

Supply Chain UnAssurance

An Alternate View of History by Dave Cook

“An army marches on its stomach, but sits on its

I know the question that you are dying to ask is, “Who is the father of preserved foods,” right? Clarence Birdseye? Nope – sorry – he was the father of flash-frozen foods. The honor of being the father of preserved foods belongs to Nicolas Appert.

Appert was a confectioner and chef in Paris from 1784 to 1795. In 1795, he began experimenting with ways to preserve foodstuffs, succeeding with soups, vegetables, juices, dairy products, meats, jellies, jams, and syrups. He placed food in glass jars, sealed them with cork and sealing wax and placed them in boiling water.

Why would a confectioner develop such a fixation on preserving foods? Well, you see, it was not about a fixation, it was about money! France was engaged in various conflicts during the late 1790s and early 1800s. The French Army was well aware that an army marches on its stomach. When engaged in conflicts in locations where the locals were unable (or unwilling) to supply provisions, it was difficult to keep the soldiers well fed.

So, in 1795 the French military offered a cash prize of 12,000 francs (about about USD \$2 million in today’s money) for a new method to preserve food. Appert was definitely interested! After some 14 or 15 years of experimentation, Appert submitted his invention and won the prize in January 1810 on the condition that he make the method public. So, the same year, Appert published *L’Art de conserver les substances animales et végétales* (or *The Art of Preserving Animal and Vegetable Substances*). This is considered the world’s first cookbook concerning modern food preservation methods. His method was to cut up and place foodstuffs in a bottle, leaving air space at the top of the bottle. Then, a cork would then be sealed firmly in the jar by using a vise, and the bottle was then wrapped in canvas to protect it. Next, the bottle was placed into boiling water and then boiled for as much time as Appert deemed appropriate for cooking the contents thoroughly. The cork was then reinforced with wire.

It was not a fast process (it took up to five hours per bottle), but it worked. It is worth noting that Appert (nor anybody else at the time) had any idea WHY it worked – it would be almost 50 years before another Frenchman, Louis Pasteur, showed the relationship between bacteria and food spoilage. In any case, Appert was given the prize, and started a company that produced canned foodstuffs for more than 100 years.

Which leads us to 1815. Napoleon at this time was self-proclaimed Emperor, and was engaged against the coalition armies of Great Britain, Russia, Austria, and Prussia at the battle of Waterloo.

What in the world does food preservation have to do with Waterloo? You see, the majority of the foodstuff that the French carried with them to battle consisted of energy-giving proteins – beef, lamb, and other meats. I don’t know about your digestive system, but a diet heavy in protein (and low in high-fiber food choices) can make you wish that there were large supplies of prunes also accompanying the meal. During the Waterloo conflict, Napoleon was troubled by hemorrhoids, which made sitting on a horse for long periods of time difficult and painful.

This condition led to disastrous results at Waterloo. Waterloo occurred on Sunday, 18 June 1815, near Waterloo in present-day Belgium. There had been several days of fighting – on the previous Friday, the French defeated the Prussian army at Ligny (about 20 miles from Waterloo). This turned out to be the last battle ever won by Napoleon.

On Sunday, the British troops, led by the Duke of Wellington, combined with the re-grouped Prussians (led Gebhard von Blücher) and attacked. During the critical phases of the battle, Napoleon was unable to sit on his horse for other than very short periods of time. This greatly interfered with Napoleon’s ability to survey the situation and direct his troops effectively. Napoleon was unaware just how weak his right flank had become – and the Prussians were able to break through the weakened right flank.

At the same time, Wellington attacked from the front – and the French were driven from the battlefield in complete disarray. All because Napoleon couldn’t sit in his saddle. Probably due to a high-protein low-fiber diet. Because food preservation techniques did not require the French to forage for local produce (where the local diet would have been healthier and higher in fiber).

Maybe a few cases of prunes or some Milk of Magnesia would have helped. But then, those weren’t available in the supply chain.

The supply chain – like software – needs to know not just the requirements, but also the actual needs of its users. But that’s another Backtalk column.

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