SKOPE®

WHY BAD FOOD IS NOT COOL

A practical guide on how to protect your kitchen's reputation

A SKOPE eBook

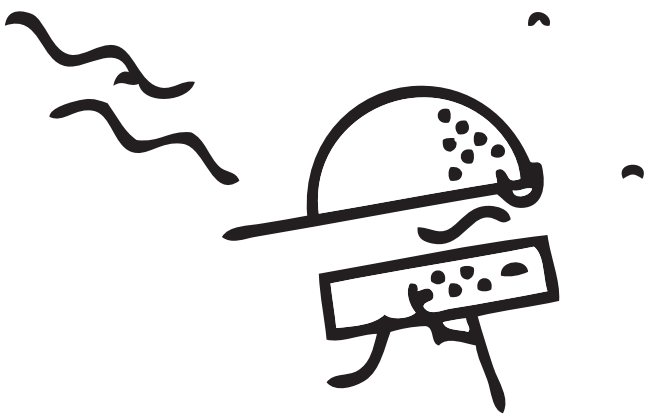
THE QUICK TAKEAWAY

1. The role of online reviews in customer choice means food safety issues can destroy your reputation, and ultimately your business, very quickly.

2. Avoiding the “danger zone” of food temperature (5°C-6o°C) is the key to keeping your food safe from the bacteria that leads to food poisoning.

3. Effective food safety is about consistency, and refrigeration that gives you tight temperature control is key to this.

4. While there are many options, choosing the right type of refrigeration is important to keeping your food safe.



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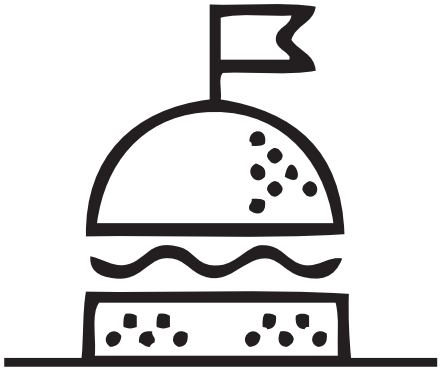


BAD FOOD IS NOT COOL

Given the media headlines and online hype, you could be forgiven for thinking that the safety of food has deteriorated rapidly in recent years. If anything the opposite is true, it's simply that problems are so much more visible.

The explosion of social media channels such as Facebook and Twitter, and online channels like restaurant reviews, means food safety issues quickly become public and can ruin reputations and ultimately businesses.

As a hospitality provider your focus is on delivering an outstanding experience to your customers. SKOPE's job as a commercial refrigeration provider is to have your back - to be a dependable partner in ensuring the food you serve to patrons is safe.

This eBook highlights some of the key issues around food safety, and how refrigeration contributes to protecting your customers, and your reputation.

KEEPING YOUR REPUTATION SAFE

With the power of the internet, there is no coming back from a food safety incident.

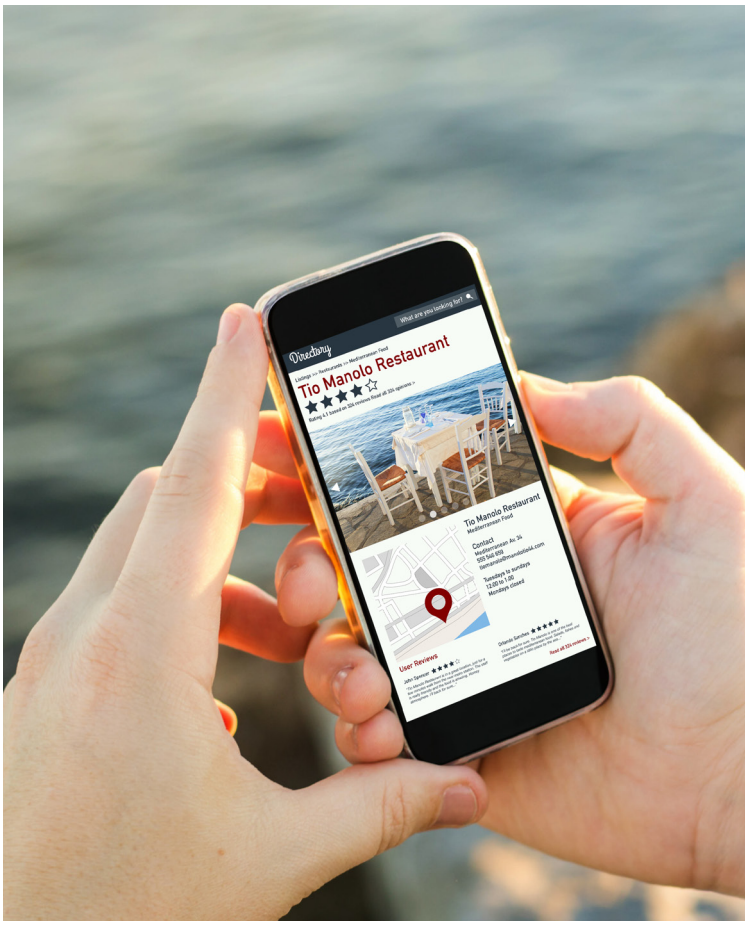
"Closure, rebranding and reopening are the only options that will erase the poor reputation that food hygiene incidents bring."

- CheckIt Food Safety Study, April 2016

Great restaurants and hospitality venues build their reputations by creating excitement and expectation in the market, and then delivering an experience that exceeds anything the customer expected. It's that customer experience that drives the success of any hospitality business.

More so than ever before because of online. According to the 2016 Sensis social media report, 60% of Australians read online reviews before making purchase decisions, even more so if they are between 40-49 years old. One widely cited University of California study[1] of the US site Yelp, showed that a half-star improvement in ratings (on a five star scale), resulted in restaurants being full at peak times.

What do customers value in these online reviews? In priority order, research points to food quality (taste and quality) as being the most important, followed by price (value for money) and then atmosphere. Many factors go into creating the right mix of these attributes, food quality is key, and therefore the role of food safety is critical to your reputation.



[1]http://news.berkeley.edu/2012/09/04/yelp-reviews-boost-restaurant-business/

Broken China

"Reputation is like fine china, once broken it's very hard to repair," legendary US president Abraham Lincoln is reputed to have said. He could have been talking about a hospitality business in the modern age. The 'crack' of a food safety problem can be very hard to repair.

UK food safety technology provider CheckIT conducted a study of UK consumers in 2016, and found 75% said they would not visit a restaurant that had a food hygiene incident. Almost half of respondents said they would never return to that restaurant, while 33% said they would only do so if the site changed ownership. "Closure, rebranding and reopening are the only options that will erase the poor reputation that food hygiene incidents bring," the study concluded.

And It's The Law*

There are also increasingly strict legal requirements to protect your customers from being affected by bad food. In New Zealand Food Hygiene Regulations require a Certificate of Registration before food can be prepared for public use, and under the 2014 Food Act a more prescriptive regime-including the need for a food control plan for those making or selling higher-risk foods-is being phased in for businesses serving food.

Under Australian law (the Food Act 1984) food businesses must operate safety programmes, and keep records.

At a local level in both countries, city and regional authorities have the extensive powers to inspect and restrict the operations of food businesses not staying compliant with safety rules.

WHEN GOOD FOOD GOES BAD

In February 2017, two Canberra-based restaurants were closed-down for "serious food safety breaches" that represented "a risk to public health".

According to a Canberra Times report, one establishment had been closed because of a salmonella outbreak, the other because their refrigeration was "not up to standard." The publicity had resulted in the newspaper receiving multiple complaints and stories from former customers.

In the competitive world of hospitality, it is hard to imagine the businesses involved recovering from this negative publicity.

*Federal, state and regional authorities provide extensive information about managing food safety and your legal requirements.

HOW KITCHEN NIGHTMARES HAPPEN

Avoiding the food temperature 'danger zone' is an important way to avoid bacterial contamination.

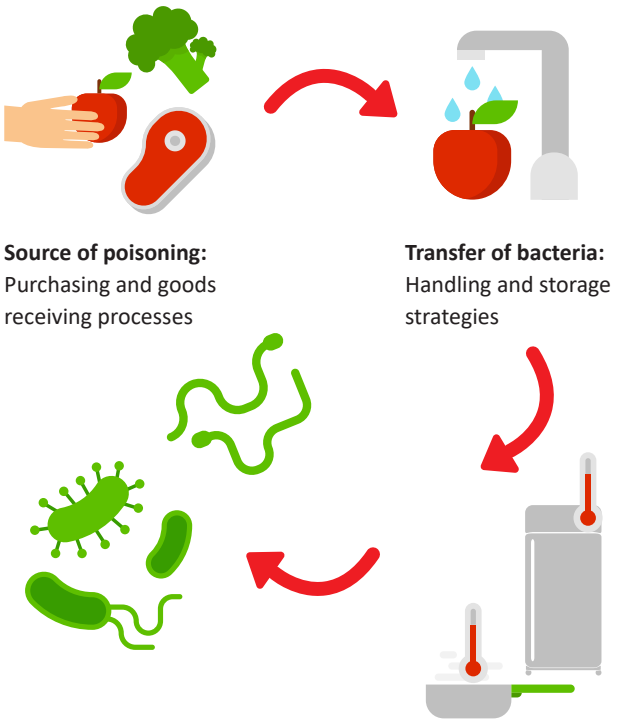
Bacteria grows best in temperatures between 5°C and 60°C - the 'danger zone'.

Causes of unsafe food fall into three categories. The first is biological hazards: the kind of bacteria, fungi and other organic compounds that make us sick if consumed. Chemicals are the second common cause e.g. cleaning products or pesticides. Lastly is the stuff of legal court cases – physical things found in food, from band aids to nails to dead mice.

The experts make a distinction between food spoilage and poisoning. Spoilage is when food has gone 'off', and the smell, taste and look of the food make it unfit to eat. Food poisoning is more insidious, in that often you cannot see or smell any difference in the food but it is poisoned with some form of bacteria.

Bacteria grows best in certain types of food, categorised as high risk foods. Typically they are high in protein and have a high water content. Examples include eggs, cooked rice, cooked pasta, raw and cooked meats, cooked beans, fish and poultry, processed or canned meat that has been opened, dairy products especially creams, cheeses and custards, gravies or sauces, and shellfish.

An Unsafe Chain

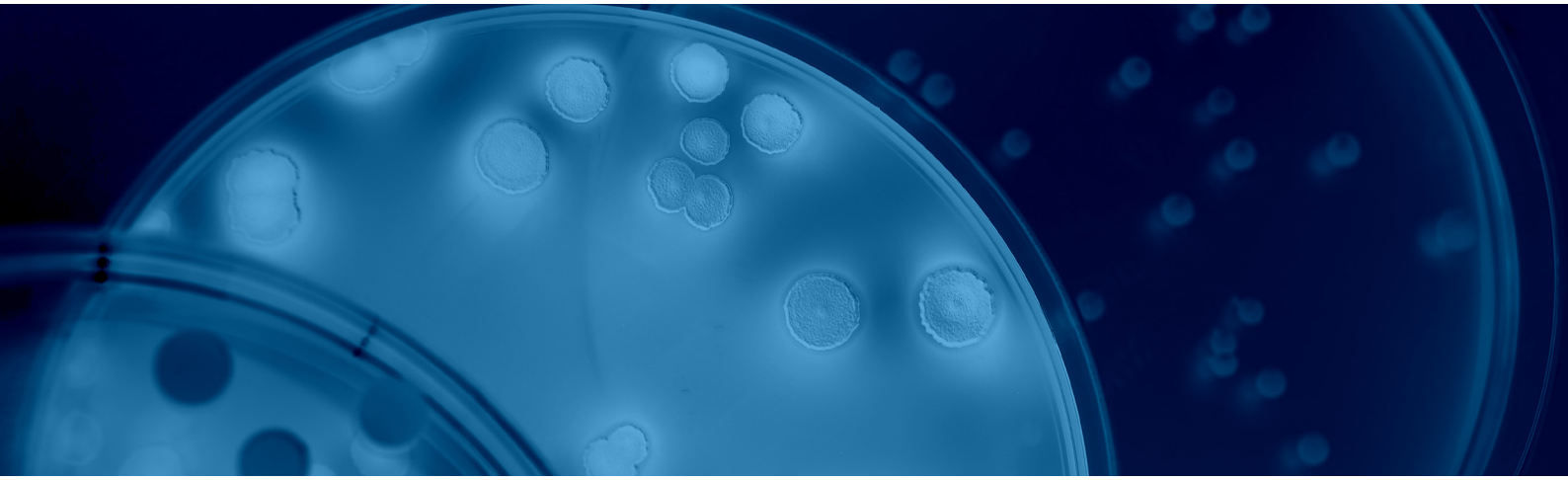


Source of poisoning:
Purchasing and goods receiving processes

Transfer of bacteria:
Handling and storage strategies

If unsafe practices are applied:
The growth of bacteria in certain conditions

Manage temperature:
In storage and cooking processes

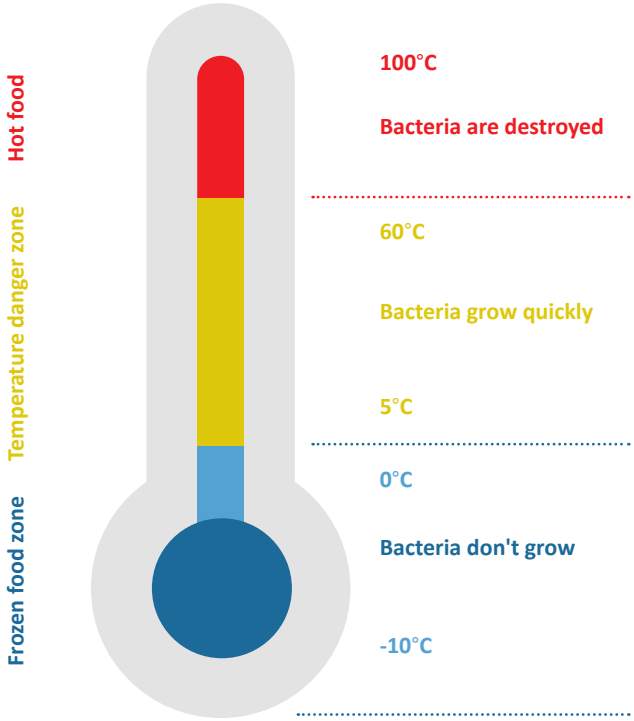


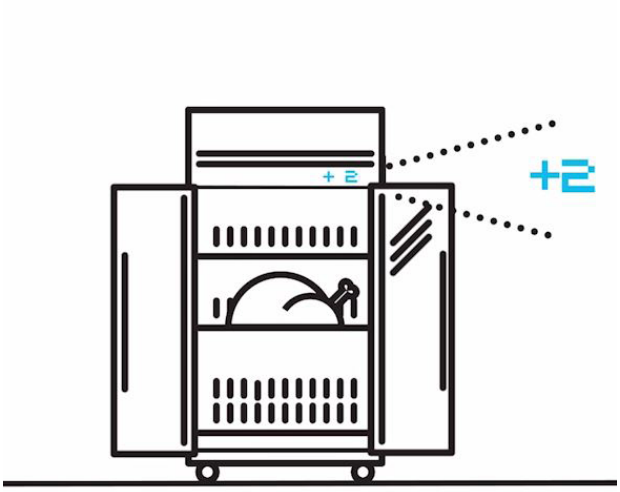
The 'Danger Zone': 5°C - 60°C

The key to mitigating your risk of unsafe food is carefully managing food temperature in your kitchen. Bacteria grows best in food that is at temperatures between 5°C and 60°C, often described as the 'danger zone' for triggering the food poisoning chain. Bacteria are not active when food is frozen solid and held between -18°C to -21°C. In a fridge, temperatures of between +1°C - +5°C prevent the growth of most bacteria which causes food poisoning.

Bacteria grows faster as temperature rises. At approximately 45°C growth slows and at 60°C bacteria stops growing. Food needs to be cooked to reach a core temperature above 75°C to kill bacteria.

Fluctuations in a products' core temperature can affect its flavour, quality and nutritional integrity. SKOPE fridges will maintain stable and consistent temperatures, ensuring food safety and preventing the spread of bacteria, oxidation and evaporation.





To minimise bacteria growth, SKOPE fridges are tested to perform at +1°C to +4°C in 43°C ambient conditions, with minimal temperature fluctuations from door openings for a consistent internal temperature.

WHY FOOD SAFETY REQUIRES CONSISTENCY

Tight temperature control is the key to keeping food safe.

Achieving food safety is almost the antithesis of what makes a great hospitality venue. Outstanding customer experiences are magical, where the creativity and imagination of business owners and chefs results in an enticing atmosphere complemented with unique, high quality food and beverage.

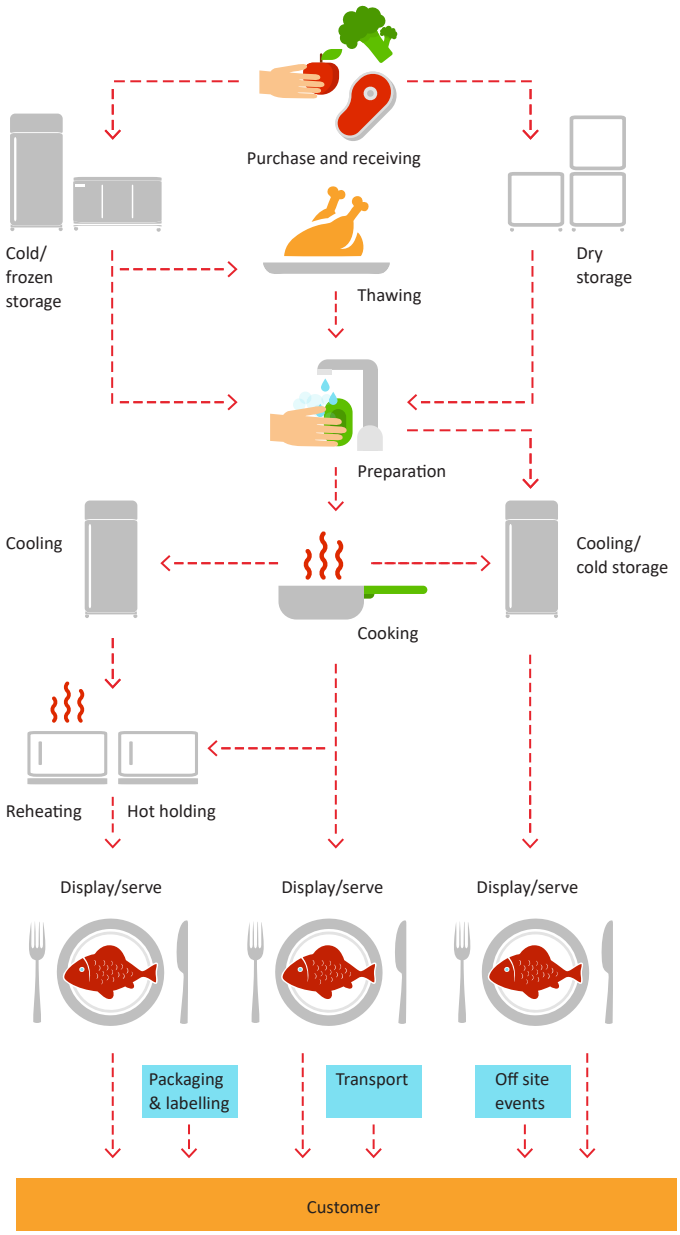
The foundation of safe food is all about attention to detail, process and consistency. Food handling and storage process is key, from handling to storing of fresh, raw and cooked food (see “from gate to plate” across). Having a proven and well understood approach across your team, from initial purchase of ingredients through to customer service is critical to minimising food safety risks.

Tight Temperature Control

At the heart of safe food is tight temperature control. To keep food safe, ensuring that potentially hazardous foods are kept either very cold (5°C or colder) or very hot (60°C or hotter) is best practice outlined by authorities in New Zealand and Australia.

It is advisable to store food at the storage temperature recommended by the manufacturer of the food. Nothing limits the risk of bacteria-related contamination of food better than correct refrigeration, avoiding the food safety danger zone of food sitting in the 5°C to 60°C temperature range.

From Gate to Plate



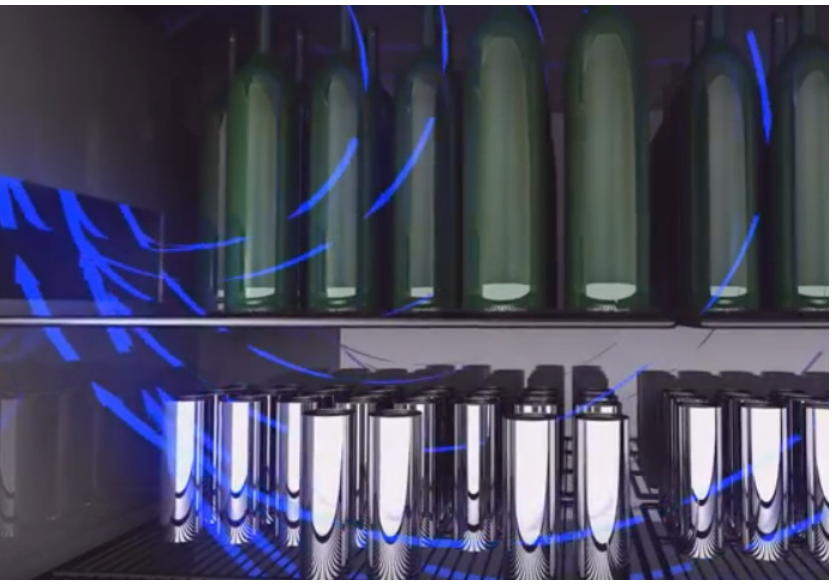
Refrigeration sits at the heart of your kitchen gate to customer plate food handling process. Thinking through every link in the food handling chain can help you identify and remedy potential weak spots.

KEEPING COOL WITH FOOD SAFETY

Good refrigeration is the simple choice for food safety.

Along with effective food handling processes, the other key to food safety is correct refrigeration.

Selecting the wrong type of fridge can make it hard to avoid that danger zone which significantly increases your risk of unsafe food. Selection of a fridge depends on several factors such as the type of food being stored, the volume of meals being prepared daily, and the frequency of the food being delivered to patrons (i.e. how many services being managed).



A commercial refrigerator's job is to keep the product inside in an optimal condition for as long as possible, to ensure food safety or to maximise sales opportunities. Many "market-standard" fridges fall well short of this objective. SKOPE fridges provide optimised internal airflow for rapid pull-down temperature and product cooling.

What are your best options for different types of refrigeration to promote safe food?

- Beverage Fridges: intended solely for the storage and display of packaged beverage products such as carbonated beverages, beer and wine. They are not designed to store potentially hazardous foods, and are often the culprit in food safety incidents.
- Display Fridges: designed to display foods to the consumer for purchase in areas where environmental conditions are controlled and maintained. This type of fridge is designed to maintain a consistent, safe temperature - not for cooling down.
- Rapid Pull-Down Fridges: also known as Blast Chillers, these are specifically designed for rapid chilling of food products. When used correctly these are ideal for the rapid cooling of hot foods.
- Food Preparation Fridges: designed with a refrigerated open top to provide quick and easy access to fresh ingredients and space to prepare food. They include refrigerated sandwich fridges and pizza preparation. The fridges are designed to maintain foods at a cool temperature for food safety.

- Storage Fridges: cold storage for non-frozen foods between periods of preparation, service, display or sale. Could be referred to as “day” fridges because they are not intended for long-term storage of foods.

- Walk-in Fridges: enclosed, mechanically refrigerated and temperature controlled room with integrated walls, floor and ceiling used to maintain prescribed cold food at consistent temperatures. Probably the most widely used in food service.

THE FINANCIAL EQUATION

Dependable commercial refrigeration is an insurance policy against the enormous business risk of food safety incidents. However, as well as keeping food safe, maintaining tight temperature control with the right refrigeration also prolongs fresh and frozen produce. Throwing food out comes straight off your bottom line, making anything that extends its shelf life a valuable strategy.

PRACTICAL TIPS FOR SAFE REFRIGERATION

1. Don't Bring a Knife to a Gunfight:

• Use proper refrigeration equipment for the type of food you are storing and handling.

2. Never Assume:

• Regularly check the internal temperature using a fridge thermometer- this should be consistent throughout the fridge with temperatures between 0-5°C.

• Check the temperature at regular intervals throughout the day to spot potential problems with temperature recovery.

3. Common Sense Storage:

• Raw foods should be kept below ready-to-eat (RTE) foods in any fridge, particularly with a walk-in fridge. Alternatively use separate fridges for Raw and RTE foods. Raw foods that are likely to leak should be placed on the lowest shelf.

4. Cool it Quick:

• As a rule of thumb: refrigerate or freeze perishables, prepared foods and left-overs within two hours.

• Cool food quicker by dividing it into smaller amounts and placing in shallow dishes.

• Newly delivered food product allowed to warm up to outdoor temperatures will increase the pull down load on a refrigeration system. i.e. move product quickly into a cool room when delivered to the site.

5. Let it Breathe:

• Don't overfill your fridges - cold air must be able to circulate to keep food safe.

SKOPE fridges evenly chill food and beverages at +5°C despite where the product is stored in the fridge.

ALL FRIDGES ARE NOT EQUAL WHEN IT COMES TO FOOD SAFETY

Places like kitchens and sculleries are often subject to high ambient temperatures. With all the activity and appliances running, the 'room' temperature can run in excess of 45°C. This poses a number of challenges in regards to refrigeration.

Each type of fridge or freezer will have an optimum temperature that it is set to and will stay at while the door is closed and operating. However, once the door is opened, warm kitchen air rushes in replacing the lost cold air and bringing in moisture. This moisture can contain bacteria, which then condenses as it cools, falling like raindrops onto the food. As the cold air drops out the opened door, hot air flows in and the compressor and fans inside the fridge will stop to prevent further air from leaving, but the temperature inside the fridge still increases.

A SKOPE fridge typically has up to 3 probes monitoring the internal temperature for accuracy.

When the temperature is fluctuating frequently (for example when the door is opened and closed frequently) and the fridge is working hard to maintain its optimum level, the quality and potentially the safety of your food is at risk. By getting a handle on this and maintaining a more consistent temperature level in your fridge, you are guaranteeing higher quality food and reducing the risk associated with poorly stored food.

One way to reduce the risk of unsafe food is to restrict the amount of times the door is opened and closed. This reduces the time the food is exposed to warm air outside the fridge. However, this isn't a viable solution during busy service hours.

Another way to look at the problem is to consider the accuracy of the temperature being recorded from inside the fridge - you will often see an increase in temperature when the door is opened. This is due to the cold air spilling out from the fridge and the internal temperature rising.

SKOPE has become aware over recent years that cheaper imported products entering the market don't display a temperature increase on the controller when the fridge door is opened. This may be down to the placement of the temperature probes inside the fridge and where the temperature is being logged. If the sensor or probe is placed where the cold air is spilling out (rather than where the returned air is circulating inside the fridge), you will see a decrease on the temperature display when the door is opened.

However, this is not only impossible, it is misleading and dangerous. Customers can easily be fooled into believing their fridge is working as the temperature reading on the controller is moving up and down, but not necessarily understand what this means for food safety.

HOW COOL IS SKOPE?

SKOPE's test objective is to guarantee average temperature readings inside the fridge within 0.5°C accuracy. Our state-of-the art environmental test chamber has significantly increased testing capacity at SKOPE and is continually improving accuracy in temperature control for food safety.

SKOPE sets high standards to ensure customer expectations are exceeded. We design products that are made to last, with a focus on tight temperature control, even spread and rapid pull down. This is proven in our latest ActiveCore technology.

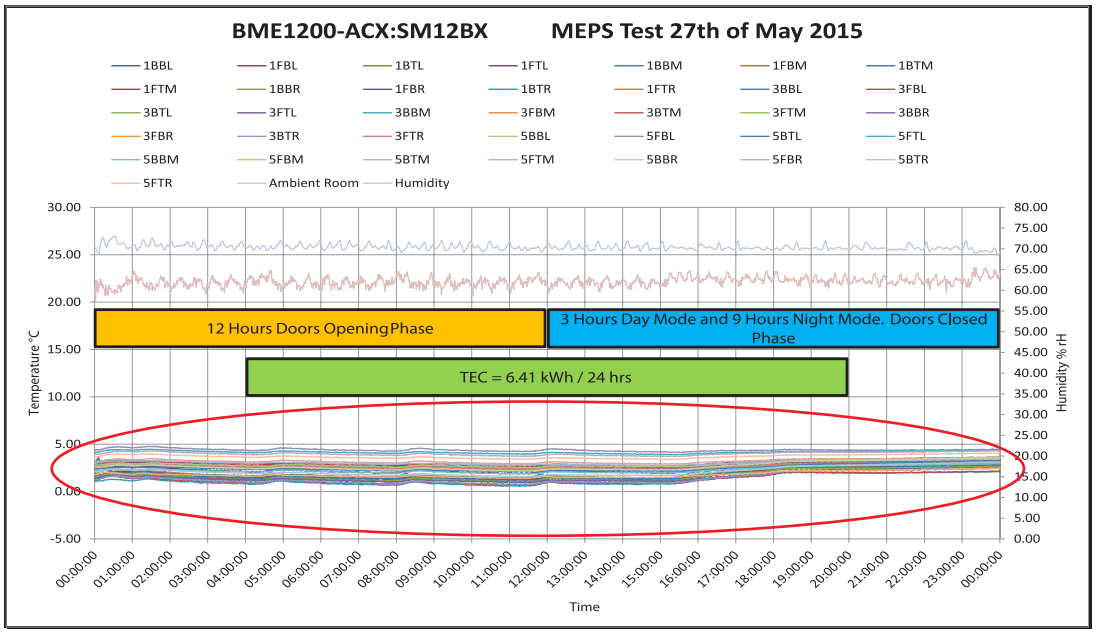
Below, is a graph taken from the MEPS (Minimum Energy Performance Standards) report, showing that an ActiveCore 2 door bottom mount fridge not only has incredible temperature consistency inside the fridge but consistently holds temperature at below 5°C. The report measures the thermal properties of MEPS packs (M packs) using dataloggers and probes to record the core temperature of each pack throughout the fridge.

The M packs represent the same properties of perishable product, and comply with the ISO Standards for Performance Tests on Household and Commercial Appliance.

The test data shows internal temperature over a 24 hour period, at Climate Class 3 (Minimum Energy Performance Standards) in testing conditions of 25°C - 60% Relative Humidity. The graph lines show that the product remains between -1°C and +5°C for duration of the test with minimal fluctuations and minimal energy consumption.

SKOPE's refrigeration products perform to - and in the case of many of our products above - MEP standards. For our customers, this means using less energy to deliver the same performance while saving on running costs over the entire life of the product.

SKOPE's testrooms and equipment is calibrated by Air New Zealand Engineering every 12 months. This includes dataloggers, room controllers and humidifiers.



MEPS test data proves ActiveCore fridges consistently stay below 5°C throughout the fridge.

Highest Temperature of Warmest M-Package	4.79°C
Lowest Temperature of Coldest M-Package	0.55°C
Average Temperature of all M-Packages	2.49°C
Lowest Temperature of Warmest M-Package	4.11°C

Graph featured in Full MEPS report for BME1200-ACX:SM12BX by SKOPE Industries Ltd. Test Report MT0165 - AS1731.13, 27 May 2015

STAY SAFE OUT THERE

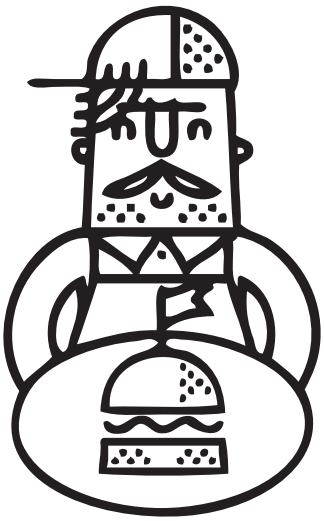
Given the millions of meals served to millions of customers across Australia and New Zealand every day, the incidences of food poisoning are relatively rare. The challenge for hospitality businesses is in an online-driven world, one single incident could represent ruin.

Are you willing to take the risk?

ABOUT SKOPE

SKOPE is the refrigeration brand of choice and a market leader in the industry. SKOPE designs and manufactures commercial refrigeration solutions for the hospitality and retail sectors.

Food hygiene is paramount at SKOPE, and our history with and ongoing commitment to developing relationships with global food and beverage manufacturers, ensures we exceed food safety requirements. Our products consistently and evenly chill food and beverages, which is of vital importance in today's increasingly regulated market.



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Contact SKOPE or your local reseller to discuss food safety practices in your kitchen.

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