The original muesli recipe originates from the early 1900's when Swiss physician Maximilian Bircher-Benner introduced muesli to his hospital to help him to treat his patients. In its traditional form, muesli contains rolled oats (soaked in water), lemon juice, cream, grated apple and ground hazelnuts or almonds. Nowadays, packaged varieties of muesli are likely to contain various grains such as wheat or rye flakes, and dried fruit, nuts, and seeds. Some brands add a lot of sugar to sweeten the taste of the product while others use honey and even chocolate chips as sweeteners.

**Muesli nutrition**
Muesli has a healthy image because it contains whole grains which are widely known to help protect against heart disease, some cancers and diabetes. Whole grains are a rich source of carbohydrates, protective antioxidants and minerals and contain a lot of dietary fibre, which is lacking in many people's diets. Six or more daily servings of bread and cereal grains are recommended by the Food Pyramid and we are advised to aim to make the majority of these whole grains. Refined grains such as white flour and white rice have had the outer layers of the grain removed and thus contain less fibre.

If the brand of muesli you eat contains nuts and seeds this means that it will provide protein unlike most other breakfast cereals which contain mainly carbohydrate. Another benefit is that if muesli is consumed with milk your daily calcium intake will be increased. Fat content is not the most serious issue when it comes to most Muesli because the added nuts and seeds contain fat which is mostly the healthy polyunsaturated type. However, it is important to look at the saturated fat content of muesli, as this is the least healthy fat and our consumption of saturates should be limited.

**Health claims**
Regardless of what the manufacturer prints on the packaging, it is important for consumers to consider all the components of a food or beverage when a health claim is made. Claims such as ‘100% natural’ are not much help if there...
is a high amount of sugar added to the product. These claims can even mislead the consumer into thinking the product is healthy when it really is not. We surveyed Alpen Original for our taste test and noted the packaging states that the product is ‘high in fibre, wholegrain, low in saturated fat’ and, ‘100% natural ingredients’. This may give the impression that the cereal is a very healthy food. However Alpen got a red light for sugar content because it is high (see table). The raisins in this muesli would also contribute to the sugar content but added sugar comes fourth in the ingredients list.

Our survey

As the serving sizes for muesli vary between brands which makes it harder to compare like with like, so we looked at the nutritional information per 100g instead. None of the muesli products received a green light for more than two out of the four areas we were concerned about. Many brands of muesli are nutritious and healthy and can play an important role in a balanced diet. However, even from the small sample of brands we looked at, it is clear that consumers should be on high alert when it comes to the levels of sugar and saturated fat in the muesli they choose.

We feel that there are improvements needed in these areas from certain manufacturers.

Sugars per 100g

The most worrying aspect of our survey was the fact that high levels of sugar were detected in each of the four muesli products we looked at. Too much sugar in the diet is linked to obesity and also has a negative effect on dental health. The sugar content ranged from 20.2g per 100g in Lidl’s Bixies Swiss Style Muesli to 27.3 in Spar’s Crunchy Muesli. Any product with more than 12.5g of sugar per 100g is considered high in sugar. Although most muesli cereals have fruit or honey in them to add sweetness, the four products we looked at also had added sugar and it featured high up on the ingredient lists. The dried pineapple, dried papaya and banana chips used in Tesco’s Finest Fruit and Nut Muesli are all sweetened with additional sugar.

Saturated fat per 100g

The consumption of saturated fats has long been linked to cardiovascular disease which is why we should minimise our intake of saturated fat as far as possible. So over 5g per 100g in saturated fat is considered high. Only Spar’s Crunchy muesli has what is considered a high amount of saturated fat with 5.5g per 100g. Two of the four products have low levels of saturated fat (the Lidl and Alpen products), whilst Tesco’s Finest Fruit and Nut Muesli gets an amber light giving it a medium rating of saturated fat, with 3.5g per 100g.

Sodium

We were pleased to note that none of the four muesli products got a red light for salt content. Any product with more than 1.5g of salt per 100g puts you in the red zone. Tesco’s Finest Muesli got a green light having a low salt content of 0.2g per 100g whilst the other three products have a medium salt content. A small amount of salt is essential in the diet but a high salt intake can contribute to high blood pressure and may lead to cardiovascular disease.

The recommended maximum daily intake of salt for adults is 6g of salt (2.4g of sodium). Some food companies list the amount of sodium, rather than salt, in g/100g of the food and this can give rise to confusion. To convert sodium to salt use: 1g sodium = 2.5g of salt. To convert salt to sodium use: 1g salt = 0.4g of sodium.

Fibre per 100g

We expected the four muesli products to receive green lights to indicate a high amount of fibre (more than 6g of fibre per 100g) but in fact only two of the products, Alpen Muesli and Bixies Swiss Style Muesli from Lidl, received a green light for fibre content. The Fruit & Nut Muesli from Tesco Finest states on the label that the product is a good source of fibre but only received an amber light having a medium amount of fibre, of 4.6g per 100g. The Spar Crunchy Muesli also received an amber light having 5.3g of fibre per 100g.
It is recommended that we include 30g of fibre in our diet everyday, because it fills us up for longer, aids digestion and helps to protect against bowel diseases and other conditions. In general, many Irish people do not eat enough fibre so a good intake at breakfast time is crucial.

Ingredients
Another reason why it is always important to read food labels is because some products may contain unexpected additives, preservatives and allergens. Tesco’s Finest Fruit and Nut Muesli contains the preservative sulphur dioxide and this is important information for people who are allergic to sulphites.

Taste test verdict
Consumer Choice provided the four varieties of muesli for the taste test panel to taste with milk. The brand names were kept secret from the tasters. The taste and consistency of each product was considered and scored out of a maximum of five marks.

Preferences vary so it is always best to try a few different types before you settle on your favourite. Make sure to check the label for hidden ingredients and preferably choose the products with the lowest levels of saturated fat and sugar. Alternatively, try making your own and you can control what is added.

Lidl Bixies Swiss Style Muesli 1kg €1.89
This was the least popular muesli rated by our tasters with an average score of two points out of five points. The general consensus was that there is not enough variety. The grains are quite fine and are toasted but otherwise the ingredients are not very interesting. One taster said that it was very sweet and the sugar is what gives the muesli a taste. Because it’s mostly grain, it is quite filling. This was the cheapest product of the four and cost €0.19 per 100g. Average score 2/5

Fruit & Nut Muesli Tesco Finest 750g €3.45
This muesli received an average of three out of five points. One taster said it was their favourite because there is a good selection of fruit such as papaya, coconut, and dried fruits as well as grains, making it quite tasty. They added that it tastes less processed more wholesome, filling, and healthy than the others. One taster marked it down because they felt there was far too much dried fruit in the muesli making it too sweet. Average score 3/5

Alpen Original Swiss Recipe 750g €3.47
This was the most popular muesli that was tasted by our panel and received an average of 3.5 points out of five. One taster said it had the right balance of fruit, nuts and cereal and that it was similar to Lidl’s muesli but less sweet. Another taster said it was very pleasant to taste and they liked the crisp toasted grains. Average score 3.5/5

Crunchy Muesli Spar 500g €1.89
All of our tasters agreed that this muesli is very sweet. Some found it tasty but one taster said it tasted the most processed of the four and that it “probably has a high sugar, salt and fat content!” Another said this product is more like a granola because the grains are clustered together unlike in muesli where the grains are loose. Sugar, oil or syrup is used in granola to stick ingredients together and this is probably why it tastes so sweet. Average score 3/5

make your own

A muesli base can be freshly prepared using wheat flakes, rolled oats, rye flakes, barley kernels, and wheatgerm. Oats and wheat flakes are the most common ingredients used in homemade muesli and can be found in health food stores and supermarkets. The base can be stored in an air-tight container such as a glass jar with a well-fitting lid.

It is best to soak muesli before eating it. Soak it overnight or for at least half an hour before you want to eat it. You can soak it in milk, water, or fruit juice. Serve it with finely chopped or grated fresh apple and a selection of fresh berries such as raspberries or blueberries. Other ingredients commonly included are bananas, grapes, and dried fruit such as coconut, mango and pineapple. Roasted seeds and nuts can be included for extra nutrients, healthy fats and protein. Natural yogurt, and milk add valuable calcium and a spoonful of honey adds sweetness.