

Innovative food label targets consumer concerns

The issue of unacceptable levels of food waste is one which continues to attract public, political and media attention. An estimated 89 million tonnes of food is wasted every year in the EU and is forecast to rise to around 126 million tonnes by 2020 if no action is taken¹.

In the UK, household food waste has been identified as a major contributory factor and concerned consumers are now looking to manufacturers and retailers to act responsibly. Given the added growing pressure of meeting Government and EU targets on waste reduction, finding safe and reliable initiatives to help manage the problem is a priority.

Total EU consumer food waste is thought to average 123kg per person annually, that is 16% of all food reaching consumers².

Perplexing packs

Tackling consumer confusion around on-pack labelling is a major focus. This factor alone is thought to contribute more than 15% of the 15 million tonnes of food thrown away in the UK annually³.

Definitions of 'best before' and 'end by' dates are either misunderstood or disregarded by many UK consumers.

In fact, over two thirds claim to use their own senses rather than date labels to judge whether a food is Statistics from the Department for Environment, Food and Rural Affairs (DEFRA) show households to be the largest source of food waste in the UK; estimated at 7.2 million tonnes per year.

safe for consumption⁴, which is alarming with Salmonella, E-coli and Listeria all being odourless.

While industry and EU legislation continue to make moves towards simplifying on-pack label terminology, there remains a more immediate risk to food safety as well as escalating waste.

Consumers are looking to manufacturers, producers and retailers – big and small – to act responsibly. Those who do, will be seen to be delivering an increased level of consumer commitment and be rewarded with clear product differentiation and greater consumer loyalty. Those who don't, risk reputational damage and an impact on brand value.

- Ounting the Cost of Food Waste: EU Food Waste Prevention, Published by the Authority of the House of Lords 6 April 2014, HL Paper 154
- ² Environmental Research Letters, Volume 10, Number 8, doi 10.1088/1748-9326/10/8/084008
- 3 'Best-before' could be destined for the waste bin', foodmanufacture.co.uk, 12 Jan 2015, published by William Reed Business Media
- Consumers' Food Safety Concerns UK May 2015, Minte
- Food Waste, Briefing Paper Number CBP07045, 2 September 2015, Emma Downing, Sara Priestley, Wendy Carr; www.parliament.uk/commons-library



Find out how UWI can help you

- reduce waste
- reduce risk
- optimise food quality
- T +44 (0)131 290 2299
- E info@uwitechnology.com
- W www.uwitechnology.com

Real-time solution

The UWI Label offers an innovative and accurate approach to monitoring how long a food or drink product is safe to eat after opening:

User-friendly concept

Applied to the outside of food packs, the UWI Label incorporates an embedded, elapsed-time indicator strip which is automatically activated when the product is opened; progressively changing from green to red according to a pre-set time period. Red alerts the consumer that the product is no longer safe

Unique technology

Designed using patented microfluidic technology, the smart label comprises three parts; the fluid, the microfluidic channel and the flexible material substrate. Many years of rigorous scientific and technical development is behind its successful performance.

Tailored Timescale

The required time period is set in advance which enables specific timeframes for each product to be selected: ranging from a few minutes, to hours, days, weeks and months.

Longer periods are possible, subject to further research and development and validation.

Broad application

Made from flexible, paper-like, composite materials, the UWI Label is suitable for application on a wide variety and size of jars, bottles, containers and tubes. It is consistently reliable across refrigerated and ambient products.

Ease of use

Readily integrated into standard tamper-proof labelling lines, the UWI Label does not require investment in additional machinery or line disruption. Fully applied to the outside of packs, it does not come into contact with the contents at any stage.

Versatile design

The size of the UWI label can be adjusted according to individual pack specifications and artwork developed to align with product branding.

Enhanced safety

The UWI Label is compliant with EU food regulations.



Founded in 2009 by CEO and inventor of the UWI Label, Pete Higgins, UWI Technology has since won a raft of awards in recognition of its technical and commercial developments from organisations including: PWC Scotland, Barclays, NESTA, SMART Scotland and Scottish Enterprise.

UWI Technology Limited CodeBase, Argyle House 3 Lady Lawson Street Edinburgh EH3 9DR United Kingdom

Far reaching benefits

The UWI Label works alongside conventional on-pack date information but delivers valuable additional advantages:

- → Boost corporate reputation
- → Creates a point of differentiation against competitors
- → Helps build consumer loyalty
- → Ensures consumers consistently experience a quality product
- → Supports waste reduction targets
- → Reduces the risk and damaging impact of a food safety crisis

Consumer benefits

- → A clear, visual guide which shows at a glance whether a product is safe to consume
- → A universally understood use-within time indicator
- → A foolproof, easy to use, integrated tool which requires no additional steps
- → Reduced risk of using out of date, substandard or even harmful products
- → Financial savings as a result of managing grocery supplies more confidently