<sup>(11)</sup>. Common food sources include potatoes, rice, bread, pasta, bananas, barely, beans, peas, corn and seeds.

Sugar or ‘simple carbohydrates’ are given this name due to their simple structure. This enables the body to quickly break them down and use them for energy<sup>(12)</sup>. Eating food high in sugar often leads to a sharp increase in the body’s blood glucose levels outside of the normal healthy range. The size of these spikes are relative to the amount of sugar consumed. Large, frequent spikes in your blood glucose levels can have negative health effects with frequent sugar consumption contributing to weight gain<sup>(12)</sup>.



*Figure 4- Sources of natural (left) vs added (right) sugar*

Sugars are naturally present in foods such as fruit, milk, and milk products. These foods offer nutrients such as many vitamins and minerals that help to keep the body healthy and should not be limited in the diet. Refined sugar is not naturally occurring and is added to foods during processing. Foods containing added sugar include sweets, cakes, biscuits, table sugar and soft drinks. These foods offer little nutritional value and are often referred to as ‘empty calories’ as they only provide the body with energy. Therefore, their high consumption can lead to weight gain and negative health effects.

Fibre is different to the other types of carbohydrates as the body is unable to digest it. This is because it’s made up of non-digestible polysaccharides and therefore, the body’s digestive system is unable to break it down<sup>(13)</sup>. Fibre provides many health benefits in the diet and should be consumed daily. These benefits include the regulation of your appetite and increasing the feeling of fullness making you less likely to snack between meals and subsequently helping with weight loss<sup>(14)</sup>. It increases stool bulk preventing constipation, aids with digestion and has also been linked to improved metabolic health such

as increased insulin sensitivity, reduced risk of cardiovascular disease, improved gut health and reduced risk of colon cancer<sup>(14)</sup>. Food examples of dietary fibre include wholemeal bread, pasta, rice, beans, avocado etc. It's recommended to each 30g of fibre a day.



*Figure 5- An example of different foods eaten in a day that can provide 30g of fibre.*

Carbohydrates are an essential part of a healthy balanced diet and are delicious contribution to many meals. They also make a perfect treat or little snack when eaten in moderation.

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