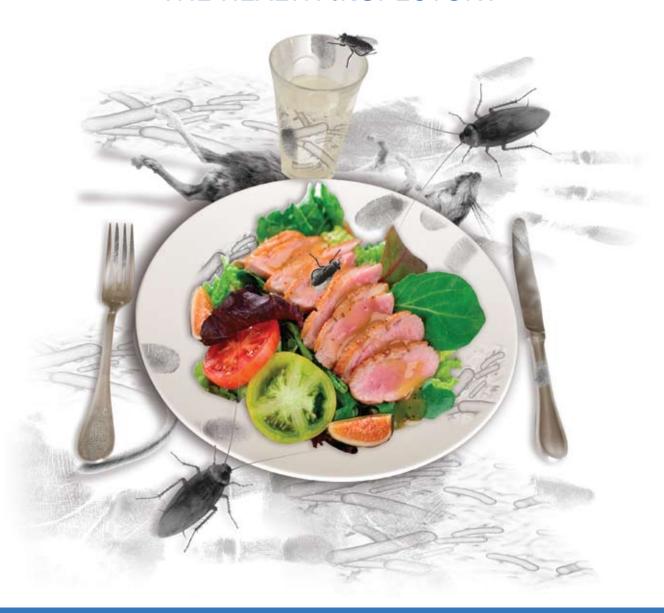


FOOD SAFETY BULLETIN



ARE YOU EXCEEDING YOUR CUSTOMERS' EXPECTATIONS... AND THOSE OF THE HEALTH INSPECTOR?



Be sure and keep safe with a tailored, economic food safety programme for small enterprises and restaurants.

Food safety is becoming more and more of an issue, with on-the-spot fines for dirty kitchens and the dreaded name-and-shame website. Designed for stand-alone customers, the CCP Food Safety Programme is an affordable system that helps you meet regulations and provides a high level of due diligence for food safety management. It includes instruction on compliance with national temperature requirements, on-site visits from a qualified food scientist project manager, a detailed site audit and report, a template documentation start-up kit, and so much more.

Get in touch with HACCP Australia, and ask about our CCP Food Safety Programme.

Call 02 9956 6911 or visit www.haccp.com.au





A Simplified Food Safety Programme for Smaller Retail Operations

Common criticisms of HACCP Based food Safety programmes over the years have been the expense and complexity of developing and implementing such a programme in smaller operations. Facilities such as Cafés and small restaurants undeniably have a need for an appropriate food safety programme but the commitment required in time and cost are often prohibitive.

Some government bodies have responded to this need by developing template programmes. An excellent

example of which is that developed by the Victorian Government. Of course with such a programme, implementation still falls to the operator. This can be onerous and confusing to some. This can be onerous and confusing to some leading to neglect and risk.

HACCP Australia has developed a new system which delivers a low cost, effective and easy to use Food Safety Programme. The Programme is called 'CCP Food Safety'. As the name suggests, the system is based around the Critical Control Point (CCP) part of a HACCP programme ...really, the pointy end of food safety management.

The manual is designed as a simple yet handy tool for reference and the monitoring forms are intuitive and easy to use. More attractive still, the programme includes a series of on-site implementation visits from our qualified technologists. At the completion of the programme, and subject to the successful

outcome of a compliance audit, the client is awarded certification including window decals and display certificates.

The programme has been trialed in Queensland and NSW in the QSR, restaurant and café sectors with outstanding results. Amed of Enfes Kababs in the busy Darling Harbour precinct in Sydney said "we needed a programme to demonstrate and manage the safety of our food – The CCP Food Safety Programme delivers this 100%" Martin Stone, Director of

HACCP Australia says "this sector has been looking for such a programme for some years now and with 'name and shame' and on-the-spot fine concepts on the regulators agenda, the imperative for this type of programme is building. Not only does this programme assist clients in meeting the food standards

requirements for temperature controls, the assistance given on site during the implementation phase is a great help to the operator", Mr Stone adds. "And, at a cost of about a tenth of a full HACCP programme, CCP Food Safety delivers excellent value to a market sector where every dollar counts."

Not only will this programme deliver an appropriate level of food safety, due diligence and therefore peace of mind to the operators, but, once the audit is passed, the system provides for a strong point of differentiation to customers in a food safety conscious market. For more information about the CCP Food Safety Programme, call the Sydney office of HACCP Australia on **02 9956 6911**.



Delivery Vehicles - Maintaining temperature control while reducing energy use and carbon footprint.

By Karen Constable - HACCP Australia Endorsement Manager

What's so important about temperature control?

One of the key contributing factors to Australian food poisoning outbreaks is inappropriate food storage. This refers to food that is stored for too long, or food stored at incorrect temperatures. In fact, a recent study funded by the Commonwealth and the NSW Governments found that inappropriate storage was the key contributing factor in twenty nine percent of food poisoning outbreaks.

Where temperature abuse occurs, it is often the result of a failure in the cold chain. The cold chain is a sequence of operations in the production, distribution, storage and retailing of chilled and frozen foods. It extends from raw material supply, through production, to the presentation of product for final consumption, including the handover of foods between different links in the cold chain, for example from producer to delivery truck, from delivery truck to retailer.

One very common link in the supply chain is the use of refrigerated transport vehicles to carry food from the manufacturer to the retailer. Keeping the temperature of the food correct while it is in a refrigerated vehicle can be a challenge.

Food businesses are required by law to ensure that they do not accept deliveries of potentially hazardous food that is not at the correct temperature or which has been outside temperature control for longer than safe time limits. Usually, the limits for chilled food will be 5° C or below. Frozen food temperature limits vary according to quality criteria, however the absolute minimum from a food safety point of view, is that the food is thoroughly frozen all the way through, and has not begun to thaw.

There are legal requirements for businesses that transport food. The business must protect the food from contamination, and potentially hazardous food must be transported under temperature control.

Imagine a scenario where a food company delivers frozen food from a central distribution centre to a number of small retail outlets across a metropolitan area. They use a two tonne delivery vehicle with a refrigerated truck body. Over the course of the delivery run, the truck door is opened a number of times. Each time the door is opened, the temperature within the truck fluctuates. On a hot summer day, how do you protect a sensitive product like ice-cream from these fluctuations? What about the amount of energy consumed by the refrigeration compressor as it attempts to keep the temperature at the required level?

Reducing your carbon footprint

In April this year, a survey of over 1000 members of the Australian public ('What Assures Consumers?' Net Balance Foundation) found that four out of five Australians want businesses to take climate change more seriously. More than two thirds said that government should force companies to phase out products that contribute to global warming.

The cost of carbon-based energy, such as diesel fuels is set to rise significantly in the next few years. Combine this with consumers' desire to see businesses changing their energy usage patterns, and there is a strong incentive for all businesses to attempt to minimize their carbon footprint.

Cold Air Barriers

Cold air barriers provide effective protection to product, as well as reducing energy usage. Plastic strip curtains have been shown to be the most effective cold air barrier devices, proving, in one study (School of Chemical Engineering and Industrial Chemistry, University of New South Wales), to be 93% effective in maintaining temperature control and energy consumption, compared to a vertical air curtain which was 79% effective.

A PVC strip curtain will provide an effective barrier against cold air loss, which protects product safety and quality. It will



Coldshield's Compass System - simple, clever and energy saving

also provide a visual barrier for stock security while unloading. In addition, condensation and ice buildup is reduced, compressor running times are reduced, giving longer compressor life, and coil icing is reduced. Energy consumption is reduced, and that means significantly lower fuel costs. One-piece PVC panels provide an even more effective barrier against cold air loss.

Colless Foods is one Australian company that is investigating a new system for optimizing their refrigerated truck operations. Colless Foods want to protect their stock during delivery and guarantee the integrity of the cold chain for their customers.

They are currently trialling a sliding PVC curtain system in two of the trucks that they use for delivering ice-cream. It is called the Coldshield Compass System. This sliding system has many advantages over a static barrier installation. The PVC curtains are mounted on travelling beams which allow them to be moved forward and back in the vehicle as it is unloaded. This allows the area that requires refrigeration to be minimized as the load reduces. The PVC curtains are two-piece side-to-side-sliding to provide a clear opening for uninterrupted access during loading and unloading. Will Cormack of Colless Foods likes the simplicity of the Coldshield Compass System, saying it is easy to use.

The Compass System is manufactured from lubrication-free nylon, stainless and aluminium components, with a robust and cleanable design. Installing two barrier systems into a truck body provides the flexibility to create three separate temperature zones within a vehicle; for example, freezer, chiller and dry goods zones.

Coldshield have performed tests under the supervision of an independent engineer which show the benefits of the system. Tests of a trailer-mounted cool room operating at 2°C, with ten door opening cycles in 24 hours showed that PVC strip curtains achieved greatly improved temperature stability, reduced condensation and a massive 24% energy saving. In a freezer container operating at -18°C, ice build up was prevented and an energy saving of 11% was achieved.

If you are in the business of delivering chilled or frozen food, a sliding PVC barrier system will help you achieve optimal temperature control and reduce your contribution to global warming. \blacksquare

Coldshield can be contacted on 1800 462 233.





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WATERING DOWN THE TRUTH

Officials and milk producers put their interests above those of consumers – and thousands of Chinese families are suffering.

As the head of China's food safety watchdog, Li Changjiang resigns and recalls in Australia New Zealand and Europe, compound the awful situation in China's powdered milk industry, the question is being asked as to how, if 20% of the milk producers in one country are producing poisonous milk, can consumers trust any others? This is what is now happening in China.

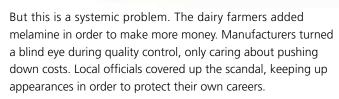
Sanlu group, one of China's largest baby milk powder manufacturers, revealed its products had been contaminated with melamine. An industrial chemical used to make plastics and fertilisers, melamine is rich in nitrogen. When added to

milk, it can make the milk's protein level appear higher than it actually is. In 2007 the US authorities found that pet food which had caused widespread illnesses was contaminated with the chemical. This time, kidney stones were found in babies who drank the milk provided by Sanlu. By the end of September, 6,244 babies had fallen ill, while 158 have acute kidney failure. Three babies have died.

The Chinese authorities arrested two dairy farmers who supplied Sanlu this week, accusing them of watering down milk and adding melamine to fool quality control checkers testing protein levels. However, the Chinese media reports that Sanlu first received complaints in March that its products were making babies ill. Public complaints to China's general administration of quality

supervision, inspection and quarantine (AQSIQ), were made as early as June. Sanlu's New Zealand shareholder Fonterra warned of the risks on August 2, but nothing happened until New Zealand's ambassador contacted senior Chinese officials. This has led some to conclude that the Sanlu Group and local officials tried to cover up the scandal.

Sanlu is not an isolated case. A nationwide investigation has found that 22 of the 109 milk producers have batches of products contaminated with the same compound. The Chinese media and public are now pointing the finger at senior officials within AQSIQ, believing they are also in some way responsible.



There are other cases that demonstrate the interweaving of interests between manufacturers and local officials. Almost at the same time as the Sanlu scandal, a mudslide happened in Shanxi, killing 259 people. Local officials were accused of helping a mining company to cover up the real reason for the

mudslide, the collapse of a mining dump belonging to the company. This is not rare phenomenon in China. Manufacturers and local officials collude to cheat the central government and the media.

The only victims are the consumers.

It's worth pointing out that most of the milk powder brands contaminated with melamine are at the lower end of the price range. For example, Sanlu's baby milk powder is priced at 18 Yuan (A\$2.70) per 400g bag. Most are sold in rural areas or less—developed provinces, where income is low and market supervision is lacking. Manufacturers assume the poorer consumers can't afford to care much about food quality, and even if they do, it's easier to silence them because of their lower awareness of consumer rights. The same applies with

the Shanxi mudslide. Most of those who lost their lives were mineworkers and local farmers. It's really hard for them to seek justice in the local judicial system. So, when accidents happen, a small amount of compensation will keep them silent.

One consequence of such criminal acts is that people gradually lose confidence in the manufacturers as well as the local authorities. And this is already happening. Chinese people are now questioning why this country has become so unsafe that even infants can be killed by their only food.

When both manufacturers and the local officials don't care about basic ethics, things are bad indeed. ■

Food and Beverage Industry Supply Chain Risk Management and Administration

A 3rd party solution offers risk reductions, economies and efficiencies to the food industry.

BACKGROUND

The food and beverage industry is faced with an ever increasing number of challenges as it attempts to satisfy a demanding market with high expectations of food safety and nutrition.

Changing life style patterns and technical developments have seen this responsibility move away from the consumer. As recently as 80 years ago, almost all fresh food was bought daily from a local source and consumed soon after and most food preservation was undertaken by the consumer in the home. Such food safe techniques have worked for centuries. Nowadays, responsibility for food preservation and food safety is almost entirely in the domain of the supplier and to those in their supply chain, with the consumer having to do little more than follow the instructions and 'use by' information on the packaging.

In the Western world, the consumer has rapidly developed a fundamental expectation of supplier's ability in guaranteeing food safety. The actual risks inherent in the preservation process are rarely considered by consumers with action often limited to the occasional sniff of milk or meat and a glance at the 'use by' label. More and more, the recognised brand, synonymous with quality or a unique flavour or a taste sensation, are assumed to be 100% reliable with regard to safety. Similarly, the caterer, retailer or restaurant chain is also considered to be 'above reproach' in this regard. Anything less is now a serious failure in terms of product expectations and brand damage is severe.

CURRENT ISSUES

Living up to this increasingly common expectation is difficult. Many of the major risks to food safety and food quality now lie in a complicated supply chain. While Marketing, Production and Logistics usually present the most immediate challenges to a business's success and brand value, the obvious risks of a failure in food quality and food safety that exist further down the supply chain are often ignored.

"Somebody, somewhere, is looking after that??!!

Such failures can come from only two sources - the actions in one's own control and actions in the control of others in the supply chain. It is no longer sufficient to solely manage the risks in one's own processes; buyers are required to take some responsibility for the quality of good they accept from their suppliers.

To this end, most food businesses enter in to supply agreements with vendors that include supplier expectations and commitments. Others operate a Vendor Quality Assurance programme as part of their quality process or as a subsection of a HACCP programme. However, this is merely a beginning. Vendors need to ensure that their suppliers are honouring such commitments and meeting those expectations. There are also failures and non-conformances to manage. Recognising these or reacting to these, after the product has reached the consumer, is too little too late and often very expensive. 'Recall' is a word that no distributor, manufacturer or insurer wants to hear!

Having the resources to manage these risks in the supply chain is proving to be technically difficult in terms of information flow and technical review. Many companies, such as large scale caterers, retailers and distributors buy a very wide range of products – meat, fish, dairy, processed goods etc, the reviewing and evaluation of which require expertise across a wide spectrum. Most organisations would prefer to manage Quality Control and in their own processes and liaise with suppliers on product quality and specification – leaving the technical or food safety to an expert resource base – and this is rarely available, to the required degree.

Too many companies all do the same thing and often pretty poorly!

Furthermore, the administration, management and verification of compliance data and non conformances are issues in themselves. Few organisations have a database platform and information exchange system that is capable of handling this complex issue efficiently, securely and in real time.

In fact, the time and labour cost in managing this process often sees it being ignored or poorly performed. This unacceptable risk profile isn't usually approved or sanctioned. Most commonly, it is unrecognised or even hidden – until a preventable failure causes causes a contamination, illness, recall and serious brand damage.

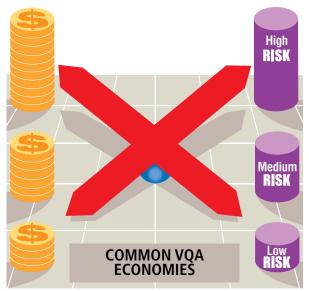
THE SOLUTION

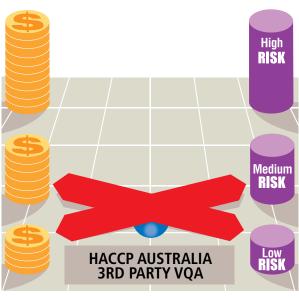
Those organisations that do get this right find themselves with the lowest risk profile and are among the very best in supply chain management. Until now however, this high risk profile has been expensive to master and has been the domain of very few companies but now HACCP Australia's 3rd party solution conquers the issues that have prevented others from benefiting by providing the platform and technical resource - and providing them at an acceptable cost.

Working with the iCiX system as the information platform and operating system, HACCP AUSTRALIA offers the food industry compliance administration and technical services – specifically designed to reduce risk and risk profiles in the supply chain. iCiX is a live time supplier information exchange database being used extensively by food companies and reatailers in the United States, including Safeway, Cosco and Conagra. (full details can be found by visiting www.icix.com)

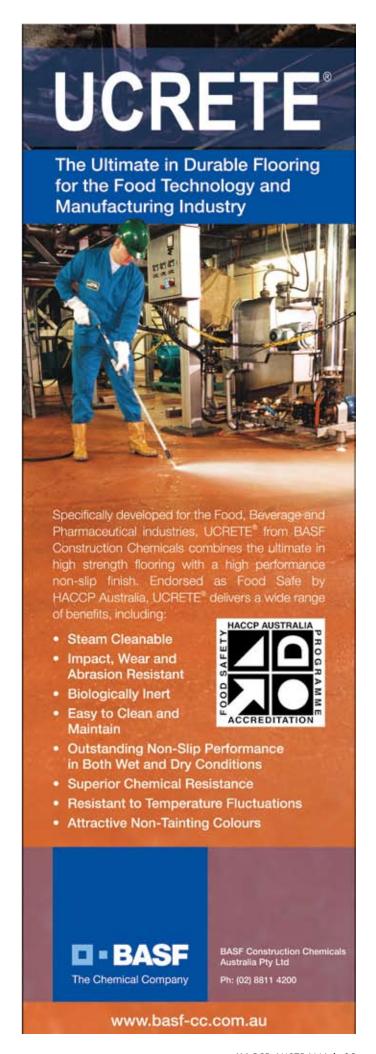
HACCP AUSTRALIA undertakes the administration, review, closeout management, documentation and technical reviews that are so often neglected. Specialising in this particular function, and undertaking such services on behalf of a number of likeminded companies, allows HACCP AUSTRALIA

VQA COST AND RISK BALANCE COMPARISON





CONTINUED ON PAGE 11



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OR
BAD PUBLICITY DUE TO FOOD
CONTAMINATION...

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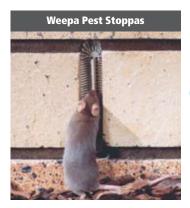
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to resource the service with specialist iCiX administrators and food technologists – and generate significant economies that are then reflected in the cost to customers; together with a much improved risk profile.

In Australia, the company undertakes supply chain risk management services for a number of high profile international organisations that once wrestled with a wide range of products, suppliers and risk profiles, such as Quick Service Restaurants (QSRs), Flight Caterers, Insurers and multi site service providers. Furthermore, the system is being adopted by a number of the world's largest food companies and retailers in the USA.



Subscribers share benefits and economies of 3rd party VQA administration

These customers – some of which did not address this issue at all beforehand – have benefited hugely in utilising this service. Not only do they now have some knowledge of the risks in their supply chain, they have now gained control of those risks and reduced the cost of managing it. Suppliers performance has improved considerably as they are continually monitored and incidents actioned appropriately. Product quality and consistency, as well as food safety, have demonstrated significant improvements too.

Those with complex or varied supply chains and high risk profiles stand to gain considerably from this.

The key factors in HACCP AUSTRALIA's service are:

- i) its experience in Vendor Quality Assurance Management,
- ii) its food technology resource
- iii) its iCiX administration experience
- iv) its ability to combine certain requirements of likeminded customers while satisfying individual customer profiles and particular reporting needs and actions.

HACCP AUSTRALIA, operating in conjunction with iCiX, offers supply chain management services that deliver

- A Reduced risk profiles
- B Improved supplier performances
- C Efficient administration and
- D Live time status and reporting

Of course, the precise requirements of customer organisations are always different and the service is always tailored to their needs. However, the following services feature among the most useful:-

- Risk Profiling
- Supplier Food Safety Certification review and administration
- Supplier Food Safety audit review
- Supplier Assessments
- Product complaint food science and food technology reporting
- Non conformance administration, reporting and stats
- Corrective Action issue and close-out
- Product specification review and management
- Allergen information compliance
- Insurance documentation and reporting
- Recall notice issue and administration

CONSIDER THIS!

While the policy and management of Vendor Quality remains in one's own domain, the processes and functions of administering Vendor Quality Assurance can be shared with other like-minded organisations without any loss of competitive advantage. Third party specialists with significant technical resources can undertake many of the tasks – offering economic and technical efficiencies that are just impossible to obtain in-house.

For more information, contact Clive Withinshaw at HACCP Australia on 02 9956 6911 or email vqa@haccp.com.au ■



AUSTRALIA'S FIRST ANTIBACTERIAL STEEL FOR COOL ROOM PANELS





Produced by BlueScope Steel and endorsed by HACCP Australia, COLORBOND®
Permagard® steel is used in the manufacture of insulated panels for cool rooms and facilities such as supermarket cold stores, food processing plants, abattoirs and wineries where hygiene is obviously a key concern.

COLORBOND® Permagard® steel combines the proven strength of COLORBOND® steel with leading Microban® antibacterial technology to inhibit the growth of harmful bacteria, which can lead to crosscontamination and food poisoning.

The material helps protect areas that are difficult to clean, offers enhanced protection between cleaning and doesn't wash off. It has been independently tested in accordance with strict Japanese Industrial standards against Staphylococcus aureus and Escherichia coli 0157.

COLORBOND® Permagard® steel comes with a 10 year warranty* and is available in the colour Permagard® White.

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*Warranty subject to terms and conditions.







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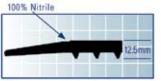
Grade "A" Food Production Mat No.482

Grade "A" has four key features:

- 1. Built-in handles to ease pick-up and cleaning of the mats
- 2. Hygienic porthole and solid underside design of the mat simplify cleaning and virtually eliminates areas where food and bacteria can collect
- Substantial underside knobs allow quick drainage and increase the comfort level of the mat
- 4. Flat, but textured surface increases traction when areasy and wet.

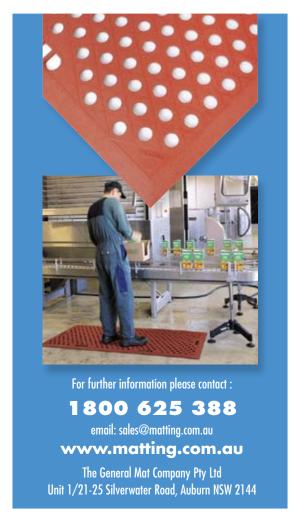






Stock sizes

760mm x 900mm and 760mm x 1520mm (sizes are approximate only)





While China takes centre stage in the media with its contaminated milk powder causing death an considerable illness, Canada has suffered a terrible outbreak of food poisoning, this time with listeria giving rise to awful consequences. Canada is normally associate with very high standards of food safety and care and so this outbreak has come as a shock to the nation and serves as a warning to all others as to their susceptibility to such events.

The head of Canada's biggest meat processor said his company was fully accountable for a nationwide outbreak of listeriosis food poisoning, which has been linked to deaths of 15 people in August this year.

"The buck stops right here," Maple Leaf Foods Inc. "We have excellent systems and processes in place but this week it's our best efforts that failed - not the regulators, not the Canadian food safety system," McCain said.

"I emphasize this is our accountability and it's ours to fix, which we are taking on fully."

Two deli meats samples that were processed at a Maple Leaf plant in Toronto tested positive for the same strain of listeria bacteria that has made dozens of Canadians sick this summer, including 15 people who have since died. As a consequence, the company faces a series of class action suits and has withdrawn all products made at the plant as a precaution in one of Canada's biggest-ever food recalls.

The meats were being used in facilities housing highly susceptible sectors of the population such as nursing homes and hospitals as well as restaurants and shops. Mr McCain said he did not know when the company would reopen the Toronto plant. Third-party experts were examining the plant to find the root cause of the contamination, which McCain said might not be possible to determine.

Maple Leaf shares lost more than 20 percent of their value after the recall began and financial analysts said the company's future depended very much on its ability to regain consumer confidence.

McCain declined to provide details of the cost of the recall, which the company had assessed at C\$20 million.

Canadian health officials defended their inspection system, which has been subject to criticism by members of the inspectors' union. Some were complaining that industry data was being overly relied upon.

Mr Paul Mayers of the Canadian Food Inspection Agency, said that Listeria bacteria is pervasive and can be found at low levels in food processing plants, grocery stores, kitchens, and on people's hands, McCain said.

Maple Leaf and other processors focus their attention on preventing listeria from being introduced into packaged foods because it is possible to test contaminated food product and not find the bacteria, Listeria and its cause are very difficult to find and Maple Leaf have compared that to searching for needle in a haystack!

This particular outbreak, the consequences and difficulties surrounding it, are worth noting as a warning or reminder to food manufacturers in Australia. Failure to review procedures and monitoring as well as Recall insurance could cost the business its very existence.





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A Range of personal hygiene products specifically developed for food handling and manufacturing environments. The Range is designed to:

- Raise the level of employee compliance with skin hygiene protocols
- Improve skin condition
- Reduce the potential for cross-contamination to safe-levels.

What's more, all products in the Florafree range offer excellent cost-in-use, exceptional performance and are backed-up by an unrivalled package of extensive testing, support, awareness and training manuals.

For more information on how to become part of the Florafree Experience contact: Deb Australia Toll free 1800 090 330 or visit www.deb.com.au



OZONE ON THE INCREASE



An ozone sanitation technology is receiving a boost in the US market, following an agreement signed between manufacturer Aquentium and Advanced Purification Systems International to market the equipment.

Aquentium's technology uses ozone as a disinfectant for food manufacturing equipment, and can also be used for direct application to food products to help destroy bacteria and viruses.

Ozone has been used in the United States for preventing food contamination since 2001, when the US Food and Drug Administration (FDA) granted ozone 'generally recognized as safe' (GRAS) status for use in food-contact applications. With concerns over the use of chemicals such as chlorine, ozone is seen among manufacturers as a safer cleaning chemical.

"Ozone is an excellent intervention regarding e-coli, listeria, salmonella and other bacteria or viruses. We are very optimistic that our relationship with Advanced Purification Systems International will help increase shareholder value for Aquentium,"

said Aquentium President & CEO Mark Taggatz.

OZONE IN FOOD

Because ozone is an unstable, highly reactive form of oxygen, it is 51 times as powerful as chlorine, the oxidiser most commonly used by most food processors, and 3,000 times as fast at killing bacteria and other microbes.

Ozone use, which is accepted by the National Organic Program (NOP), could also result in reduced energy costs for surface cleaning by eliminating the need for hot water during the process. According to Taggatz, treating food processing equipment with Aquentium's ozone technology can reduce the amount of bacteria that could potentially contaminate food. The firm also highlighted that ozone can help enhance the freshness of food

products, including fruits, vegetables and seafood. Ozone gas (O3) is a naturally occurring tri-atomic form of oxygen (O2) that is formed as sunlight passes through the atmosphere, explained the company. It can be generated artificially by passing high voltage electricity through oxygenated air, causing oxygen to break apart and recombine in the tri-atomic form.

Aquentium said its equipment allows for disinfecting of food products, machinery, and even floors and walls to be washed with ozone water.

Ozone is also increasing in popularity across Europe and Australasia as a sanitation method in food plants. In June this year, UK firm Radical introduced a new ozone sanitation technology designed to eradicate contaminants such as Listeria, Pseudomonas and E.coli in hygiene critical areas.

Ozone has been used in the USA for preventing food contamination since 2001

The company said its Steritroxing process is based on the production of free radicals through the generation of aqueous ozone and it includes four product categories: room sanitizing, surface sanitizing, produce decontamination and odour control. The system, which uses ozonised water to wash down surfaces and remove unpleasant smells from the environment, allows the factory to return to full production within an hour, according to Radical.

Contributor: Lorraine Heller: Food Production Daily/Decision News Media. www.decisionnewsmedia.com

OZONE IN AUSTRALIA

Queensland – based water treatment company **Noblewater** manufacture the Ozone Industrie's range of ozone generating equipment and accessories for use in food processing and related activities where chlorine-free sanitation is preferred. Says Glenn Waters of Noblewater "The advantage that ozone enjoys over traditional chemical sanitizers is that it can be applied at almost every point in the food processing supply chain. From the paddock to the plate, ozone can be used to enhance food safety, extend the shelf life of produce, and maximize profits at each delivery point.

Increasingly, environmental considerations and business imperatives are coming together as organizations realize the value of efficient use of resources. The use of ozone in many applications within the food processing industry can lead to a reduction in water consumption and less reliance on potentially harmful chemicals and their associated by-products. In addition, the use of ozone in direct food contact applications can increase the overall profitability of the supply chain through enhanced food safety, reduced wastage, extended shelf life, and a lower 'Total Delivered Cost' of manufactured food products."

Contact details:

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In this section are a few food safety and food related news snippets from around the world. Keep up to date with trivia as well as news!

From Japan

Quench your thirst with an Eel!

Forget cola, lemonade or beer, Japanese people sweltering in summer heat now have a new canned drink to quench their thirst — made from eels.

The fishy drink 'Unagi Nobori' – which translates as "Surging Eel" – contains eel extract and vitamins found in the fish. The fizzy yellow liquid is believed to be the first mass-produced drink of its kind.

The launch of the drink this month coincided with the start of Japan's annual eel-eating season, which peaked on 5th August. Many locals believe the fish boost energy during the summer's hot and humid conditions. Kazunori Hayashi, spokesman for Japan Tobacco Inc, the makers of the drink, said it is "mainly for men who are exhausted by the summer's heat."



The beverage has a similar taste to broiled eels, a popular form of the summer delicacy. The drink sells at about 140 yen (\$1.50).

Such is the popularity of eels that every year the Japanese newspapers are full of stories of "eel fraud". Desperate suppliers — eager to capitalise on the delicacy's demand — are often found breaking rules over food labelling. Already this year there have been four cases of companies trying to pass off foreign eels as grown in Japan.

The most recent case came at the end of June, when a government ministry reprimanded two companies for mislabelling Chinese-bred eel as grown in Japan. The Ministry of Agriculture, Forestry and Fisheries partly blamed the fact that companies are desperate to get rid of their stock from China. The safety of Chinese food was brought into question in January when imported dumplings laced with pesticide caused 10 Japanese people to fall ill.

Unagi Nobori isn't the only drink with an unusual flavour to be sold in Japan. Last year — for one summer only — you could buy Pepsi Ice Cucumber, concocted to taste like the cool green vegetable. Not to be outdone, CocaCola also has its own vegetable-based soft drink — Water Salad.

From Ireland

Food Safety Authority of Ireland receives WHO Food Safety Award

Earlier this year, The World Health Organization presented the second WHO Food Safety Award to the Food Safety Authority of Ireland (FSAI) at the end of the first day of the 31st Session of the Codex Alimentarius Commission, being held in Geneva this week. The Food Safety Award has been given to FSAI in recognition of their international contributions in promoting improved food safety in the global community. Dr Alan Reilly, Deputy Chief Executive, accepted the award on behalf of the FSAI.



FSAI is recognized as a world leader in promoting an integrated sciencebased approach, which ensures the safety of food along the entire food-chain links.

The Beijing Declaration on Food Safety of November 2007 reiterated the crucial need for an international approach to solving the world food safety problems. "The Food Safety Authority of Ireland is fully aware with the importance of close international collaboration on tackling food safety issues. They have been actively assisting other countries often in collaboration with WHO and FAO to improve the management on food safety," said Jørgen Schlundt, WHO Director for Food Safety, Zoonoses and Foodborne Diseases.

FSAI has also actively participated in the Codex Alimentarius Commission and has provided support to promote the effective participation of developing countries in the work of the Commission.

The WHO Food Safety award recognizes exceptional efforts in addressing food safety problems and outstanding contribution in the promotion of human health through food safety. In 2005 the World Health Organization (WHO) presented the first WHO Food Safety Award to Her Majesty Queen Sirikit, Kingdom of Thailand, in recognition of her commitment and efforts to promote food safety in her country.

From New York Edible Oddities

At this year's Annual Fancy Food Show in New York, the world leaders in edible oddities met to show off the forthcoming goodies many of which are destined to become favourites of the worlds trendiest restaurants and dinner tables. Eucalyptus chutney, wasabi rhizomes and blueberry acai gummy pandas, were on show among the 2,400 exhibitors gathered at the 54th annual event.

Americans spend nearly \$50 billion a year on specialty foods, a market that has grown more than 20% since 2005, boosted by a growing appetite for fancy energy snacks, infused bottled waters and all things

organic. Food purveyors have taken notice - specialty products might make up just 12% of all retail food sales, but their high prices yield big profits with 3,500 new specialty food products launched in 2007 alone. TIME Magazine scoured the hall and identified some of their favourites and at the top of their list was an Australian product that is attracting a big fan base. Namely a brand called 'Wild Hibiscus' being Hibiscus flowers in syrup.





The magazine went on to say "This Australian product packs 11 gorgeous red flowers and a sweet syrup into a little jar. Though the flowers are at their most sultry at the bottom of a champagne flute, they're edible and make an elegant topping for berry desserts." Another product that caught their eye was an explosive chocolate called 'Choco Pod Firecracker' which sees chipotle, salt and popping candy tossed into into dark chocolate and giving a spicy mouthful of indulgence. These single-serving bars, made with Venezuelan chocolate, have 60 calories and combine the spark of Pop Rocks with the richness of quality cacao.

From the US

Red wine can 'prevent food poisoning and stomach ulcers'

By Fiona MaCrae

Health kick: A healthy heart and now a settled stomach are seen as red wine's benefits. New research shows that red wine can combat potentially-fatal food poisoning bugs.

E coli, Salmonella and Listeria are all susceptible to the effects of red wine, and Helicobacter pylori, a stomach ulcer-causing bug which is spread through food and drink, is particularly vulnerable.

The study, carried out at the University of Missouri in the US, showed that Cabernet, Zinfandel and Merlot are particularly effective in fighting food-borne bugs.

White wine, however, has no effect.

The researchers told a Chicago conference that their findings added to mounting evidence about the health benefits of a glass or two of red wine. Dr Azlin Mustapha, a food scientist, said: "Our study is a little different than those previously reported. Those studies promote moderate red wine consumption for cardiovascular diseases." We went a step further and asked: If red wine is already good for cardiovascular diseases, what about food-borne pathogens? "If you get a food-borne illness and drink red wine, will that help decrease the symptoms a little bit? This study showed the pathogens were inhibited by red wine."



She said that although the alcohol in wine may act against the bacteria, other factors such as acidity may have an effect.

The chemical resveratrol, which is found in grape skins - which are removed when making white wine - is also thought to have an important role.

However, wine-lovers are warned not to overdo it.

Dr Mustapha said: "I wouldn't go

out and keep drinking red wine to the maximum but the recommended consumption of wine is one glass of wine for women, and two glasses for men per day."

Other recent research has shown that a glass or two of alcohol a day can extend life expectancy by almost four years. Wine was particularly beneficial, with just half a glass a day being enough to slash the risk of death from heart disease.

It is thought that the alcohol's health benefits come from its ability to prevent blood clots from forming and raise levels of HDL cholesterol - 'good cholesterol' which protects against hardening of the blood vessels.

Red wine is packed with polyphenols, naturally-occurring compounds which are thought to hinder the build up of dangerous fatty deposits in the arteries. Previous research has credited red wine with reducing the risk of developing cancer and staving off gum disease.



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With world concern growing as to the carbon or energy cost of producing and transporting products, the concept of 'food miles' is being presented as a convenient measure that allows consumers to predict the environmental cost of the food they are consuming. The term 'food miles' was coined by Tim Lang (now Professor of Food Policy, City University, London) who said: "The point was to highlight the hidden ecological, social and economic consequences of food production to consumers in a simple way, one which had objective reality but also connotations." Most recently, in the UK large manufacturers and retailers have collaborated within the UK's 'Food and Drink Federation' to address this as Jane Byrne of Food Production Daily reports.

A collaboration between leading food manufacturers and retailers aims to reduce the environmental impact of transporting food and groceries in the UK, claims scheme pioneer IGD. The scheme is a direct response to spiralling energy costs as well as demands from consumers for a reduction in the number of food miles incurred in the distribution of products, according to IGD, a food and grocery think-tank.

Currently, 37 of the UK's biggest food and drink companies have signed up for the initiative, including Coca Cola, Coors, Northern Foods, Heinz and Asda.

The concept of 'food miles' is being presented as a convenient measure that allows consumers to predict the environmental cost of the food they are consuming.

"In a highly competitive industry, getting 37 companies working together in this way is very innovative and results so far are impressive," stated IGD President and CEO of Nestle UK, Alastair Sykes.

The Sustainable Distribution initiative will result in the removal of 800 trucks from UK roads this year, which will result in savings of about 23 million litres of diesel fuel per year, claims IGD.

Callton Young, director of sustainability and competitiveness for the Food and Drink Federation (FDF), said that the industry has a particular role to play in ensuring sustainable distribution of goods.

"Shared transport is one of a number of activities that food and drink manufacturers and other companies across the supply chain can pursue to achieve fewer and friendlier food miles," stated Young.

"FDF is working with its members to achieve sustainable distribution in line with a commitment made in our Five-fold Environmental Ambition, which we launched in October last year," he added.

The transport scheme kicked off through a pilot project in early 2007, which saw Nestle and United Biscuits working together to create efficiency in their distribution network.

United Biscuits trucks now collect a load of Nestle products each day from Nestlé's factories in York and Halifax and deliver it to Nestlé's distribution centre in the Midlands, reducing empty truck runs.

IGD said that Tesco and Unilever have also explored the potential of transport collaboration, sharing vehicles between the Unilever Doncaster and the Tesco Goole distribution centres, helping to remove 500,000 road miles.

Workshops

The partnerships followed the attendance by the companies at Efficient Consumer Response (ECR) workshops managed by the IGD, which aim to drive greater collaboration between retailers and suppliers to allow companies to discover transport sharing opportunities.

The IGD claims that the outputs of the initiative will be shared widely within the industry to encourage improvements from companies of all sizes.

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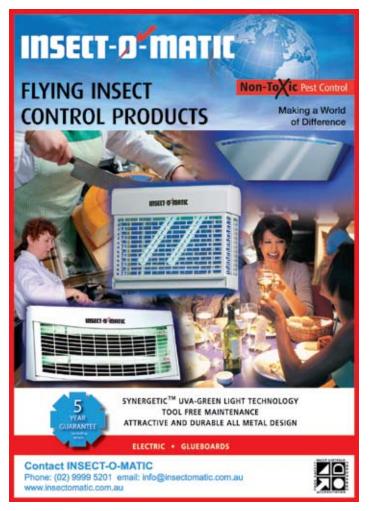


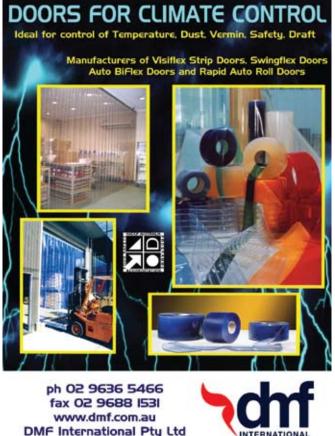
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Queensland packaging companies WRAP UP HACCP PROGRAMMES

Two Queensland based packaging companies have recently undergone their second re-certification audits and passed with flying colors. Gold Coast based 'Amec Plastics' and Brisbane based 'Flexpack' are high achievers in this manufacturing sector and have delivered outstanding levels of food safety compliance to their customers.

At first glance, you may question why a packaging manufacturer pursues HACCP certification most commonly applied to manufacturers of food. Martin Stone, Director of HACCP Australia explains, "Primary packaging from companies like 'Flexpack' and 'Amec' is designed for long term food contact and will be used in a food factory without any significant decontamination step for the packaging. The materials therefore should be treated as a virtual ingredient of the food". Mr Stone adds, "the materials that make up the packaging, inks for example, can migrate into foods and further, any contaminants that enter the product stream at the packaging manufacturer may well end up in the food when that material is used".

'Amec Plastics' specialises in injection moulding and are a major supplier to the beverage industry of plastic bottle tops and water bottle covers. They have developed and built a special 'Food Room' enclosure to help ensure the environment in which the moulding occurs is as free of potential contaminants as possible. Further, they operate a practical HACCP programme to identify and control all food safety risks to the product and subsequent food materials packed.

Amec Plastics General Manager, Mr Hennie Oliver says "we have responded to our customers needs and recognise that the characteristics of our product have a direct impact on the safety of the finished food product and the final consumer. Our HACCP programme has addressed and formalised the measures we take to ensure the safety of our customers', finished goods."

Director of HACCP Australia, Mr Clive Withinshaw notes, "When we first started working with Amec you could see they had a high quality product but some areas of food safety management were not formalised or measured and not all food safety risk management strategies were identified. Now, it is clear that

food safety issues are at the top of mind and their minds are and extremely effective," says Mr Withinshaw.

The latest addition to their equipment range is the Wittmann IML (in mould labeling) robot which interacts with their multicavity stack-mould system. Amec Plastics uses the latest injection moulding machines and other available technology to produce a variety of thin wall containers and tubs for the food packaging industry. "The quality produced with this system is unsurpassed and the benefits to the food industry are substantial," claims Mr Oliver.

Flexpack say they are 'Big enough to deliver....small enough to care', a claim substantiated by just one look at their Brisbane operation and understanding the commitment they have shown to the development, implementation and certification of their HACCP programme. Martin Stone says, "This organisation approached their HACCP development with a vigour rarely seen in the food and associated industries and their achievements have been outstanding."



'State of the Art' packaging manufacturing equipment at Amec Plastics

CONTINUED ON PAGE 22



A production run at Flexpack's first class facility

As the name suggests, the company specializes in flexible packaging. To achieve the flexibility and quality their customers demand, they have invested in the best industry proven equipment including high quality 8 colour German flexographic presses, solventless lamination and high speed slitting. Flexpack's state-of-the-art pouch making facilities can additionally supply custom shaped, ziplock, tear notches and euro slots all to add prestige and functionality to your packaging.

Ms Mercia van den Heever, Business Support and HACCP Coordinator at Flexpack says that "since implementing HACCP, our facility has been cleaner and our awareness of food safety issues has significantly improved in the facility. Our customers are also more confident in our products. The system also dovetails into other programmes we run at the facility and this combines to provide a platform for excellent quality and food safety characteristics in our products....everytime." Flexpack supports their impressive product offering through continued investment in the production facility. This investment includes a fully air-conditioned production environment which enhances quality through the control of temperature and humidity and reduces the potential for environmental contamination.

Both Flexpack and Amec Plastics are leaders in their field in regard to quality, food safety and innovation. As Martin Stone confirms, "For packaging solutions in the food industry, these two organisations would definitely be the first doors I would be knocking on. Food safety and quality systems are passionately maintained and flawlessly executed through both facilities."

Further Information;

Amec Plastics Pty Ltd

www.amecplastics.com.au T - 07 5525 5989 Mr Hennie Oliver

Flexpack Pty Ltd

www.flexpack.com.au T - 07 3217 0999 Ms Mercia van den Heever ■

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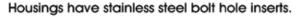
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HEPATITIS A

Hepatitis A is becoming increasingly common and is now a major food-borne illness concern both in Australia and elsewhere in the world.

What is Hepatitis A?

It is a virus that results in live disease. It can effect anyone at any age. The Hepatitis A virus (commonly referred to as HAV) is found in faeces and is spread from human to human when contaminated items are placed in the mouth. The virus can also be spread from infected animals to humans. Poor sanitation processes and poor personal hygiene are far and away the most common causes of HAV.

What are the symptoms?

Signs of infection include yellow eyes or a 'jaundiced' complexion, dark urine, nausea, fever, fatigue, vomiting, stomach pains and/or loss of appetite. Signs of infection normally appear within six weeks of exposure though children rarely display symptoms of infection. Three out of four adults will develop these symptoms when infected over several days.

Making it a more difficult problem is the fact that HAV can be spread about one week before symptoms appear and during the first week of those symptoms. In this way an infected person spreads the discease unknowingly.

Unpleasant as it is, it is not a long-term illness and death is rare. Once recovered, an infected person is most unlikely to be reinfected in the future.

Is food a carrier of HAV?

Yes. Reports over the last few years suggest Hepatitis A has been linked to contaminations in raw vegetables and shellfish. Other possible sources identified include contaminated drinking water and ice.

Does cooking kill HAV?

Subjecting the virus to temperature in excess of 41°C for one minute does kill HAV however such a process does not mean the product cannot be reinfected. Chlorine treatment also kills HAV.

Is HAV preventable?

Proper hand washing discipline after using the toilet, changing nappies or preparing/handling food is essential as is correct food preparation, handling and sanitation procedures. Vaccines are also available.





CHOICE

Go to the 'Choice' site – not just to check out washing machines and bicycles but to investigate their 'Food' section. Some really tasty reviews and test results on very well -known products. Some surprising and concerning findings make for an interesting read. The reader tests and quizzes are also worth a visit.

www.choice.com.au

Health Insite

As well as having a clever name, this Australian government initiative site contains a wide range of information with a very useful and pertinent 'food safety' section. Put 'food safety' in their internal search engine and a host of subjects are well addressed in such fields as Nutrition, Storage, Regulations and Food Handling.

www.healthinsite.gov.au

Better Health

Another mine of information, this time from the Victorian government, the food fact sheets section is very well presented and contains heaps of information. If you do look at this quiz, you had better score 24 or this bulletin is not for you!

www.betterhealth.vic.gov.au

Food and Fun

This is a bit silly but actually full of trivia which we found to make good reading. If you can remember one or two of the 'fact's here, you might impress ...somebody ..sometime. Did you know that lemon was originally deserved with fish in the belief that the juice would dissolve swallowed bones!

www.nms.on.ca/Elementary/fun_food_facts.htm

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Is compressed air contaminating your food?

Compressed air is a very common utility in food manufacturing. It is mostly used to drive machinery. It also comes into direct contact with food contact surfaces, food packaging and in some cases, the food itself. Many dry goods manufacturers make use of compressed air for cleaning using blow nozzles.

We all know the dangers of compressed air from an occupational health and safety perspective. But what about food safety? Just what exactly is in the compressed air that is used in food manufacturing facilities? And could the compressed air be a vehicle for transmitting nasties into our food?

The air that is found in a compressed air system is not always as clean as we would like it to be. Compressed air is almost always contaminated with water, oil and solid particulates. The contaminants come from three main sources: the atmospheric air that is drawn in to the compressor, the compressor itself, and the compressed air receiver and distribution systems, such as piping.

Atmospheric air contains water vapour, dust, microorganisms and unburned hydrocarbons. These contaminants are concentrated when the air is compressed. The compressor itself can contribute wear particles, coolants and lubricants. Finally, the receivers and piping can contribute contaminants such as rust and pipescale, which are the result of corrosion within the system. The receivers and piping may also provide warm moist environments that can support microbial life. These contaminants find their way through the compressed air system, causing potential problems for equipment and finished product.

Some common contact points for compressed air and food are; air knives to loosen products from bakery trays and to open packaging before filling, aeration of liquids such as sparging of milk, fluidizing of dry goods and air lines in form-fill-seal packaging machinery. Where there is contact between food product and compressed air, the product may become contaminated with moisture, microorganisms or oil. In the event of significant moisture or microorganism carry-over, or if the product is very sensitive, there is likely to be a noticeable affect on product quality. In this case, steps can be taken to eliminate the contamination. However where oil contamination is occurring, the effects can be less obvious.

There are two types of air compressors, oil-free and lubricated compressors. While oil-free compressors do not contain any oil/ lubricant in the compression process, lubricated compressors (which are used in over 90% of food manufacturing facilities), use and oil in the compression process. This therefore contaminates the compressed air. Every oil-lubricated compressor allows small amounts of oil to be carried over into the compressed air as it makes its way out of the air compressor. Mineral-based compressor

oil is carcinogenic and toxic. While every food company should be using food grade lubricant in their compressor system, this kind of lubricant is significantly more expensive than mineral-oil-based lubricants. Compressed air consultant Edwin Burwood of Specialty Air, estimates that less than 10% of compressors in the Australian food industry would be operating with food grade lubricant.

As a result, there are potentially thousands of food manufacturers who are unknowingly allowing their food products to be contaminated with traces of toxic mineral oil.

Australian food law does not directly address the topic of compressed air quality. However, where there is a potential for contamination to occur from compressed air, the Food Standards Code requires manufacturers to keep the level of contaminants as low as reasonably achievable. Most Australian State and Territory Law requires food manufacturers to comply with the Food Standards Code. In addition, state and territory food laws prevent the sale or unsafe or unsuitable food, and the presence of compressor contaminants such as carried over mineral oil in food would render it 'unsafe' and/or 'unsuitable'.

The International Standards Organisation (ISO) has developed a standard for measuring the purity of compressed air. It is based on purity level classes for three contaminant types; solid particulate, water and oil. Each purity class specifies a maximum permissible amount of contamination per cubic metre or compressed air. When specifying the purity of compressed air, a different purity class is selected for each contaminant. As an example, ISO 8573.1:2001 Class 1.2.1 refers to a purity level class 1 for solid particulate, purity level class 2 for water and purity level class 1 for oil.

In Britain, the British Compressed Air Society (BCAS), working with the British Retail Consortium (BRC) launched a Code of Practice for Food Grade Compressed Air. This code of practice recommends air purity classes based on the ISO standard for compressed air used in food manufacturing facilities. The recommendations of the BRC are fairly stringent, especially with regards to moisture content. The intent of recommending very dry air is to minimize the risk of microbial contamination from the air. When it comes to oil-lubricated compressors, the code of practice states that only food grade lubricants be used. In Australia, the BRC recommendations have received little attention. Mr Burwood is of the opinion that less than 5% of food manufacturers in Australia would currently meet the recommended food grade purity classes described by the BRC.

Compressed air systems typically contain one or more different treatment points to control contaminants in the compressed air. At the compressor location, dryers are used to remove moisture from the compressed air stream, as well as mechanical filters to remove particulates and oil. Sterile air filters can be used where sterile air is required. Adsorption filters containing activated carbon can be

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used to remove oil vapour from the air. Alternatively, oil-free compressors can be used, which eliminate oil carry-over.

Dryers are used to remove water vapour. Drying the compressed air is very important. During compression, the air becomes hotter, which allows it to retain atmospheric moisture. After compression, the air is usually cooled in an after-cooler, where the condensate is drained away. However, any further cooling which occurs in the air receiver, piping, or during expansion in valves or machinery causes further condensation. This liquid condensate is damaging to production equipment and end product, and must be removed. Different dryer types have different capabilities for drying, and not all types of dryers are able to produce very dry air.

Compressed Air Quiz

Are the blowers over your cooling conveyor blowing ambient air or compressed air on to your product?

Are there other direct contact points between compressed air and food in your production facility?

How clean are your compressed air lines?

Could dirty compressed air pipe-work be the source of that troublesome microbial problem?

Do you know what kind of lubricant is used in your compressor/s?

Is moist compressed air causing problems in your powderhandling systems?

How much product would be lost if a compressor had a catastrophic failure and allowed bulk oil carry-over into the air lines?







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Compliant or endorsed products are rigorously reviewed by HACCP Australia's food technologists and in their expert estimation are manufactured and designed to meet all the appropriate food safety standards. In performing

the assessment, they look for 'world's best' in terms of food safety features and characteristics. The food technologists undertaking these reviews all have extensive industry and manufacturing experience.

Only products that are assessed as meeting the criteria can carry the mark. Quite often, organisations are required to make modifications to the product, design, delivery, literature or recommendations in order to comply. This process is therefore particularly useful for products that are designed for many industrial applications.

The companies listed in this section carry a range of excellent and food safe products or services endorsed by HACCP Australia. Call on 02 9956 6911 for more details.

expert estimation are manufactured and designed to m	neet all the appropriate food safety standards. In performing		
CATERING EQUIPMENT (HEAVY)	SEMAK W AND P REEDY	Manufacturers of chicken rotisseries Suppliers of ovens and provers to the baking industry	03 9796 4583 02 9533 9522
CLEANING EQUIPMENT	AUSSIE RED EQUIPMENT ESWOOD AUSTRALIA OATES CLEAN SABCO STEAMASTER AUSTRALIA PTY LTD	Aquafortis hot water high pressure clean and capture equip. Manufacturers of industrial dish and glass washers Full range of food grade cleaning equipment Scourers, sponges, clothes and cleaning aids Hot and cold water pressure cleaners	1800 804 878 02 9604 7333 1800 791 099 02 9642 6411 02 9796 3433
CLEANING CHEMICALS	AVANTI CHEMICALS BIOTECH AUSTRALASIA PTY LTD DEB AUSTRALIA GREEN MOUNTAIN SOLUTIONS PASCOES	Cleaning chemicals for food and agri. businesses Broad spectrum disinfectant Skin care and hand cleaning soaps for food handlers All purpose cleaning and disinfectant products Cleaning chemicals for the food industry	07 5549 3666 02 9603 4499 1800 090 330 07 5599 8410 08 9353 3900
CLEANING AND MAINTENANCE SERVICES TO THE FOOD INDUSTRY	ACE FILTERS AERIS HYGIENE SERVICES PTY LTD BORG CLEANING CHALLENGER CLEANING SERVICES ICE CLEAN INDUSTRIES INTEGRATED PREMISES SERVICES P/L ISS HYGIENE SERVICES METROPOLITAN FILTERS OZ TANK PINK HYGIENE SOLUTIONS POWERTANK PTY LTD	Food grade cooking oil filters Specialist cool room and cool room motor cleaning services Specialist contract cleaning services for food premises Specialist contract cleaning services for food premises Residual free dry ice cleaning Specialist contract cleaning services for food premises Bathroom services for the food industry and premises Filters and filter services for range hoods and food facilities SS deep cleaning tanks and systems for pans and trays Bathroom services for the food industry and premises SS deep cleaning tanks and systems for pans and trays	1300 555 204 1300 790 895 03 9463 1300 02 9993 0562 0403 044 162 02 9432 8000 02 8644 9704 1300 653 536 1300 66 88 66 1800 007 794 0411 441 441
CLEANING MATERIALS	3M CHEMPACK SUPPLIES CLOROX AUSTRALIA CONCEPT LABORATORIES PTY LTD DEB AUSTRALIA OATES CLEANING SABCO SCA HYGIENE AUSTRALASIA SUNNYWIPES PTY LTD	Scotchbrite™, cleaning chemicals, scourers and sponges Food grade bathroom paper and dispensers Chux™, Oso™ and Glad™ range of materials Suppliers of sanitising hand gel and sanitising wipes Disposable cleaning wipes Full range of kitchen cleaning materials Scourers, sponges, clothes and cleaning aids Tork premium colour coded specialist cloths Disposable cleaning wipes for the food industry	136 136 02 9542 5822 02 9794 9500 07 5493 8433 1800 090 330 1800 791 099 02 9642 6411 03 9550 2999 03 5436 1100
CLEANING SANITATION SYSTEMS AND PRODUCTS	NOBLEWATER	Ozone generators for sanitising	07 3367 9111
FACILITY FIXTURES AND FIT OUT	ALBANY DOORS COLDSHIELD FLEXIBLE DOORS DMF INTERNATIONAL PTY LTD PHILIPS ELECTRONICS AUSTRALIA LTD THORN LIGHTING	Automatic rapid close doors PVC flexible doors for food premises Flexible door material for food manufacturing and storage Food safe tube lighting for food handling facilities Food safe lighting and fitout Osolutions for food handling facilities	1300 666 232 1800 462 233 02 9636 5466 02 9947 0000 1300 139 965
FLOORING, WALLS, AND MATTING	3M ALTRO SAFETY FLOORING BASF CONSTRUCTION CHEMICALS BLUESCOPE STEEL DEFLECTA CRETE SEALS DYNAMIC COMPOSITE TECHNOLOGIES GENERAL MAT COMPANY (THE) LAMAL GROUP PTY LTD	Specialist safety matting for food and beverage areas Specialist food premises flooring UCRETE Flooring System Colorbond® anti-bacterial coolroom panelling products (quote 2222) Anti-bacterial Flooring Product and Services Glassboard Coolroom and Food Transport Panelling Products Specialist safety matting for food and beverage areas Food safe wall and ceiling paints with antimicrobial additive	136 136 1800 673 441 1800 333 048 1800 022 999 03 9318 9315 1800 051 100 1800 625 388 07 5591 9585
FOOD SERVICE EQUIPMENT AND UTENSILS	AACLAIM FOOD SERVICE EQUIPMENT (FSE) KENCAN LTD MONO & BEYOND P/L TOMKIN AUSTRALIA PTY LTD	Food service and food storage light equipment Juice dispensers and other buffet equipment Kee-seal™disposable piping bags Food grade trays Providers of colour coded catering utensils, catering equipment and piping bags	02 9525 1049 1800 673 153 07 3273 8111 02 9690 0900 02 9319 2993
FOREIGN BODY IDENTIFICATION	SMITH HEIMANN AUSTRALIA WJB ENGINEERING	X-ray inspection and foreign object detection equipment Magnetic separation technology and services	02 9597 6833 1800 835 858
HAND SOAPS AND BARRIER CREAM	CONCEPT LABORATORIES DEB AUSTRALIA PROARMA	Food Grade hand soaps Food Grade hand soaps Antibacterial protection hand cream	07 5493 8433 1800 090 330 1300 889 280
ICE MACHINES	ICE MASTER SYSTEMS PTY LTD HOSHIZAKI LANCER PTY LTD	Ice machines for hotels, restaurants and catering outlets Ice machines for hotels, restaurants and catering outlets	03 9455 2300 08 8268 1388

KITCHEN CONSUMABLES	3M CLOROX LALAN GLOVES SAFETYCARE OATES CLEANING PARAMOUNT SAFETY PRODUCTS STEELDRILL WORKWEAR & GLOVES PTY LTD	Scotchbrite™, cleaning chemicals, scourers Glad™, Chux™ and Oso™ range of materials Disposable gloves for the food industry Full range of kitchen consumables Disposable gloves for the food industry Disposable gloves for the food industry	136 136 02 9794 9500 03 9706 5609 1800 791 099 03 9762 2500 03 9790 6411
LABELS - FOOD GRADE	PURBRICK HEALTHPRINT W W WEDDERBURN	Labels for the food and pharmaceutical industries Food safe labels for food products and food retail	03 9751 7100 02 9797 0111
LUBRICANTS - FOOD GRADE	LANOTEC AUSTRALIA	Suppliers of food grade lubricants	07 3373 3700
MANUFACTURING EQUIPMENT AND COMPONENTS	BSC MOTION TECHNOLOGY ENMIN PTY LTD FCR MOTION FESTO PTY LTD HARRINGTON ELECTRICAL MOTORS NORGREN PTY LTD SMC PNEUMATICS SPECIALTY AIR	Food grade bearings and housings Manufacturers of food grade feeder equipment Manufactures of food grade geared motors and inverter Pneumatics and valves for food manufacturing equipment Stainless steel electric motors for food processors Suppliers of pneumatics and valves for food manufacturing Suppliers of pneumatics and valves for food manufacturing Compressed air piping system in food manufacturing processes	03 9560 3222 03 9753 3633 03 9362 6800 1300 889 696 03 9546 7515 02 9582 8000 02 9354 8222 1300 1300 24
PACKAGING MATERIAL AND EQUIPMENT	CONFOIL PTY LTD CROWLE INDUSTRIES DALTON PACKAGING MICROPAK PTY LTD NETPAK	Suppliers of food grade foil containers Repacking of consumables and food products Manufacturers of paper bags and products for the food industry Manufacturers of food grade packaging materials Suppliers of food grade netting to small goods manufacturers	02 8825 8800 02 9809 0254 02 9774 3233 02 9646 3666 02 9604 4950
PEST CONTROL EQUIPMENT AND MATERIALS	BASF AUSTRALIA LTD BELL LABORATORIES INC EKO SOLUTIONS INSECT-O-MATIC PEST FREE AUSTRALIA PTY LTD STARKEY PRODUCTS PTY LTD WEBCOT PTY LTD WEEPA PRODUCTS PTY LTD	Suppliers of rodent and cockroach control materials Suppliers of rodent control materials and stations Distributors of the 'ecomille rodent eradication equipment Suppliers of insect eradication systems and 'cryonite' Specialist electronic vermin elimination devices Range of insect control devices Suppliers of "Brandenburg" flying insect control Weep hole protection devices for new or retro application	02 9150 7449 0427 802 844 1800 612 212 02 9999 5201 02 4969 5515 08 9302 2088 02 9984 2222 07 3844 3744
PEST CONTROLLERS (ALL STATES)	RENTOKIL	National pest control services for the food industry	1300 736 865
PEST CONTROLLERS (NSW)	AEROBEAM PROFESSIONAL PEST MGNT. AMALGAMATED PEST CONTROL ANT-EATER ENVIRONMENTAL SERVICES COMPORATE PEST MANAGEMENT EAGLE PEST CONTROL ECOLAB PTY LTD HACCP PEST MANAGEMENT ISS PEST CONTROL RENTOKIL SCIENTIFIC PEST MANAGEMENT STOP CREEP PEST CONTROL	Secialist food premises pest management Specialist pest control services for the food industry Specialist food premises pest management services Specialist pest control services for the food industry National pest control services for the food industry Regional pest control services for the food industry Regional pest control services for the food industry	02 9636 5840 13 19 61 02 9939 8208 02 9674 5499 02 9311 1234 02 9748 0066 02 9748 0066 02 9922 3743 13 14 40 1300 736 865 1300 139 840 02 9371 3911
PEST CONTROLLERS (QLD)	ARREST-A-PEST GOODE PEST CONTROL RENTOKIL SCIENTIFIC PEST MANAGEMENT	Specialist pest control services for the food industry Specialist pest control services for the food industry National pest control services for the food industry Regional pest control services for the food industry	07 3279 1199 1300 13 12 14 1300 736 865 1300 139 840
PEST CONTROLLERS (VIC)	ISS PEST CONTROL PESTAWAY AUSTRALIA PTY LTD PROTECH PEST CONTROL RENTOKIL SCIENTIFIC PEST MANAGEMENT STATEWIDE PEST TRAPS PEST CONTROL PTY LTD	Specialist pest control services for the food industry Specialist pest control services for the food industry Specialist pest control services for the food industry National pest control services for the food industry Regional pest control services for the food industry Specialist pest control services for food industry Specialist pest control services for the food industry	13 14 40 03 9850 3777 0438 780 980 1300 736 865 1300 139 840 1800 136 200 03 9390 6998
PEST CONTROLLERS (SA)	RENTOKIL	National pest control services for the food industry	1300 736 865
PEST CONTROLLERS (WA)	ISS PEST CONTROL RENTOKIL SCIENTIFIC PEST MANAGEMENT	Specialist pest control services for the food industry National pest control services for the food industry Regional pest control services for the food industry	13 14 40 1300 736 865 1300 139 840
REFRIGERATION GOVERNORS AND EQUIPMENT	CAREL DANFOSS HEATCRAFT AUSTRALIA PTY LTD PHASEFALE	Temperature controllers and supervisors for refrigeration M2 alarm and monitoring system HACCP specification cool room thermostats and alarms Temperature controllers for refrigerated storage	02 8762 9200 02 8845 1813 13 23 50 03 9553 0800
REFRIGERATORS AND REFRIGERATION SERVICES	AERIS HYGIENE SERVICES PTY LTD MELBOURNE REFRIGERATION SERVICES REJUVENATORS (THE)	Specialist cool room and cool room motor cleaning services Refrigeration installation and repair Specialist cool room cleaning and rejuvenation services	1300 790 895 03 8761 6395 0407 292 826
STAFF RECRUITMENT AND HUMAN RESOURCES	SKILLED GROUP	Specialist HACCP trained workforce solutions for the food industry	1300 366 606
STORAGE, SHELVING AND RACKING	ARMACEL TECHNOLOGY GROUP MONO & BEYOND PTY LTD	Food storage containers, food grade shelving Distributors of food grade shelving	02 9450 0900 02 9690 0900
MANAGEMENT SYSTEMS AND REPORTING	SHADOW ORGANISATION PTY LTD SPECIALITY AIR	Audit, compliance and monitoring systems Specialist compressed air servicesfor the food industry	02 8448 2090 1300 1300 24
THERMOMETERS, PH METERS AND DATA LOGGERS	3M FLUKE THERMOMETERS TESTO PTY LTD TRIPLE POINT CALIBRATION	TL 20 Temperature logger for logistics Thermometer calibration services Specialist thermometers for use in the food industry Thermometer calibration services	136 136 08 8172 2233 03 9800 4677 08 8172 2233
TRANSPORT CONTAINERS AND PALLETS	ARMACEL TECHNOLOGY GROUP SCHUETZ DSL (AUSTRALIA) PTY LTD	Manufacturers of food grade pallets and storage solutions Food safe storage and transportation palletcons	02 9450 0900 1800 336 228

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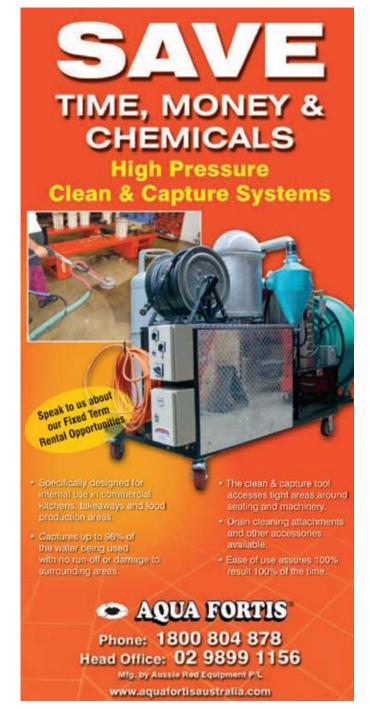


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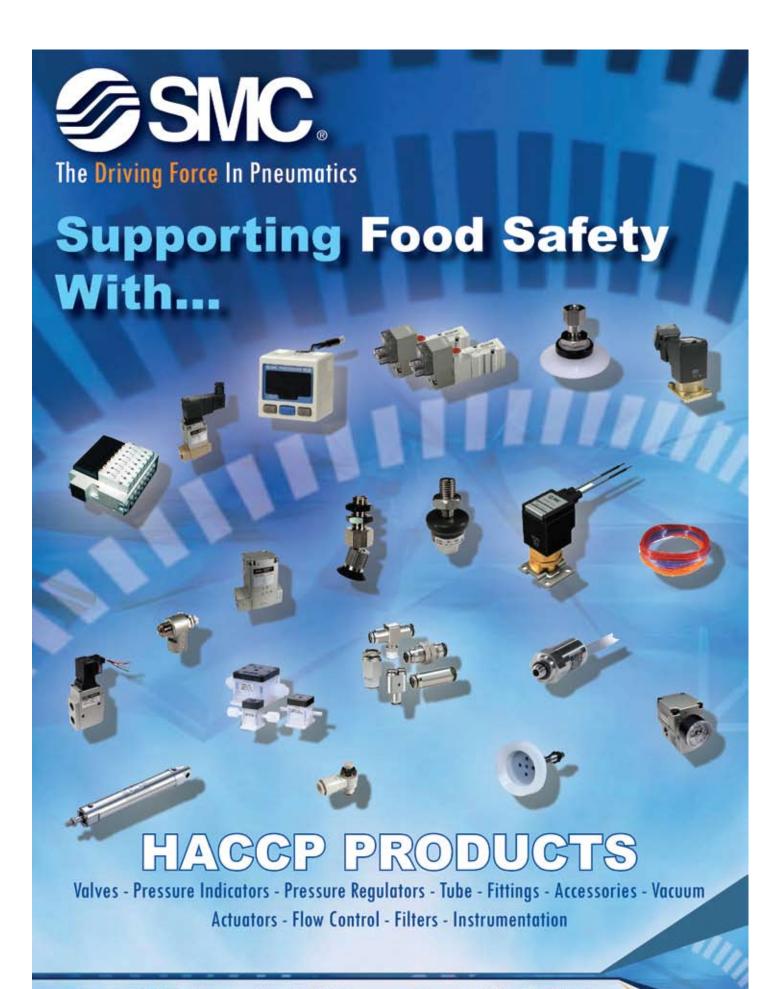


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