

(1,500 word essay on Milk)

Milk in our daily life

We've all had milk at the early years of our life - it is a calcium rich beverage which has Vitamin D, helps keep our bones strong and prevents Osteoporosis. School children across the globe should be familiar with this healthy goodness since it is one of the most important components which make up a school lunch. In the Oslo diet, it is important to have that half a pint of milk as it has the ability to calm the children down after lunch - that improves their attention span and helps school teachers to some extent, since children will be less likely to cause trouble. As well as that, the sugar content in milk is far lower than carbonated soft drinks, which is one of the main culprits of today's high rate of obesity in America and Britain. As a result, milk is almost a mandatory part of our diet in primary school.

This creamy and pure white beverage initially comes from cows, but with the development of technology and the increase in the number of lactose-intolerant people, a lot of alternative milk options are available in the supermarket. Besides being a part of our diets, milk is also used in sweets. In places such as China and Japan, milk sweets act as a significant part of childhood, and people would remember the famous mascot Peko-chan for 'Milky', and the iconic red and blue illustration of a rabbit on 'Da Bai Tu' (White Rabbit) that originated from Shanghai. Although one of the key points 'Milky' tries to promote is 'healthiness', it is not actually made with pure milk. It is made with condensed milk, where water in cow's milk has been removed. Sugar has also been added to form 'sweetened condensed milk', which is one of the reasons why the milk sweet is so creamy and rich in milk flavour. 'Da Bai Tu' in comparison has a much lighter taste, probably due to the use of whole milk powder rather than milk itself. However, both milk sweets are popular among children in Asian countries.

Types of milk and its properties

In Japan, they have a milk fat content standard of 3.6%, as they wanted to preserve the original taste of cow's milk - creamy and fresh. The four basic types of milk include whole milk (3.5%-3.7%), semi-skimmed milk (0.5%-1.5%), skimmed milk (less than 0.5%) and extra rich milk (4.5%). Flavoured milk is also a popular choice for children, which may find regular cow's milk a bit boring. Chocolate milk and Strawberry milk are usually found in Western countries such as Europe and the USA, whereas special flavours such as Banana milk, Papaya milk and Melon milk are more prevalent in Asian countries such as Japan and Korea.

Packaging and design for milk

The most ancient method for storing milk is probably the milk glass bottle, as refrigerators did not exist and it was a good way for milkmen to ensure that fresh milk was delivered to the households. We often perceive milk in glass as 'fresher' compared to those in a carton because of its crystal clear appearance, and the cool surface of glass allows us to form associations with 'freshness'.

Another notable way to package milk is with a paper carton.. In countries such as Taiwan and Japan, you will be surprised to find that over 90% of the milk products are packaged in a carton rather than in glass bottles or plastic containers. That is due to the strong idea of being environmentally friendly in those two places. When the schoolchildren finish their milk at school, they would give the milk carton a rinse to get rid of the smell, then cut up the carton and hang them to dry so that they could recycle it. So if we were to look at the environmental factor of milk packaging, glass bottles and milk cartons are actually good methods of storing milk as it is sustainable.

Milk tops in the past were made using cardboard tops, and there would be a perforated circular tab which allows the milk to be poured into glass. Colours such as red and blue are the two most popular colours which were used to create cardboard tops. After cardboard tops, the original milk cartons were first introduced by G.W. Maxwell during the first decade of 1900s. The pull and squish motion la

John Van Wormer took out his first patent for the milk carton in 1915, which is known as the 'Gable-top carton'. The Gable top is also used for juice cartons nowadays, as the 'mouth' allows the user to pour the liquid into a glass with convenience and without spilling it

The colour scheme for milk packaging is mainly green, red and blue. That is probably because of the standardisation of the packaging system, and those three colours are able to deliver the feeling of freshness and pureness.

Milk nowadays also have a standardised system for its packaging. In order to fit with the lifestyle of people with different dietary needs, the different coloured milk plastic caps act as one of the visual cues for people to instantly recognise the milk fat content. In the United Kingdom, milk can be found in plastic containers, in four different sizes. It is a shame to see the downgrade of the quality of the milk packaging, probably due to the emphasis of being economical in order to save costs during milk production. It also affects the overall feel and look to the product (milk) itself, as plastic containers do not give you the sense of freshness at all.

"GOT MILK?" - an American Milk Advertising Campaign

In 1993, American advertising agency Goodby Silverstein & Partners started a campaign which promotes the consumption of cow's milk for the California Milk Processor Board. It was later licensed and used by milk processors and milk farmers. The tagline 'Got milk' has been used since 1995, on print adverts as well as popular cartoon animations such as Powerpuff Girls, Mario, Batman and The Simpsons. One of the recognisable element from this advertising campaign would be the 'milk moustache' component, which is displayed by athletes from the Super Bowl in USA. Since milk has high protein content, it would be wise to get sports players to market milk. In one of the advertisements under the 'Got Milk' campaign, one of the messages it was trying to communicate was the perfect combination of a dry food product

with milk. If you were to have a chocolate chip cookie, milk would be the perfect complement to it as it provides a good balance between the two food items.

Alternative milk options - Do we really need milk?

With the growing championship of “going vegan” from social media, milk producers and food scientists have come up with various alternative milk options for vegans and for those who advocate a ‘animal cruelty free’ diet. Apart from those people, these options are targeted towards people that cannot drink normal cow’s milk due to a medical condition known as ‘Lactose Intolerance’. Individuals that have Lactose Intolerance have a lower ability to digest lactose (milk sugar), and if consumed at large amounts, may lead to stomach pain, bloating, diarrhoea, gas and nausea. The alternatives include oat milk, soya milk, hemp milk, rice milk, almond milk, coconut milk and goat’s milk.

Current research have also shown that we do not actually need milk to get strong and healthy bones - in fact, scientific research has shown that milk increases our risk of having bone fractures! In addition, the growing importance of standardisation in this fast-paced technology driven society has caused the milk industry to use homogenisation as the standard. That means that the chemistry of milk has been altered and processed, releasing detrimental acidifying effects after consumption.

There is also a controversy about the consumption of milk, due to ethical reasons and how the milk producers treat the cows with cruelty. Although cows do produce milk naturally, the amount of milk is not enough to meet the high demands from us human beings. Just like female mammals, cows have to be pregnant in order to produce milk for their baby calves. To speed up the process, it is said that milk producers artificially inseminate the female cows using “rape rack”, which involves shoving an restraining apparatus into the cow. Also, the baby calves would have to be separated with their mother, and they would not be allowed to have their own mother’s milk as that will be reserved for humans’ consumption. The female cows would have to face a life-time of pain, being milked by mechanical machines just to satisfy the milk demand. Maybe that explains why the ‘vegan’ movement has become popular now - mostly to stop animal cruelty and to embrace the plant based diet. But it is still the earlier stages of this movement, and it is likely to take far more decades to get more people to change their eating diets.