## From trough\* to table: mapping the food chain saves lives

Tracking produce prevents the spread of disease and tackles food fraud.



The use of mapping technologies makes it easier to ensure that no unexpected ingredients end up in our food. Photograph: Jochen Tack/Alamy

Nearly half of global manufacturers say they don't have any visibility past their direct suppliers – in other words, they don't know what is happening in their supply chain. While they may audit first tier suppliers, they usually cannot see beyond them to their suppliers' suppliers. In the food industry, a meat packaging plant buys meat from a supplier, which in turn buys beef from multiple farms in an area. The packaging plant keeps records on its supplier, but does it know the cleanliness ratings and health history of those farms?

Applying higher standards to information collection and management will reduce the impact animal disease has on global food production and have huge public health benefits. The US Centers for Disease Control and Prevention found salmonella not only in poultry, but also in bean sprouts, nut butter, chia powder and cheese. It estimates that, each year, roughly one in six Americans get sick, 128,000 are hospitalised and 3,000 die from food-borne diseases.

Where transparency is concerned, understanding the location of each point in the journey food travels from trough to table is essential. One of the best ways to achieve this is through mapping. By linking geographic information (all the locations that, for example, the ground meat, lettuce, cheese and sesame seed bun come from) to non-spatial data (the name and lot number of the cow, and the firm processing it), it's possible to simplify the complex web of origins and process points so food chains can be more easily understood, accessed, traced and tracked.

Toolbox: \*Trough: (for animal food) = auge

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