TRADE INTERCHANGE
Smarter Supplier Management

ARCUS®
A Trade Interchange System

ANTICIPATING CHANGE: ANTIBIOTICS IN THE FOOD AND DRINK SUPPLY CHAIN

TRADE INTERCHANGE REPORT: ANTIBIOTICS

Why antibiotic usage is set to become a big issue, and what you can do about it

WHITE PAPER
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An Introduction to
ANTIBIOTICS IN YOUR SUPPLY CHAIN

Risks and responsibilities

Questions over the provenance of our food are now commonplace; there is growing consumer concern about antibiotics entering the food supply chain and links with an increase in drug resistant diseases in humans.

Untreatable infections could reach crisis point – the EU estimates that 25,000 people die in Europe each year from an antibiotic-resistant infection. In a 2017 report, the World Health Organisation recommended that farmers and the food industry stopped the routine use of antibiotics in food-producing animals in a bid to halt increasing antimicrobial resistance in humans. "A lack of effective antibiotics is as serious a security threat as a sudden and deadly disease outbreak," said Dr Tedros Adhanom Ghebreyesus, Director-General of WHO.

The use of antibiotics for growth promotion has been banned within the EU since 2006. However, some food related organisations buy meat from outside the EU where antimicrobials are legally allowed to be used in this way. A study published by the National Academy of Sciences projected that worldwide antimicrobial consumption would rise by 67% between 2010 and 2030, and nearly double in Brazil, Russia, India, China, and South Africa. This rise was thought to be driven by the growth in consumer demand for livestock products in middle-income countries, and a shift to large-scale farms where antimicrobials are used routinely.

Add to this, that even within the EU, antibiotics are used as mass preventative medication against mastitis in dairy cows and are commonplace in intensive farming. This overuse is having a knock-on effect on the health of humans. With every use of antibiotics, antibiotic-resistant bacteria are created, which can pass into the food chain and infect humans – MRSA, for example, was found in raw supermarket pork, according to The Alliance to Save Our Antibiotics research. The dairy industry is not exempt – MilkSure is a training programme, developed in conjunction with the British

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Cattle Veterinary Association (BCVA), that aims to safeguard antibiotic-residue milk.

In response, there are rising consumer fears over antibiotic use in food-producing animals. This leads to a greater demand for transparency in food products. Many consumers are unaware, for example, that only organically-certified meat is protected against the routine use of antibiotics.

It's the routine dispensation of antibiotics in feed that health campaigners object to. "There is a welfare issue around completely removing any kind of antibiotic use in farming," Emma Rose from the Alliance to Save our Antibiotics told The Guardian. "Animals must and should be treated with antibiotics as and when is necessary – and when this mirrors a diagnosis from a qualified vet. It is the routine, prophylactic use that we oppose when no disease has been diagnosed in any of the animals being treated. We also oppose the use of the critically important antibiotics."

If suppliers cannot provide transparency of use of antibiotics – either routinely or for disease treatment – from their food producers, this can slash consumer confidence, damage reputations and leads to issues of customer retention. Businesses inspire consumer confidence by working with suppliers on a clear policy of antibiotics in the supply chain, a strategy to reduce their use and a commitment to publishing results.

Antibiotic survey from Trade Interchange

To better understand awareness around antibiotics in the food and drink supply chain, Trade Interchange has carried out its own study. We asked 225 people who have responsibility for managing food and drink suppliers a series of questions around the issue. It showed that more clarity at a legislative level, as well as a deeper understanding around the potential impacts will be crucial if the foodservice and food manufacturing industry is to thrive in 2018 and beyond.

[1] European Commission, New EU Action Plan on Antimicrobial Resistance (Brussels, 29 June 2017).
   <http://europa.eu/rapid/press-release_MEMO-17-1723_en.htm#_ftn1>

[2] World Health Organisation, WHO Guidelines on Use of Medically Important Antimicrobials in Food-Producing Animals, 7 November 2017.

[3] PNAS, *Global Trends in Antimicrobial Use in Food Animals*, May 5, 2015. 112 (18) 5649-5654; published ahead of print March 19, 2015.
   <https://doi.org/10.1073/pnas.1503141112>

[4] Alliance to Save Our Antibiotics, June 2015 <http://www.saveourantibiotics.org/media/1518/mrsa-in-pig-meat-press-release-june-2015.pdf>

[5] The Guardian, *Is it Time for an Antibiotic-Free Label on our Food?*, 18 June 2015.

The
CHALLENGES

What's holding the food and drink industry back?

Trade Interchange's new research, conducted by 3Gem, shows a low awareness of the problems around antibiotics in the food and drink supply chain. 37% of respondents don't currently include antibiotics in their supply chain monitoring and 21% don't know if they do.

In the UK, the use of antibiotics in livestock is relatively low compared with other countries – the US, for example, uses five times as many antibiotics as the UK. According to figures from Defra, the UK has been reducing the quantity of antibiotics consumed by livestock. Sales for use in food-producing animals dropped 10% from 62 milligrams per kilogram (mg/kg) to 56mg/kg, continuing a ten-year downward trend and putting the UK on track to reach its 50mg/kg target by the end of this year.

However, a recent study published in the BMJ publication Vet Record found that a small group of farmers were using "extremely high levels" of antibiotics in their cattle. The study examined 358 dairy farms over a year and found that the top 25% of farms accounted for just over half – about 52% – of the total antibiotics used across the sample.

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of businesses are concerned about the use of antibiotics in their supply chain.

The impact on the food and drink supply chain is one of visibility. With so many areas of concern – from allergens to modern slavery – consumers are more demanding in terms of transparency in sourcing.

This is reflected in our new research – 76% of respondents are scrutinising their supply chain more than ever before and 77% are seeing more external pressure from stakeholders to tackle supply chain challenges such as antibiotics.

Those working in the food and drink industry are also worried – 67% of businesses are concerned about the use of antibiotics in their supply chain. A deep understanding of the problem is not apparent however, as 40% "have some idea" about the issue of antibiotic use in food and 15% are "not clear at all".

This perhaps reflects the low, but growing, awareness among consumers. In our survey, only 44% of respondents said that consumers had asked whether antibiotics are used in their products. Increasing media coverage around the issue will inevitably cause this number to increase over the coming years.

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Trade Interchange's research confirms that foodservice and food and drink manufacturing businesses are meeting this challenge head-on, with the huge majority (84%) already working to improve visibility in the supply chain, a task which includes supplier management.

Interestingly, 72% of respondents said they tried to purchase products from antibiotic-free sources. However, only 57% had the ability to identify whether preventative rather than curative antibiotics had been used in the products they purchase, and only 41% monitored antibiotic use among their suppliers.

Today's complex supply chains require closer scrutiny than ever before, as well as closer collaboration between suppliers, buyers and consumers. Tackling major issues such as antibiotic use in livestock, and the potentially deadly impact on human health, requires close monitoring and collaboration. Without the right data to hand, this is getting ever harder to achieve.

One solution is Trade Interchange's ARCUS® Supplier Information Management (SIM) software that can help businesses to manage issues such as antibiotics, collecting and collating what businesses need to know about suppliers. This is particularly helpful when collecting and managing large amounts of supplier information. ARCUS® SIM will send alerts to suppliers when information is out of date, reducing risk and ensuring compliance, as well as helping with supplier discovery and selection.

Advanced functionality, such as product information management, manufacturing site level information and supplier audit, are specifically tailored to the foodservice and food and drink manufacturing sectors, and are designed to give procurement and technical teams a complete, collaborative approach to managing supplier risk.

The World Health Organisation has recommended reduced use of antibiotics in the food and drink supply chain. Some 27% of the respondents to Trade Interchange's new survey have a strategy to try to reduce antibiotic use, while 28% have no strategy but plan to consider the issue. Another 15% believe it's up to suppliers to deal with the issue, while the remaining 19% have never thought about or discussed the issue and 11% simply don't know.

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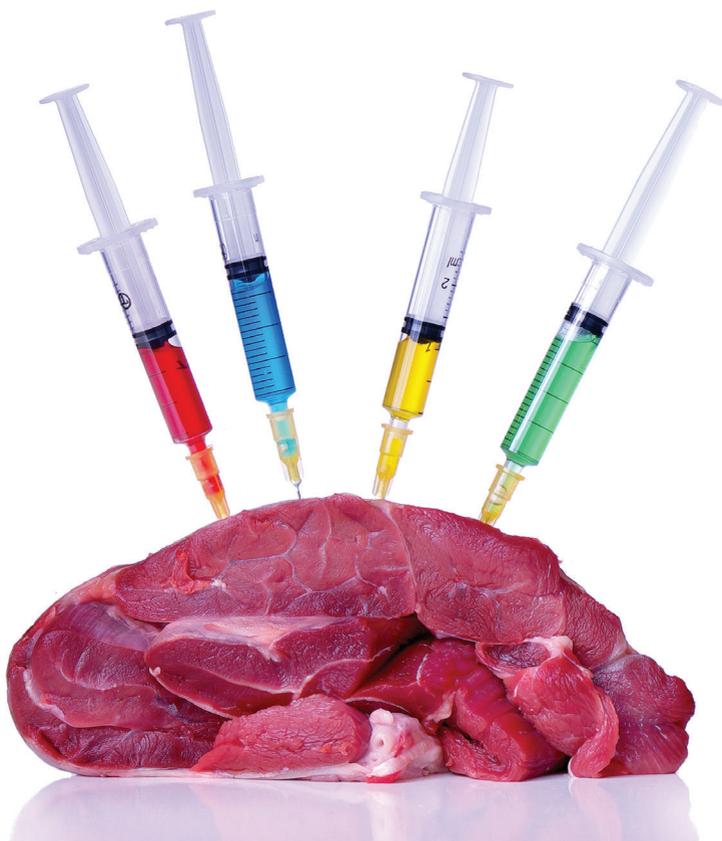
[6] Alliance to Save Our Antibiotics, 8 February 2018, <http://www.saveourantibiotics.org/media/1794/us-and-uk-farm-antibiotic-use-comparison.pdf>

[7] Gov.co.uk, UK on Track to Cut Antibiotic Use in Animals as Total Sales Drop 9% <https://www.gov.uk/government/news/uk-on-track-to-cut-antibiotic-use-in-animals-as-total-sales-drop-9>

[8] Vet Record, Quantitative Analysis of Antimicrobial Use on British Dairy Farms, <http://dx.doi.org/10.1136/vr.104614>

The
FUTURE

67%
of respondents worried that Brexit will have an adverse effect on visibility in the supply chain.

The importance of access to data and how technology can help

Although the UK has exceptionally high standards when it comes to animal welfare, legislation around the use of antibiotics in the UK currently allows preventative group antibiotic treatments – dispensation when no disease has been diagnosed.

Other areas in Europe are further ahead. The Netherlands and the five Nordic countries – Denmark, Finland, Iceland, Norway and Sweden – do not permit preventative antibiotic treatments on herds of animals.

All remaining EU members are on track to follow these frontrunners. In March 2016, the European Parliament voted 95% in favour of new veterinary medicine regulations that would ban mass medication with antibiotics for groups of animals where no disease has been diagnosed.

The UK voted in favour of the new rules, however the upcoming split from the EU is casting doubt over the issue, along with other pressing concerns in the food supply chain. Our research reflects this,

with 67% of respondents worried that Brexit will have an adverse effect on visibility in the supply chain.

Leaving the EU will change patterns of production, trade and consumption. The regulatory system will therefore need to be flexible and responsive. In the case of antibiotics, however, British businesses will need to demonstrate their commitment above and beyond.

Including details on antibiotic policies when engaging new suppliers, and asking existing suppliers to provide the relevant information, will enable food and drink businesses to start effectively tracking where they stand and encourage best practice across the board.

Our new research shows that the majority of operators in the food and drink industry use manual systems to manage supplier information of this kind. These paper or spreadsheet-based systems are notoriously difficult to manage, however, and can be subject to human error.

Manually maintaining supplier databases requires significant investment in terms of time and resource. This has the knock-on effect of putting the supplier database constantly at risk of becoming outdated or neglected.

Foodservice, hospitality and food and drink manufacturing businesses are increasingly judged on their ability to provide full accountability in terms of where and how they source ingredients and products. Maintaining supplier databases is therefore of paramount importance in ensuring compliance – businesses should prove they have the correct documentation and have asked the right questions, above and beyond the basic legislative requirements.

Developments in data and technology are making this heightened compliance much more achievable. If an enhanced supplier management software system, such as ARCUS® SIM, is in place, operators in the food and drink industry are far better equipped to maintain full visibility over the sourcing of products, enabling them to best support ambitious targets when it comes to cutting antibiotic use. The positive impact on our health is something we must all strive for.

Trade Interchange's Technology
CAN MAKE ALL THE DIFFERENCE

Managing director and co-founder Mike Edmunds lifts the lid on effective supplier information management

In today's competitive environment more than ever, the food and drink trade relies on trust. Consumers want to know that the product they are being served has been sourced responsibly, and that their health won't be adversely affected by the supply chain it comes from.

Tracing products from source to plate is becoming ever more challenging as the complexity of supply chains increases almost daily, leaving some businesses in the food and drink industry struggling to manage all the information that consumers are calling for.

When it comes to excessive antibiotic use in the food and drink supply chain, awareness is only going to grow as the impact is felt in antibiotic resistance and human health. Consumers will inevitably ask more questions and expect the companies they work with to provide the right answers.

Specialist technology such as Trade Interchange's ARCUS® Supplier Information Management (SIM) software is a central supply chain management solution that provides a 360° view of supplier information. It streamlines the process of managing important supplier information using a single cloud-based platform. Suppliers 'on-board' themselves by completing tailored questionnaires and SIM automatically sends out reminders to suppliers when additional documentation is required or needs updating.

SIM collects what your business needs to know and creates dramatic time-savings, freeing your employees from tedious data-inputting. Supplier information is stored in a central location with remote access and a full audit trail. SIM helps your business to reduce risk, ensure compliance with the latest regulations and put procedures in place to protect your brand and reputation.

Foodservice, hospitality and food and drink manufacturing businesses can now benefit from specialist functionality in SIM, which revolutionises how users in technical and quality roles manage supplier risks. This functionality can evaluate and approve deeper levels of supplier information at a product and manufacturing site level, as well as site audit capabilities.

With up-to-date supplier information to hand, businesses can feel confident in their food and drink sourcing and provide a positive consumer experience. Furthermore, by holding clear, audited records on antibiotic use in the food chain, businesses can ensure animal welfare, responsibly reduce the use of antibiotics that are essential to human health and protect their own brand and reputation.

About Trade Interchange

At Trade Interchange, we help organisations reduce the costs, risks and complexities associated with managing a large amount of supplier information.

Our solutions support a range of supplier management activities: from initial tenders and supplier information management, through to supplier contract and performance management.
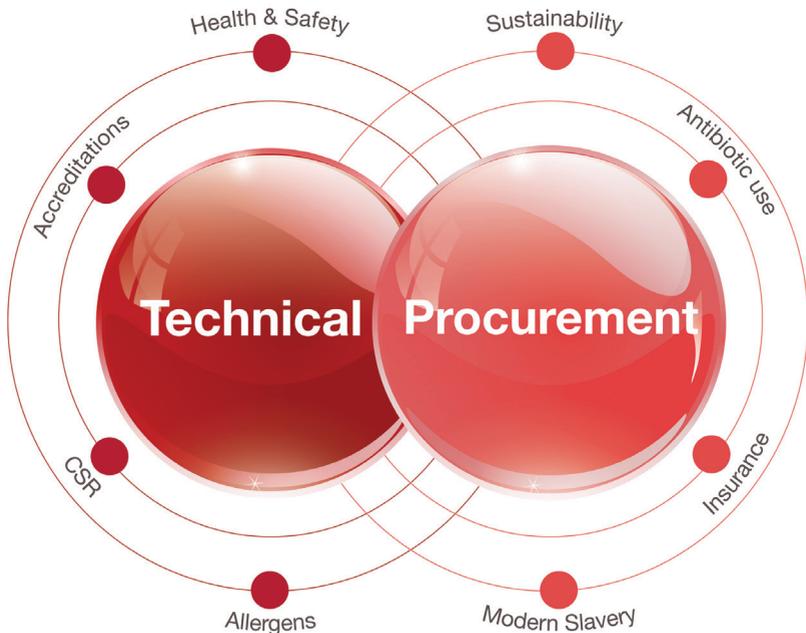
TRADE INTERCHANGE

Smarter Supplier Management

ARCUS SIM — Supplier Information Management

ARCUS — A Trade Interchange System

ARCUS SCM — Supplier Contract Management

ARCUS eRFX — Supplier Tender

ARCUS eAUC — Supplier Negotiation

ARCUS SPM — Supplier Performance Management

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