

# The history of food packaging

Packaging was invented to make food and drink last longer, but it's become a BIG cause of waste. Could new packaging innovations and a clampdown on waste herald a brighter future?



**2018**  
It's reported that 5 million to 13 million tonnes of plastic leak into the world's oceans every year, causing pollution and harm to sea creatures. One in three fish caught in the English Channel is also estimated to contain plastic<sup>22</sup>.



**2016**  
Edible coatings for fruit and veg were developed in the US. Made of leftover plant skins and stems, it's claimed they extend produce's shelf life by as much as five times<sup>20</sup>.

**2015**  
Oxford became the first city in the UK to ban food sellers from using non-recyclable food containers<sup>19</sup>.

**2005**  
WRAP (the government-funded Waste and Resources Action Programme) – which launched in 2000 – announced the Courtauld Commitment, a voluntary agreement signed by food sellers to reduce food packaging waste. Northern Foods, for example, changed the design of its Goodfella's pizza box, and reduced the total weight of packaging by 4,000 tonnes a year<sup>16</sup>.



**1970s**  
The ready meal took off in UK homes – driven by trends including more working women (with less time to prepare a meal) and a rising divorce rate<sup>14</sup>. This drove demand for single-use packaging. At the same time, the rise of the takeaway on the high street led to more disposable packaging.



**1951**  
Tetra Pak, established in Sweden by Dr Ruben Rausing (right), launched its famous tetrahedron-shaped carton to package milk and cream<sup>9</sup>.

**1948**  
The flexible and heat-resistant foil container was launched – and is still popular to this date<sup>8</sup>.



The development of different types of plastic packaging led to a 'plastic fantastic' revolution. Single-use packaging was developed for convenience, but caused litter and waste. At the same time, packaging stopped being just a container for food, but also became a way to improve its quality.

**1914**  
Kellogg's pioneered the use of wax paper for holding the contents of its cereal boxes<sup>6</sup>.



**1879**  
The foldable cardboard box was invented – by accident – and began to be used for food items towards the end of the century<sup>5</sup>.



**43 AD**  
The Romans' solution to the packaging problem was the humble pie: the pastry shell was a baking tray, storage container and a serving dish all rolled into one. Only the filling was ever eaten, and the pastry thrown away afterwards<sup>1</sup>.



Before packaging was invented, people had to be resourceful about how they preserved food (made it last longer) and transported it.

An unexpected benefit of the Industrial Revolution was the emergence of new food packaging from metal and cardboard.

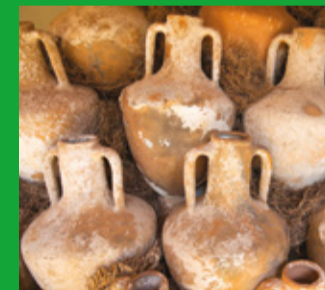
**1809**  
The famous General Napoleon Bonaparte offered a reward to anyone who could invent a method to preserve food for his army. The result was the metal can. Food was sealed in airtight tin cans, and the cans then boiled to sterilise the contents<sup>4</sup>.



**1619**  
King James 1 built the first 'modern' ice house to keep food and drink cool during the year. Until refrigeration was invented, it was one of the only ways to keep food fresh<sup>3</sup>.



**1500 BC**  
Two of the earliest types of packaging were glass and pottery. Food could be preserved for longer and transported further when enclosed inside these sealed containers<sup>2</sup>.



**2018**  
The government announced plans to eliminate avoidable plastic waste by 2042. Proposed measures include plastic-free shopping aisles and a charge on single-use plastic containers<sup>23</sup>.



**2017**  
The 'edible water bottle' was invented. Created from seaweed extract, it can even be eaten after use<sup>21</sup>.



**2014**  
The 'Bump Mark' was developed – a food label which uses gelatine to track the decay process of the package contents. A smooth surface indicates the food is still fresh, but a bumpy texture warns that it's not safe to eat<sup>18</sup>.

**2012**  
Food wrappers and containers were found to be the second biggest polluter of the world's oceans, after cigarettes<sup>17</sup>.



**1980**  
Marks and Spencer sold the first pre-packaged sandwich and the 'food to go' market was born. All those sandwiches meant a lot of throwaway boxes though...<sup>15</sup>



**1977**  
The first plastic soft drinks bottles went on sale, made from 'polyethylene terephthalate' (PET)<sup>12</sup>. Nowadays, an astonishing 1 million bottles are sold worldwide every MINUTE<sup>13</sup>!



**1954**  
The first 'TV dinner' – made out of aluminium and with separate compartments, like airline trays – launched in the US. It fed a growing appetite for ready meals and single-use packaging<sup>10</sup>.



**1966**  
Over a quarter of bread was now sold in plastic packaging (instead of paper bags), following the development of 'polyethylene', a new type of plastic<sup>11</sup>.



**1927**  
Packaging gets technical, as Modified Atmosphere Packaging (MAP) – a technique to make food and drink last longer – was invented to protect apples. The process reduces the amount of oxygen and increases the amount of carbon dioxide around the product to stop bacteria developing – and is still in use today<sup>7</sup>.



MANY CENTURIES AGO...

THE INDUSTRIAL ERA

20th CENTURY

21st CENTURY

Learn more about waste at [www.jointhepod.org](http://www.jointhepod.org)