When Christopher Columbus returned to Europe from the New World at the turn of the 16th century, his crew was carrying more than just plundered gold and slaves. Western explorers had long been infecting indigenous populations with foreign viruses. But this time around, it was the local people who unwittingly passed on a lethal infection. As his men climbed ashore in Spain, Columbus’s deadly cargo was unleashed: syphilis. With ferocious speed, the disease swept across Europe. Spread by sexual intercourse, its victims suffered a slow and painful death. In the absence of any effective treatment, the sores could worsen so dramatically that victims of later-stage syphilis were often mistakenly presumed to
have leprosy. For centuries, a common treatment was mercury, which had the unfortunate side-effect of death by poisoning.

For the medical profession, this virulent disease presented an urgent challenge. With sexual intercourse increasingly resembling a game of Russian roulette, the race began to find a cure. In 1564, Gabriele Fallopio (who gives his name to fallopian tubes) instead proposed a preventive. In a work published in 1564, two years after his death, the Italian anatomist described a linen sheath to ward off venereal disease.

While Fallopio provides the first written record of condoms in European history, it is very likely that they have been with us for much longer. A crude cave drawing at Les Combarelles, France, shows an apparently sheathed man dating from between 15,000 BCE and 10,000 BCE. In ancient Egypt, a device resembling a condom may have been used as far back as the XIX Dynasty (1350-1200 BCE). The Egyptians may even have dyed them different colors.

We will probably never know exactly what the ancient civilizations did with these sheaths, however. Some may have been simply penis protectors, which have been used since prehistoric times to protect the wearer during
combat, as well as against insect bites or evil spirits. They may also have served purely decorative purposes or acted as lucky charms. Even today, some Dani people in West Papua wear nothing but a koteka – a long, upward-pointing penis sheath made of gourd.

Nevertheless, while disease prevention is a relatively modern use for condoms, the need for birth control has been with us since time immemorial. This desire to limit family size, due to various physical, emotional, social or economic reasons, suggests that civilizations would have been experimenting with contraception long before Fallopio’s linen creations. Along with more natural approaches, such as the rhythm method, coitus interruptus (withdrawal followed by ejaculation) and vaginal douching, it is possible that early peoples also experimented with other more artificial ways to block insemination.
Most evidence, however, shows that these early efforts were focused on women’s anatomy. Women in ancient South American civilizations, for example, fashioned themselves a female contraceptive made out of a cut-off seedpod. Upper-class women in ancient Egypt are said to have used crocodile-dung pessaries and irrigated the vagina with honey and sodium bicarbonate. Another kind of pessary, popular in African pre-industrial societies, was a solid object to block the cervix; women also made plugs of chopped grass or cloth. In Japan, prostitutes are said to have used balls of bamboo tissue-paper, while wool was preferred by Muslim and Greek women. These techniques evidently enjoyed some success. Until the development of the diaphragm, the sea sponge – which was wrapped in silk with a string attached – used by ancient Jews was considered one of the most effective contraceptives in use.

This emphasis on female protection continued for several centuries. In the Middle Ages, magicians are said to have advised women to wear the testicles of a weasel on their thighs or hang its amputated foot from around their necks. Other ‘lucky’ charms included ground cat-liver, flax lint tied in a cloth and soaked in menstrual blood, and the anus of a hare. It was also believed that
a woman could avoid pregnancy by walking three times around the spot where a pregnant wolf had urinated. As recently as the 1800s, some women in Canada would brew dried beaver testicle in alcohol to create a contraceptive potion.

While many of these rituals appear absurd today, some had a genuinely scientific basis. When researchers discovered women in a particular Mexican tribe were apparently avoiding conception by eating a certain wild yam, for example, they studied the vegetable further. The hormone present in these yams, with the addition of estrogen, subsequently led to the first birth control pill. In China, some women drank lead and mercury to control fertility, but this often resulted in sterility or death.

The earliest surviving oral account of male contraception appears rather less grounded in reality. According to legend, when he wasn’t busy getting Hercules to kill the Minotaur, King Minos of Crete was said to have a rather embarrassing personal problem. Whenever he had sex, the king would ejaculate snakes and scorpions in his seed which killed all his lovers. His personal physician therefore invented a receptacle made from a goat’s bladder which would catch his sperm, and thereby protect his lover.
Life-savers

As syphilis raged through 16th-century Europe, contraception was for the first time not simply a matter of preventing new life, but also of avoiding death. In Fallopio’s groundbreaking work *De Morbo Gallico* (literally ‘On the French disease’, the Italian slang for syphilis) he described a small linen sheath, which fitted either over the glans of the penis or (more painfully) was inserted into the urethra. He claimed to have trialed it on 1,100 men and none was infected with syphilis. In 1597, medical scholar Hercules Saxonia improved on Fallopio’s primitive designs by introducing the first spermicide. He advised soaking the linen sheaths in a chemical solution and allowing them to dry before use.

During the second half of the 17th century, linen began to be replaced by stretched animal gut. Sheep, lamb, calf and goat intestine were a readily available waste product from the slaughterhouse. They also felt much more like a ‘second skin’, although they were looser and had to be tied with a ribbon. At the same time, there were also

‘To quench the heat of Venus’s fire, and yet preserve the flame of love’s desire.’

Anon.
experimentations with fish bladders.

The early condoms were not easy to make. After being soaked, inverted, softened, scraped and inflating, the stomach lining then had to be dried and cut into shape. It was an expensive process, and though reusable, they were costly. Very few men would have been able to have them tailor-made from scratch.

**LIFE THROUGH A LENS**

The 17th century welcomed another important medical discovery. While early condoms were most likely being used for disease prevention and birth control, contemporary scientists actually knew very little about the mechanics of conception, ie the fertilization of an egg by a sperm. In 1677, a discovery by Antonie van Leeuwenhoek advanced scientific thinking – and kick-started a controversy in the history of condoms. Using a primitive microscope, the Dutch scientist was the first person to find animalcula, or spermatozoa. In *Looking for Doctor Condom*, W E Kruck suggests ‘the cause-and-effect relationship between intercourse and conception was (previously) well-known but not understood’. With van Leeuwenhoek’s discovery of sperm, the link between condoms and birth control was officially sealed. Among many religious thinkers, the implications of a man’s seed ‘dying’ in condoms still provokes outrage to this day.◆
Nevertheless, they were effective. And beyond this efficacy at disease prevention, it’s clear that condoms were also recognized as a means of birth control. A 17th-century poem by the son of an English bishop praised the liberating effect that condoms would have on young women, freed from the ‘big Belly, and the squawking brat’. But the new contraceptive was also highly advantageous for men, regardless of wealth or class. Poor men were eager to escape the financial drain of additional mouths to feed. Besides the question of heirs, wealthier gentlemen were concerned not to damage their reputation in society with children from illicit sexual liaisons.

Casanova’s condoms
The renowned 18th-century lover Giacomo Casanova was certainly well experienced with condoms. Although he hated them at first – dubbing them *redingotes Anglaises* (‘English riding coats’) and cursing their smell and inconvenience – he changed his mind later in life.

In 1758, he praised their effectiveness in freeing him
from any more heirs or venereal disease. ‘Ten years ago, I would have called this an invention of the devil, but now I believe that its inventor must have been a good man,’ he wrote in his diaries. The Italian lothario wasn’t beyond trying other methods of contraception, however. Perhaps most famously, he experimented with using half a lemon as a cervical cap.

This was surprisingly effective, and has since been proven to be scientifically sound. In 2002, Australian scientist Roger Short even suggested that lemon juice could be an effective and cheap microbicide to help reduce the spread of HIV/AIDS in the developing world. In studies, he reported that a solution of 10-per-cent lemon juice produced a 1,000-fold reduction in HIV activity in a lab sample. He claimed that half a teaspoon of the highly acidic juice wiped out two teaspoons of sperm in just 30 seconds.
The early condom trade

By the early 18th century, London had become the center of a thriving international condom trade. Its captains of industry were a certain Mrs Perkins and Mrs Phillips, two bitter rivals who sold to apothecaries, ambassadors and travelers, and claimed to have received large orders from ‘France, Spain, Portugal, Italy and other foreign places’.

THE REAL DOCTOR CONDOM?

No one knows where the word ‘condom’ originated. However, one popular – if unsubstantiated – theory is the existence of a certain ‘Dr Condom’.

According to different sources, he was either the physician to King Charles II, a colonel during his reign – or both. Author Jeannette Parisot concluded that the inventor of the first sheep-gut sheath was Colonel Quondom, a Royalist army physician.

Quondom reputedly survived the English Civil War, but to avoid being identified with the Royalist defeat, he retired from the army and changed his name to Dr Cundum.

As a physician, he had allegedly created the membranous sheath to provide the King with a means of preventing more illegitimate offspring. Given the prevalence of syphilis, however, they may also have been to prevent sexually transmitted infection.

Historically at least, this theory tallies approximately with the discovery at Dudley Castle of the world’s oldest surviving
condom fragments, dating to 1640. A more complete condom found in Sweden, dating from the same year, is on display at the Tyrolean County Museum in Austria.

There are many other theories to explain the word ‘condom’. One is that when Catherine de Medici married Henry II of France, she brought her minister Gondi and the architect Bernardo Buontalenti. Together, they are purported to have started producing waxed protections to be used as condoms, which the French began to call ‘gondons’.

Other theories trace the word condom from the Latin verb ‘condere’ (to contain) or ‘condos’ (receptacle). Some people believe they are simply named after the French town, Condom. Others cite the Persian ‘Kendu’ or ‘Kondu’, meaning a long storage vessel made from animal intestine, as the original etymology. In 1972, even Playboy magazine contributed a theory, suggesting the word comes from ‘conundrum’: a riddle, difficult to put on.

For poorer customers, there was ‘Miss Jenny’ who sold washed second-hand condoms.

To guard yourself from shame or fear,
Votaries to Venus, fasten here;
None in our wares e’er found a flaw,
Self-preservation’s nature’s law.

A common 18th-century advertising slogan.
In his *History of the Condom*, Dr H Youssef writes that the sheath was widely praised in erotic poetry of the period, and often referred to as ‘the preservative machine’ or simply ‘armour’. Among its adherents was James Boswell, the famous biographer of English literary giant Samuel Johnson. On 10 May 1763, the fast-living Boswell recounts how he picked up a strong, young, jolly damsel, led her to Westminster Bridge and there ‘in armour, complete did I enjoy her upon this noble edifice’.

**Getting a grip**

By the mid-19th century, the European scramble for colonies was in full swing. Among the indigenous goods plundered and brought back by the colonial powers was rubber, which was originally from South America.

As a base material, rubber is extremely sticky and difficult to handle. But in 1839, Charles Goodyear, the man whose name is now synonymous with car tires, experimentally dropped a mixture of rubber and sulfur onto a hot stove. What he discovered was that the resulting mass was a very strong, stable and elastic material. The discovery of this process, known as vulcanization, revolutionized condom production almost overnight. Unlike meticulously handcrafted animal-
gut sheaths, vulcanized rubber was not simply quick to make, but it could also be stretched and produced much more cheaply.

Nevertheless, the earliest ‘rubber johnnies’ were still very different to our modern condom. To start, these creations had the thickness of bicycle inner tubes and seams down the sides. In *Johnny Come Lately*, French writer Jeanette Parisot describes two different versions. The first ‘consists of a delicate membranous tube which corresponds to the dimensions of the erect penis, is sealed at the front end and at the rear end usually has a fastening device (ribbons)’. The second was a successor to Fallopio’s ‘tip’ condom: ‘When filled with water, the condom has the shape, either of an egg from which a small section has been cut, or the glans penis. When the condom is in use (a) ring fits so tightly around the glans that the condom cannot slip off during intercourse.’

The inherent problem with ‘tip’ condoms was the need to have them tailor-made. This involved a trip to the doctor to have the penis measured, and then the rigmarole of ensuring you bought exactly the right size. They also did not provide the same amount of protection against venereal disease as a full-length condom.

In the early days, rubber condoms were still beyond
KING OF CONDOMS
In 1865, Julius Schmid, a poor German-Jewish immigrant, arrived in the United States. He was 17 years old. After finding work at a sausage-maker’s in New York, the young entrepreneur began to make and sell ‘skins’, condoms made from animal guts – a European phenomenon which had yet to reach the US. He then pioneered a new kind of safe, vulcanized rubber sheath, which gradually grew in popularity. By 1918, when condoms were legalized in America for disease prevention (but not contraception), Schmid was selling condoms to European troops. In World War II, the US Government made Schmid official condom supplier to the US armed forces. Soon, his business was earning $900,000 a year (equivalent to $11 million, or £5.7 million, in today’s currency). The impoverished immigrant had become a multi-millionaire. In 1955, Schmid, then 73, handed over the reins of the company to his two sons, Carl and Julius Junior.
the means of most everyday men. Partly because of this, coitus interruptus was one of the most common methods of contraception in the world at this time, even though it is by no means effective. But as advances in manufacturing speeded up and costs came down, so the condom gradually captured the public imagination. By the turn of the century, new innovations were also improving the manufacturing process. In 1901, the year of Queen Victoria’s death, the first teat-ended condoms (designed to hold ejaculate) were made by dipping glass moulds into a liquid rubber solution.

**HOW IT WORKS**

Today’s latex condoms are disposable, easy to use and highly effective – so long as they are used correctly. The World Health Organization gives the following advice for wearers:
- Make sure that the condom is of good quality and not past its expiry date.
- Open the packet carefully so the condom does not tear.
- Squeeze the tip of the condom before unrolling it on to the erect penis.
- After ejaculation, hold the rim of the condom and pull the penis out while still hard.
- Do not use oil-based lubricants (stick to water-based, such as K-Y Jelly).

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Latex love

Arguably the biggest revolution in condom manufacturing history was really just a clever shortcut. By the early 20th century, condoms were becoming more popular but they were still rather cumbersome and expensive. Thanks to Goodyear’s invention, these were now made by turning sticky rubber sap (properly known as latex) into vulcanized rubber. But in the 1930s, scientists developed a way to skip this process – and turn the liquid latex straight into condoms.

No one knows exactly who pioneered the first latex condom, but the results were superlative. Latex proved better than rubber in every possible way. Not only was it cheaper, lighter, and more durable, it was also more

IN THE TRASH

Latex and sperm are both biodegradable, but condoms contain added ingredients, such as lubricants and stabilizers, which mean they need to be disposed of carefully. HIV/AIDS charity Avert recommends that condoms should be wrapped in tissue or toilet paper and put with the trash. Condoms should not be flushed down the toilet as they may cause blockages in the sewage system and also damage marine life. Condoms made from polyurethane, a plastic material, are not biodegradable at all. ♦
enjoyable to wear and easier to make. Indeed, the simplicity of making latex condoms rapidly led to much greater automation in production. Conveyor belts of glass moulds were simply dipped into liquid latex and dried before going into hot air chambers for vulcanization. As output surged, so prices plummeted. The resulting condoms were tougher and thinner, simultaneously offering the wearer even more sensation and greater protection.

In 1949, a Japanese firm introduced the first colored condom. The following year, the first lubricated condom was launched in the UK by Durex. In 1973, the first textured condoms were introduced to the market. Continual innovations since then mean that today, we have more choice than ever.

While latex remains the material of choice for most condoms worldwide, there are now innumerable variations in color, flavor, size, thickness and texture. For people allergic to latex, there are even polyurethane condoms, although these have a greater risk of breaking or slipping. One solution is ‘double-bagging’ – wearing an animal gut condom (still available from specialist stores) beneath a regular latex condom.

So, there were plenty of condoms and plenty of choice, but how to get people to use them?