The Secret Sauce to Increased Cost Savings

& Student Participation in K-12 School Cafeterias

By Beth Hammer Vice President of Institutional Sales, Electrolux Professional Group





Selecting the right type of foodservice equipment for your school's unique needs is key to preparing and serving more school meals that balance cost, USDA requirements, and student tastes.

In this white paper, we will:

- Identify common and COVID-centric challenges K-12 school nutrition programs face
- Examine how these challenges can affect foodservice from product to plate
- Explain how advanced cooking, serving, warewashing, and produce washing equipment can enhance cost savings and boost student participation rates



The Social Distancing Age is upon us.

The COVID-19 pandemic has drastically changed what the common school day – let alone the traditional lunch – looks like. Whether it's tightly monitored in-person learning or all-remote behind a computer screen at home, the current education world has been unorthodox, to say the least. Compounding this challenge is many children depend on school food programs.

In a normal school year, more than 30 million students in the United States get their midday meal each day through the National School Lunch Program and more than 13 million get their morning meals through the School Breakfast Program, according to the USDA. For many children, these meals account for nearly 50% of their daily calories.¹

Most would agree that these programs have a direct impact on student achievement. There's even a growing body of research to support the claim that integrating more healthy and nutritious food can lead to improvements on students' standardized test scores.² It's also becoming apparent that schools need to provide to-go options to address the challenges of the pandemic and social distancing create.

However, serving less processed foods can be an expensive goal to sustain over time. It is one of many challenges Child Nutrition Directors must consider when weighing budgetary constraints and other external factors, such as federal regulations and increasing food costs. Considering more than 80% of a school's foodservice budget goes directly to food and labor, school nutrition staff must continue to find innovative ways to reduce food waste and improve productivity to keep revenue in line with expenses.³

When deliberating on the available cost-reduction strategies, evaluating foodservice equipment options can be a valuable strategy for increasing efficiencies and savings.

The Challenge

Every school nutrition program should assess its equipment lineup to ensure it is functioning at a level that can help staff produce an optimum number of meals per labor hour, enhance food quality, ensure proper sanitation, and maximize processes at every turn of food handling, preparation, and service. There are three main issues every school nutrition program must address to balance budgetary considerations with a successful integration of fresh food options.

Individual tastes, income levels, and especially a school district's current procedures can affect the number of students who participate in school meals on any given day. In recent years, the number of total students participating in the National School Lunch program has been on a gradual decline. In 2018, the program served 4.87 billion lunches or 400 million fewer lunches than it did at its high point in 2010.³

2. Meal Costs

In a school nutrition program, a loss of just pennies per meal can easily add up to thousands of dollars at the end of a school year. School foodservice directors are expected to run their operations like any other business and must keep close tabs on those factors that may increase food and utility costs. According to a recent SNA survey, nearly eight out of 10 school districts had to take steps to offset financial losses since the latest USDA regulations were implemented, which added 10 cents to the cost of preparing school lunch and 27 cents for breakfast.⁴

3. Time and Labor

Keeping highly trained and qualified staff can be a serious challenge for schools with traditionally high turnover rates. In these situations, many school districts and third-party vendors must spend a substantial amount of time and resources on training. Other hindrances to productivity and cost-savings include excessive labor-intensive manual processes.

The Solution

All of these challenges underscore the demand for school nutrition programs to conduct a serious evaluation and accounting of foodservice equipment with the end goal of ensuring the highest return on investment as possible.

Ultimately, this requires identifying equipment with the most potential to enhance food quality and streamline food preparation processes and efficiencies. Foodservice directors should seek out equipment that is not only built with these considerations in mind, but can verify long-lasting results that extend food storage and savings, generate more consistent cooking results, and reduce costly and cumbersome manual labor tasks in these unpredictable times for schools..

Foodservice Equipment

STEAMERS

In today's school cafeteria kitchens, the steamer is a popular tool for cooking and retherming large quantities of food, such as rice and vegetables, and some foods not often associated with steaming, such as ground beef and bread.

The seven main types of steamers are generator-based, boiler-based, steam coil, direct steam, pressure steamers, boilerless/connected and boilerless/ connectionless. All of them use steam power as a vehicle to spread heat fast and evenly. Contrary to what one might expect from home steaming, the food does not come out soggy or wet. Steam is a gas, not a liquid.

Each type of steamer provides different advantages in terms of water and electricity usage, temperature recovery times, convection methods, NSF hold features, ventless solutions, sizes, maintenance, and cleanability. This can have an impact on cooking quality, speed, space, utility, and labor cost savings. All steamers offer the healthiest cooking method available because they help food retain more nutrients and color, which makes food more appealing to children. Steamers are also simple and easy to operate, requiring minimal labor and oversight.

BRAISING PANS

The utility players of the commercial kitchen, braising pans (also known as tilt skillets) reside among the most versatile types of cooking equipment. With the capacity for braising, roasting, boiling, simmering, poaching or sautéing, they can be used for nearly any cooking technique or as a back-up for other cooking equipment at a moment's notice. Soups, stews and sauces, and a full menu of other items with multiple ingredients, such as rice, meat and vegetables for fajitas, can also be made in tilt skillets. One example that has been found to reduce costs and improve food quality is cooking raw ground beef with a tilt skillet instead of purchasing pre-cooked ground beef crumbles.

There are several different sizes of braising pans to choose from including smaller (10-gallon) countertop models and larger (15- to 60-gallon) floor models. One 30-gallon braising pan can produce up to 350 meals per hour, greatly reducing preparation time and energy usage, which are vital in a K-12 setting. Braising pans come in gas and electric models; however, gas models also require electricity for operation of temperature controls.

Braising pans are often used to perform similar tasks as steam-jacketed kettles or stock pots. When used with basket inserts or perforated steam-table pans, they can also serve as steamers.

STEAM-JACKETED KETTLES

Among the most productive types of cooking equipment in the school cafeteria, steam-jacketed kettles provide for significantly reduced preparation times (up to twice as fast) when compared to stock pots on a standard range. Cooking functions include blanching, boiling, braising, poaching, retherming, and sous vide. They can be used to make large batches of soups, sauces, and braised or boiled meats. Whether your school nutrition program utilizes a centralized kitchen format or operates in a more traditional local prep setting, a steam-jacketed kettle can help improve consistency for small to large batches.

There are several different sizes of kettles ranging from tabletop models up to 48 quarts and floor models up to 200 gallons. Kettles with advanced electronic controls and cook to temp features promote additional labor-saving opportunities with consistent, duplicable results every time. Offering energy-saving cook times in electric and gas configurations, steam-jacketed kettles effectively lower costs and reallocate labor.

HIGH-CAPACITY KETTLES

Designed to prepare large batches of food that can then be stored for retherming and serving at a later date, high-capacity kettles provide school systems and centralized kitchens a proactive solution for serving large student populations.

High-capacity kettles feature a bottom-mounted product discharge valve for efficient transfer to a pump/fill station which prevents damage to delicate menu items. A pneumatic-powered design helps fill bags effortlessly, minimizing time and labor while ensuring uniform results.

Depending on the needs of the individual school system, high-capacity kettles can typically be found ranging in size from 50 to 300 gallons. Some kettles include advanced controls and data features for greater temperature control and recording to ensure HACCP and quality assurance.

SERVING UNITS & LINES

Having an organized and welcoming serving line layout is another aspect of high-volume foodservice that can make or break a school's nutritional program. This equipment should not only enhance the appearance of the food, but also encourage the efficient ingress and egress of students to maximize the limited amount of time dedicated to school meals.

In these times of social distancing when cafeteria space and facility requirements vary from school to school, flexibility can be achieved through customizable options and interlocking units that take the guesswork out of assembling and dismantling serving stations before and after meal service.

Another way schools can combat barriers to their school nutrition program and promote greater participation, and meal reimbursement is through the adoption of mobile serving units. These portable vending stations support grab-and-go options. They can be used to support serving breakfast, snacks, concessions, after school or dinner options and even summer meal programs.

These units can easily be set up in cafeteria seating areas, school entrances, gymnasiums, and other high-traffic areas. They can also be customized to include a variety of food pans, heating units, display tiles, baskets, personalized signage, and more.

With the limited time designated for breakfast and lunch at many schools, mobile serving units provide a low-cost solution for those students who have a tendency to skip meals or are in a rush to get to class.

POT AND PAN WAREWASHING EQUIPMENT

Power Soak Joe

Pots and pans are among the most difficult items to clean in school cafeterias because they can be heavy and bulky and are more likely to have the type of baked-on food that can be extremely difficult, expensive, and time-consuming to wash.

The majority of automated dishmachine options are not designed for onepass warewashing of soiled pots, pans, and sheet pans. Utensil washers that are specifically designed to wash these particular items are costly to purchase and operate, often requiring extensive re-washing. Furthermore, manual hand scrubbing in a three-bay sink produces inconsistent results for such a high-cost, time consuming, and labor-intensive process.

Continuous motion warewashing systems, on the other hand, virtually eliminate all hand scrubbing of soiled wares. These systems naturally scour pots, pans and sheet pans in hot, soapy washwater with a series of water jets that create an even wave action to maximize cleaning power. They also make the loading and unloading process easier and more ergonomic for workers. For example, clean wares in the system can rotate up to the cafeteria staff member for easy unloading with minimal back-bending required. This positively affects staff morale (as hardly anyone wants to take on the arduous task of potwashing by hand) and labor allocation. With full implementation of a continuous motion warewashing system, the labor that would normally be used for hand scrubbing can be reallocated by a minimum of 50%, providing staff more time to spend on more critical foodservice tasks.

PRODUCE WASHING EQUIPMENT

As more schools seek to increase healthy food offerings, a real need exists to minimize the high cost of preparing fresh fruits and vegetables. Equipment that is specifically designed to wash produce can alleviate the timeconsuming process of hand washing fruits and vegetables. An even better solution can be found with equipment that provides a circular, gentle, freeflowing wash action that allows for full immersion and more thorough washing of produce. This helps to provide optimum removal of debris and bacteria (which can accelerate produce spoilage) when compared to inconsistent manual washing. When washed with a free-rinsing antimicrobial wash, produce shelf life can be dramatically increased.

Produce washing equipment with ergonomically designed self-loading baskets can make the process so simple and efficient that the operator never has to touch the clean, sanitized produce during the unloading process. The end result is a cleaner, safer product that keeps longer and saves school cafeteria staff valuable production time.

Conclusion

Advanced cooking, mobile serving, warewashing, and produce washing systems are designed to efficiently and effectively reduce the unnecessary cost and time that goes into preparing meals in K-12 kitchens, saving valuable budget dollars without sacrificing food quality or consistency. It's important to properly evaluate the advantages of each category of foodservice equipment as they apply to a specific K-12 school nutrition program. It is also imperative for foodservice directors and staff to seek the assistance of a trusted and experienced manufacturer of K-12 foodservice equipment that can help them select the best solution for their specific needs. Ultimately, the goal should be to justify and ensure every dollar allocated to school foodservice equipment is directed to where it matters the most: delivering healthy and nutritious food to growing school children. Hopefully one day the pandemic will be behind us and we'll all get back to traditional, good old-fashioned lunch.

Source Links

- 1. https://www.pewtrusts.org/en/research-and-analysis/reports/2015/08/ serving-healthy-school-meals
- 2. https://www.theatlantic.com/education/archive/2017/03/do-healthy lunches-improve-student-test-scores/520272/
- 4. https://fns-prod.azureedge.net/sites/default/files/pd/slsummar.pdf
- 5. https://schoolnutrition.org/aboutschoolmeals/schoolmealtrendsstats/

© 2023 Electrolux Professional, Inc. All Rights Reserved. Printed in the USA. 09/28/23