

# A warning against adjusting commercial refrigeration temperatures

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*Insight from Jason Webb, Managing Director, ETI*

Rising energy costs in the UK are hitting businesses hard. A 2022 survey from the Office of National Statistics revealed that more than 20% of businesses cite this as their main concern. With the cost of energy continuing its ascent, people are naturally looking for quick fixes.

From an environmental perspective, cutting down energy consumption obviously makes perfectly natural sense. However, some sectors hold certain responsibilities and duties of care that rely on stable and consistent energy usage as a part of their key business operations. Sometimes, a quick fix to save costs can impact the business from a fiscal and health point of view.

Catering operators are a prime example where a duty of care is held to both their direct customers and to the end consumer. Catering operators will have a set amount of energy output that is deemed necessary to operating a safe and functional business due to their need for refrigeration. Standard commercial refrigerators use around **70 kWh per day**, which amounts to 41% of electricity consumption across all key appliances within catering services. A figure like this may appear to be an alarming energy output, and a seemingly obvious method to reduce energy costs and spending. However, there are significant food safety ramifications to adjusting refrigeration temperatures.

It is a mandated legal requirement for businesses in England, Wales, and Northern Ireland to store cold foods at 8°C or below. The **UK Food Standards Agency** recommends that fridges are set to 5°C for the safest temperature possible. This is all to be a preventative measure to stop e-coli, listeria, and other harmful bacteria from building which can result in serious illness. Allowing for your refrigerators to

fluctuate, or rise in temperature through reducing the energy output, can put people's health at risk and the entire businesses reputation on a tightrope.

Examples of food poisoning and hygiene standard violations are well-documented and can have catastrophic results for the reputation of a business and a customers' health. Food safety is a cost that cannot be cut by taking shortcuts and without thorough research and testing of what exactly you're adjusting. This isn't to say that options aren't available, such as assessing the commercial refrigerator currently in use and if there is a more energy efficient alternate. However, simply reducing the energy usage of your current in-use refrigerator and leaving unmonitored is a recipe for disaster.

The storage of meat comes into the spotlight in any conversation about good chilling practice and food safety standards. When chilling produce such as meat at the optimum temperature of 5°C, [beef and pork should last safely for up to 4 days, and chicken up to 2 days](#). Adjustments in your refrigeration temperature, planned or unplanned, from adjusting the energy usage can result in the heavy reduction of time in safe storage for produce, accelerating spoiling and driving up costs for the businesses by having a higher turnover and purchase rate of meats.

So, how can your businesses combat energy wastage when it comes to food storage? You need to work smarter to ensure that commercial fridges are stocked correctly, avoiding overcrowding and bad place management, forcing the fridges to overwork harder than needed. Over-crowding and overfilling refrigerators block the circulation of air from reaching all areas, accelerating a rise in temperature within the fridge and forcing it to use more energy to try and combat the constantly rising temperature. Equal to this, knowing where to place certain types of food within the fridge helps keeping the most optimum temperature, such as uncooked meats towards the bottom, and dairy produce at the top.

Turning to the extreme of reducing your energy output by adjusting temperatures of commercial refrigerators should never be a consideration due to the serious potential impacts it can have. Take this advice as a stepping stone into assessing both how your fridges are stocked and working, and even exploring more efficient alternatives to your current stock. Always keep a monitor and log of your temperatures to ensure the safest and most optimum storage possible.