

## ARTICLES FROM MAGAZINES

### Animal conservation

Many animal and plant species have become extinct and many more are in critical danger. Finding ways to protect the earth's wildlife and conserve the natural world they inhabit is now more important than ever.

### Extinction

Extinction is a natural process. Many species had ceased to exist before humans evolved. However, in the last 400 years, the number of animals and plants becoming extinct has reached crisis point. Human population levels have risen dramatically in the same time period and man's predatory instincts combined with his ruthless consumption of natural resources are directly responsible for the situation.

### Dodo

The dodo is a classic example of how human behaviour can cause irreparable damage to the earth's biological diversity. The flightless dodo was native to the Island of Mauritius in the Indian Ocean. It lived off fruit fallen from the island's trees and lived unthreatened until humans arrived in 1505. The docile bird became a source of food for sailors and lacked the ability to protect itself from animals introduced to the island by humans such as pigs, monkeys and rats. The population of dodos rapidly decreased and the last one was killed in 1681.

### Endangered Animals

In 2002, many animals remain threatened with extinction as a result of human activity. The World Wildlife Fund works tirelessly to raise awareness of the predicament facing these animals and find ways to protect them. By focusing on a number of high profile, 'charismatic icons' such as the rhino, panda, whale and tiger, the WWF aims to communicate 'critically important environmental issues'. The organization's ultimate goal is to 'stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature'.

### Rhinos

The rhino horn is a highly prized item for practitioners of Asian medicine. This has led to the animal being relentlessly hunted in its natural habitat. Once widespread in Africa and Eurasia, most rhinos now live in protected natural parks and reserves. Their numbers have rapidly decreased in the last 50 years, over half the remaining rhinos disappeared in the 1970s, and the animals remain under constant threat from poachers.

### The Giant Panda

The future of the WWF's symbol is far from certain. 1,000 remain in the wild, living in small isolated groups. have been cut off from each other as a result of and human expansion into their natural habitat. The Chinese has set up 33 panda reserves to protect these beautiful made poaching them punishable with 20 years in prison. panda's distinct black and white patched coat fetches a high



As few as  
These groups  
deforestation  
government  
animals and  
However, the  
price on the

black market and determined poachers still pose one of the most serious threats to the animal's continued existence.

## Whales



300. Collisions with ships, toxic pollution and becoming entangled in fishing nets are other major causes of whale deaths.

The International Whaling Commission meets every year. The agenda covers ways to ensure the survival of the species and the complex problems arising from countries such as Japan, wishing to hunt certain whales for 'scientific' purposes. Despite the fact that one third of the world's oceans have been proclaimed whale sanctuaries, seven out of 13 whale species remain endangered. The plight of the North Atlantic Right Whale is particularly serious. Hunted for their rich supply of oil, their numbers have dwindled to just

## Tigers



The last 100 years has seen a 95% reduction in the numbers of remaining tigers to between 5,000 and 7,000 and the Bali, Javan, and Caspian tigers are already extinct. The South China tiger is precariously close to disappearing, with only 20–30 still alive. Like the rhino horn, tiger bones and organs are sought after for traditional Chinese medicines. These items are traded illegally along with tiger skins.

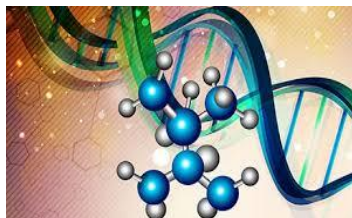
## Take Action



The WWF is actively involved in many areas of the world fighting to protect the natural habitats of endangered animals from further damage and curb the activities of poachers. They also work to influence governments and policy makers to introduce laws aimed at reducing the threat of pollution and deforestation. Our own individual efforts at home and in the workplace can also make a difference. By reducing waste and pollution, saving water, wood and energy, and reusing and recycling whenever possible, we can reduce the possibility of even more animals being lost, never to return.

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## Biotechnology



the more modern developments which have started intense debate.

Nowadays in the news you can read a lot about biotechnology and the controversies about it and perhaps you ask yourself what it is exactly. Well, this article is going to give you a brief history of the field of biotechnology and show you that, although the word "biotechnology" was first used in 1919, we have been using biotechnology for many thousands of years in ways that are completely uncontroversial. It will also look at

## Beer and Cheese



When you are drinking a cold beer on a hot day, or eating a delicious cheese sandwich, you can thank biotechnology for the pleasure you are experiencing. That's right! Beer, bread and cheese are all

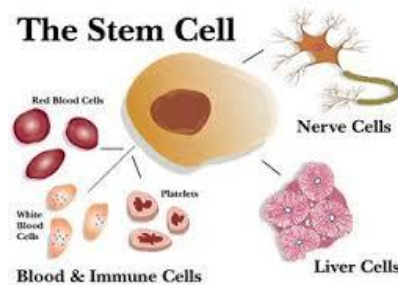
produced using biotechnology. Perhaps a definition will be useful to understand how. A standard definition is that biotechnology (or biotech for short) is the application of science and engineering to the direct or indirect use of living organisms. And as you know, the food and drink above are all produced by the fermentation of micro-organisms. In beer, the yeast multiplies as it eats the sugars in the mixture and turns them into alcohol and CO<sub>2</sub>. This ancient technique was first used in Egypt to make bread and wine around 4000BC!

### Antibiotics



Antibiotics are used to prevent and treat diseases, especially those caused by bacteria. They are natural substances that are created by bacteria and fungi. The first antibiotic was made in China in about 500BC – to cure boils. In 1928 Alexander Fleming discovered penicillin and it was considered a medical miracle. Modern research is looking at the creation of super-antibodies which can kill bacteria and viruses inside the cells that house them.

### Cleaning up



Our modern consumer society produces a lot of waste which needs to be disposed of safely and without harmful end products. Environmental biotechnology can help. Indeed, the use of bacteria to treat sewage was first practised in 1914 in Manchester, England. Vermiculture or using worms to treat waste is another environmentally-friendly practise and the end product is a natural fertiliser. Bacteria have even been developed to help with problems such as oil spills. They convert crude oil and gasoline into non-toxic substances such as carbon dioxide, water and oxygen and help create a cleaner, healthier environment.

### Modern times

These examples of biotechnology are accepted by most people. However, the discovery of the DNA structure by Watson and Crick in 1953 was the beginning of the modern era of genetics and the following areas of biotech are very controversial. Read of.

### GM food

The genetic modification of plants and crops has been in practice for many years. This involves changing the genetic code of these plants so that they are more resistant to bad conditions like drought, floods and frost. Supporters of GM food say that it can offer the consumer better quality, safety and taste and for over a decade Americans have been eating GM food. However, things are very different in Europe where genetically modified food is very strictly regulated and regarded with deep suspicion by the public. GM food has even been called “Frankenfood” in the press, a term inspired by the novel Frankenstein by Mary Shelley. There is a great cultural divide between America and Europe over whether such food is safe to eat and will not harm the environment and the discussion is still in progress.

## **Cloning and stem cell research**

1997 saw the birth of Dolly the sheep, the first animal cloned from an adult cell. This was a remarkable achievement which created world-wide debate on the ethical issues surrounding cloning. International organisations such as the European parliament, UNESCO and WHO all declared that human cloning is both morally and legally wrong. However, we need to make a distinction between reproductive cloning and therapeutic cloning. Nowadays the idea of reproductive cloning – creating a copy of another person - is no longer interesting for researchers. Instead therapeutic cloning is creating excitement in the biotech world. Key to this technique are stem cells, which are master cells that have the potential to become any other kind of cell in the body e.g. nerve cells, blood, heart muscle or even brain cells. Stem cells themselves have generated a lot of controversy as it was believed that only human embryos could provide them. However, it now appears that adult stem cells offer the same possibility. This would mean that a patient who suffered a heart attack could provide doctors with his adult stem cells which could then be implanted back into his heart and used to create heart muscle, replacing the muscle that was damaged. As the genetic code is identical, there would be no problem of the body rejecting the implant as, unfortunately, happens with organ transplants. In the future, biotechnologists hope that stem cells could be used to grow entire organs. In this way biotechnology offers the hope of revolutionizing medical treatment.

In this brief overview of the history of biotechnology we have jumped from making bread to making human organs - an enormous leap- and it is clear that these modern practices raise many controversial issues. However, despite the debate, we can imagine that as biotechnology has been around for many years, it will still be around for some time to come - but who knows where it will take us?

When I was at school, our teacher told the class 'You are what you eat.' My friends and I would laugh and call each other 'hamburger' and 'biscuits'. Our teacher was trying to show us the importance of eating the right food to stay healthy.

This was a few decades ago when there were big campaigns to make British people healthier. We decided to throw out our chip pan which we had used until then to make chips every day for dinner. We replaced our chips with boiled potatoes. We also started using semi-skimmed milk instead of whole milk in our cups of tea and bowls of cornflakes. At first I felt like I was eating my cornflakes in water and my potatoes had no taste at all. But after a while I started to prefer healthier food because I felt stronger and I didn't get sick so often.

Japanese people are reputed to be the healthiest in the world because of the food they eat. The healthiest Japanese people eat rice and fish and vegetables every day. They drink green tea or water when they're thirsty, and snack on dried fish, fruit or ginkgo nuts. The traditional Japanese diet is famous for helping you to live a longer and healthier life.

So we have proof that you become what you eat. Can you tell what your friends eat just by looking at them? When you know the effects of different types of food, you can use your knowledge well and eat what you want to become.

Food has an impact on our physical and emotional health. Have you ever heard any of the following advice?

Lettuce or milk can make you sleepy.

To stop feeling sleepy you should eat peanuts or dried fish.

To keep your teeth clean you should eat apples often.

Garlic helps you not to catch a cold.

Everyone has their own advice to give, which they have read about or have been told by older relatives. Some of these pieces of advice seem to contradict each other.

Eating chocolate makes you fat and gives you spots.

Chocolate contains the essential minerals iron and magnesium

What we need to figure out is what type of chocolate to eat to get the benefits and how much of it to eat. We can do this by reading the list of ingredients on the chocolate bar wrapper. Exactly how much real chocolate is in there? And how much of that do we need to eat to get the benefits of the minerals it contains?

Future restaurants might be named after the physical or emotional state they hope to create. Their menus will list the benefits of each dish and drink. Some restaurants have already started this concept, and list the nutritional content of their dishes on the menus.

Let's take the restaurant Winners as an example. Their menu would list dishes specifically designed to help you win sports competitions. There would be 'Night-before Vegetable Lasagne', a pasta dish with extra layers of spinach pasta for slow-burning energy, rich tomato sauce full of vitamin C and



soft, easy-to-digest vegetables. All this would be topped with a little fresh cheese – just enough to help you get a good night's sleep, but not enough to give you nightmares!

Or you could choose the 'Go-faster Salad', which is a large bowl of mixed raw vegetables in a light salad dressing, giving you energy without making you gain weight. The vegetables are carefully chosen to include plenty of natural vitamins and minerals.

What kind of dishes do you think would be on the menu at the Clever Café (which sells food that's good for your brain)?

So what's going to happen to hamburgers and biscuits? Will the concept of eating food because it's tasty go out of fashion? Of course not! Junk food is also changing. If ice cream is not good for children, can't we give them fat-free, sugar-free tofu ice cream? Unhealthy food is going out of fashion, so brands are changing. We are told not to drink cola because of the sugar and caffeine content so cola companies are making sugar-free and caffeine-free drinks. We are told dried fruit is a healthier snack than biscuits, so some biscuit companies are making biscuits with added vitamins. Snacks might soon be changing their names to 'Skinglow' and 'Chocomineral'! So in the future you might be able to eat your way to your idea of perfection!

## Superstitions

Superstitions can be defined as, "irrational beliefs, especially with regard to the unknown" (Collins English Dictionary)

They cause us to act in strange ways, believe in odd things and leave us unable to explain the reasons why.

Many superstitions may seem silly, even stupid to us today, but they continue to influence our behaviour and many people would argue that there are in fact some very good reasons for avoiding black cats and walking around ladders.

### **Common Superstitions Explained**

In most cases, the reasons behind common superstitions can be traced back to medieval or even ancient times. They are quite often even more peculiar than the beliefs they attempt to explain.

Black cats are the source of literally hundreds of unlucky superstitions. It's a sign of bad luck if they walk in front of you. It's unlucky to step on their tails. They even bring bad luck into a house if they sneeze inside!



This unfortunate connection with misfortune dates back to the Middle Ages when they became associated with witches and were thought to harbour evil spirits.

There are very practical reasons for thinking twice before walking under a ladder, but a more mysterious explanation can be traced back to ancient Egypt. The early Egyptians believed that the shape of the Pyramids had a special power. It was considered very bad luck to break the 'power' of this shape and that's exactly what walking under a ladder would do!

In Roman times people had the habit of looking at their reflections in pools of water. Some believed that these reflections were in fact 'glimpses of the soul'. Any disruption to the water, such as a stone being thrown into the pool, would bring bad luck to the person looking in. This superstition lives on with the fear of bad luck from breaking a mirror.

### **Group Superstitions**

Certain groups of people involved with dangerous or unpredictable activities tend to be very superstitious indeed.

**Actors:** There are lots of Do's and Don'ts to be followed backstage in the theatre.

One of the biggest Don'ts concerns the name of Macbeth, one of Shakespeare's most famous plays. If anyone says the name backstage then the cast will have all sorts of unlucky problems and the show will certainly fail. Also, actors never wish each other, 'good luck' before a performance as it might have the opposite effect. It's safer to tell an actor heading for the stage to, 'break a leg'!

**Sailors:** Long, dangerous journeys on wild and unpredictable oceans have made sailors very aware of lucky and unlucky signs. Bad luck is caused by stepping on board a ship with your left foot, starting a cruise on Friday and throwing stones into the sea. Good luck will follow a ship if there are dolphins swimming nearby or there is a naked woman on board! Think about the figureheads on old sailing boats with a naked woman at the front, calming the seas.



Athletes: The great Michael Jordan wore his old college shorts underneath his Chicago Bulls uniform for an extra bit of good fortune on the court and Tiger Woods favours wearing the colour red on Sundays for similarly superstitious reasons. Amateur golfers can have a successful day on the course if they start their round with odd numbered clubs and don't use balls with numbers higher than 4! It's also lucky to set out on a rainy day, but definitely not okay to borrow your partner's umbrella.

Football players don't let the side down and have numerous eccentricities of their own. West Hams' ex-player Paolo Di Canio always puts his shin pads on his left leg first. Steven Gerrard and the Liverpool players like to touch the, 'This is Anfield' sign in the tunnel on their way to the pitch, but nothing tops Chelsea's ex-player Eidur Gudjohnsen, who goes to the loo just after the warm up, kisses his shirt twice (for two goals) and says a prayer thanking God for his health and the health of his teammates as he runs onto the field!

### **Global Superstitions**

Finally, here are a few curious beliefs from around the world.

If you don't cover your bald head it will start raining. – Afghanistan

If you shave your head on a Saturday, you will be in perpetual debt. – Africa

You'll 'cut off' fortune if you use scissors on New Year's Day. – China

You shouldn't wash your hair the day before an exam. – Russia

If you go to the bathroom in the night with no clothes on, insects will fall on you. – Japan

What do you think of each article? Give a brief account of each of the article.

### **Puzzle**

**Can you find 4 hidden words**



So let's see how long you take to find those 4 hidden words?

Can you solve this?

$$\text{Hourglass} + \text{Hourglass} + \text{Hourglass} = 90$$

$$\text{Hourglass} + \text{Heart} + \text{Heart} = 60$$

$$\text{Heart} - \text{Lightbulb} = 9$$

$$\text{Lightbulb} + \text{Hourglass} + \text{Heart} = ?$$