2018, Walmart had tracked over 4 million food packages over a period of approximately one year.[5]

In March 2017, the Chinese e-commerce firm Alibaba announced a partnership with PricewaterhouseCoopers to help solve China's food safety issues (Millward, 2017). Alibaba is testing uses of Blockchain to track food products through the supply chain.

In some value chains, traceability can be a sanitary requirement, for example to ensure that foods are free of diseases such as bovine spongiform encephalopathy. Implementing such traceability systems is costly, in particular for developing countries with many small farms. Blockchain could offer an interesting alternative to existing and complex systems and make market access easier for exporters from developing countries.

Beyond issues of quality, blockchain technology is also used by companies to track ethical claims and fair-trading practices. In 2016, Provenance piloted a project in Indonesia, the world's largest producer of tuna, to provide proof of sustainably sourced and slavery-free products.[6] Local fishermen sent text messages to register their catch on the blockchain. The identification was passed on to a supplier, and every transaction that occurred along the supply chain was recorded. Information on the origin of the product and the supply chain journey could be accessed and verified by end-buyers and -consumers using their smartphones. This pilot project demonstrated how Blockchain can be used to track responsibly caught fish and prove social claims, and make fish supply chains more transparent. Another Provenance project tracked coconuts from Southeast Asia to Europe, to provide shoppers with blockchain-verified proof of fair pay to the farmers that grew the coconuts.[7] The traceability of products via Blockchain could open new opportunities for producers from developing countries, as it could make it easier for them to prove the quality of their products and to negotiate fair prices.

Traceability of products along the supply chain to assert origin, quality, and ethical and social claims, and to track tainted products is undeniably one of the most promising uses of blockchain technology. In a widely shared quote, Franck Yiannas, Vice President of Food Safety for Walmart, noted that Blockchain is the "equivalent of FedEx tracking for food" (Giles, 2018).

However, while the use of Blockchain can enhance transparency and help trace products along the supply chain, it can only guarantee that information on the blockchain has not been tampered with. Third parties may still be required to check off-chain processes and confirm that they meet the asserted claims. Ethical and social claims via a blockchain, for example, are only as good as the offline verification