

Total Cost of Ownership of Fresh Food Merchandisers

Conducted by Intertek Laboratories



A 130-year-old global organization specializing in assurance, testing, inspection, and certification services to ensure safety and quality,

conducted a head-to-head comparison study of refrigerated and heated food display cases to determine the total cost of ownership.

STUDY OBJECTIVES



Time to uncrate, position, and start up the equipment.



Daily energy costs to operate the equipment.



Time to carry out cleaning & maintenance requirements recommended by the manufacturer.

Intertek considered other factors, including **equipment acquisition price**, referring to the end-user's purchase price and estimated based on the seller's price from the manufacturer plus margin, and **expected life of operation**, projected to be 5 years, as part of the study.

Investing in Foodservice Equipment is a Long-Term Proposition

Total Cost of Ownership

	Structural Concepts*	Competitor A	Competitor B
Acquisition \$	\$11,699*	\$9,522*	\$10,304*
Start Up \$	\$48	\$110	\$68
Energy	\$999	\$1,278	\$1,148
Cleaning	\$1,088	\$2,016	\$1,425
Product Shrink	\$0	\$0	\$0
1 st Year Cost to Own	\$13,834	\$12,956	\$12,945
Following Years Cost to Own	\$2,087	\$3,294	\$2,573
5-Year Cost to Own	\$22,182	\$26,132	\$23,237

*Price includes options

In each of the equipment categories studied, acquisition prices were similar in at least 2 of the 3 manufacturer models while the difference in the 5-year total cost of ownership widened among manufacturers, demonstrating that an acquisition price comparison doesn't provide the whole story. Some **models with the lowest acquisition price experienced the highest or near the highest total cost of ownership.**

Differences in energy consumption, maintenance and product loss costs contributed to the higher differences in total cost of ownership among manufacturer models.

While the total cost of ownership varies based on the style of the fresh food display, the results indicate the necessity to consider more than just acquisition price when selecting a food display case. The indirect costs associated with owning a food display are not readily apparent but are factors that differentiate one manufacturer from another and impact the ability of the equipment to achieve revenue and profit objectives.

See complete Intertek Laboratories study for full details.

Product Shelf Life of Fresh Food Merchandisers

The National Food Lab



A leading independent organization that specializes in innovative product development and research and development

consultancy services, to conduct a holding chamber shelf-life study involving equipment from three manufacturers of refrigerated and heated food display merchandisers.

STUDY OBJECTIVES



Validate and compare the quality of each food type placed in each of the respective manufacturers' holding containers over time.

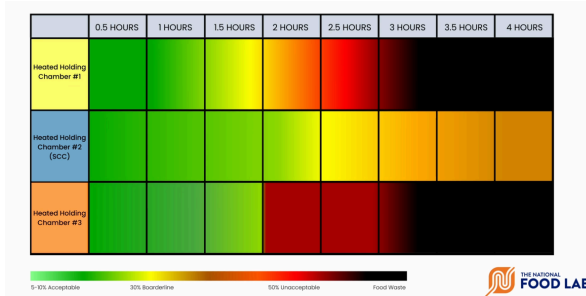


Per the refrigerated application, identify the level of foodborne bacteria proliferation in packaged fresh foods to demonstrate the impact of the refrigeration cycle on product shelf life.



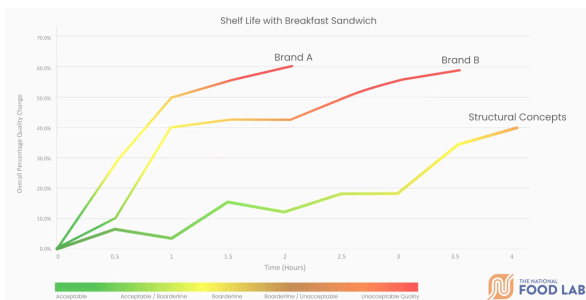
Per the heated application, distinguish the sensory acceptance of packaged fresh foods during a 4-hour display period.

The National Food Lab enlisted trained descriptive panelists to individually rate the food product samples' attributes on a 15-point scale. The individual scores were collected to reach consensus scores. The panelists also rated each sample as acceptable, borderline, or unacceptable in quality based on differences from the initial sample evaluation.



Pathogens were not found in any product stored in any of the three manufacturers' refrigerated displays tested and therefore product loss was not experienced.

As compared to the other manufacturers, the **SCC heated units overwhelmingly had the longest shelf life** for 5 out of the 6 food products tested including breakfast sandwiches, spinach artichoke souffle, pizza, fried chicken strips and fries, and breakfast plates.



In addition to having the longest shelf life for most food products tested, **SCC units also saw the lowest overall percentage of change in the quality of food over time**, confirming that the food in SCC's its heated displays remain fresher during a 4-hour duration.

The study also established that SCC refrigerated merchandisers allow store operators to safely display food products through the recommended shelf life.

Additional cost scenarios related to the quality and safety of the food products tested beyond waste and loss included the longer-term labor expenses involved in restocking the merchandiser. Hence, if the same amount of food is expected to be offered to the public and kept hot throughout all existing dayparts, the other manufacturers that were tested will require incremental labor costs to replace and refill as compared to SCC due to their higher spoilage rates.

See full report from The National Food Lab for all food testing results.