Tasked by the European Commission (EC), the European Food Safety Authority (EFSA) published a scientific opinion on 15 November 2011 evaluating the public health risk of Shiga-toxin producing Escherichia coli (STEC) and other pathogenic bacteria in seeds and sprouted seeds [1].

The EFSA Panel on Biological Hazards (BIOHAZ), author of the opinion, draws the conclusion that sprouted seeds are ready-to-eat foods with food safety concerns because certain pathogenic bacteria such as Salmonella and pathogenic E. coli (including STEC) can contaminate seeds and grow during sprouting.

Sprouted seeds have been shown to have the potential to cause serious and wide spread food-borne outbreaks. Although Salmonella and to a lesser extent pathogenic E. coli (including STEC) are the most commonly reported bacterial pathogens causing outbreaks associated with the consumption of contaminated sprouts, other bacterial pathogens (e.g. Bacillus cereus, Staphylococcus aureus, Listeria monocytogenes and Yersinia enterocolitica) have also been implicated with sprout-associated outbreaks, although very rarely.

As found for Salmonella, very low contamination levels of dry seeds, as little as four bacteria/kg, can cause sprout associated-outbreaks. Therefore it is very important to prevent contamination of seeds by pathogens during the production, storage and distribution stages.

Producers of sprouted seeds should aim to implement more stringent food safety management procedures, concludes the Panel, if these are not already in place. Additional measures include Hazard Analysis and Critical Control Point principles, Good Hygiene Practices, Good Agricultural Practices and Good Manufacturing Practices.

EFSA published a report on the public health risk of STEC in fresh vegetables earlier this year which outlined a fast-tracked risk assessment of the exposure of the consumer to STEC through eating raw vegetables [2].

References
