Product tissue temperature is the most profound contributing factor to the loss of product integrity while relative humidity plays an important role as well. The growth rate of microorganisms (e.g., bacteria) on the product’s surface can change dramatically with very small changes in temperature. This “microbial load” affects everything from product tissue discoloration to the rate of product spoilage.

As for the humidity, the lurking enemy to intended profit is “shrink,” where moisture losses in the product over the period it is in the display case rob the product of weight, deflating the sale price (dollars per lb.). Employing the right equipment that offers a favorable climate for the product integrity and product safety of meat products is crucial in gaining profit.

A LOOK AT THE NUMBERS

According to the FMI study, “The Power of Meat-2018”, which looked at the U.S. market, the total volume of fresh meat consumed was 15.4 billion pounds at a total purchase price of $49.5 billion. That amounts to $3.21 per pound on average.

Using the Conduction Cooling Gravity Assist Service Case amounts to eliminating 544,500 pounds of meat lost to shrinkage — that’s nearly $1.75 million left on the table — and all of this without even considering the additional impact of adding poultry and seafood to the mix.

65% of all store shrink is in the perishables, and 18% of total store shrink is the meat department.