

## Increasing Adoption Of Bulk Milk Dispensers In Virginia Schools

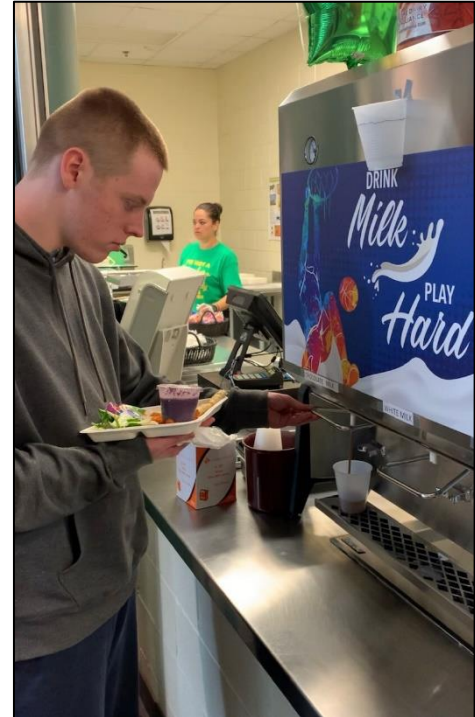
The Virginia State Dairymen's Association (VSDA) submitted a grant in 2023 to increase the adoption of bulk milk dispensers in Virginia Schools. Dairy is the #5 commodity in Virginia for cash receipts and dairy cattle make up 20% of the beef supply in today's market. School milk programs are a vital market for the dairy industry. Currently, 10% of all fluid milk is served in school breakfast & lunch programs. In Virginia nearly 90% of milk is used in the fluid market. Valuing the importance of the dairy industry in Virginia and its importance to the beef industry, the Virginia Cattle Industry Board (VCIB) partnered with VSDA to overcome identified barriers and seek to increase milk consumption by students in Virginia public schools.

Several challenges are identified in the current model of school milk carton usage. This grant aimed to tackle student consumption and waste of fluid milk as well as environmental concerns of school administration and staff regarding packaging waste.

Currently, most schools purchase large chest coolers that store cartons of milk. When the chests are opened for prolonged periods of time during busy breakfast and lunch services, the temperature inside rises, causing milk quality and taste to suffer. Bulk milk dispensers solve this issue by placing 2 or 3 five-gallon bags of milk into an enclosed refrigerated container with serving spouts underneath ensuring the milk remains at a constant cold temperature.

Focus and adoption of "green" practices to reduce environmental footprints and initiatives by local governments, have school administrators seeking more sustainable options. In a pilot program at one Rockingham County Public School, milk packaging carton waste was reduced 91% by volume. While this reduction is representative of only one school, comparable results are expected in other participating schools. This sustainable alternative fosters positive perceptions and acceptance of bulk dispensers by school nutrition staff, teachers, students, and parents.

As school budgets continually decrease across the state, one of the main challenges of transitioning to bulk dispensers lies in the initial equipment cost, maintenance, and staff training. Through this grant and partnership with The Dairy Alliance, participating schools are receiving equipment and training at no cost to them.



Equipment provided includes the milk crate, stand, and milk dispenser care kits.

The milk crate is a vital aid to allow schools to preload milk bags before the lunch shift. This enables the school to have the milk ready to insert into the dispensers for refilling during lunch. This ensures a smooth lunch service without having to stop the lunch lines, remove the empty crate, replace the milk bag, and reinsert the crate.

The stands allow the dispensers to be placed at a comfortable height and allow for more storage space. The

eye-catching magnets displayed on the dispensers promote dairy as part of a balanced diet and educate students on the benefits of incorporating milk into their meals.

The milk dispenser care kits consist of items that allow the staff to monitor internal milk temperature, scissors to cut the bag nozzles, and tube clamps to maintain milk quality during storage.



Through the VCIB grant funding, the VSDA and Dairy Alliance attended the annual Virginia School Nutrition Association meeting and presented information on the benefits of bulk milk dispensers to increase milk consumption, decrease milk waste, decrease carton waste, and increase student satisfaction with milk service. School professionals were also informed of the process and application to receive bulk milk dispensers.

To date, milk dispensers and associated supplies have been distributed to schools in Pittsylvania, Rockingham, Henrico, Madison, Bedford, Northumberland, Lousia, King George, and Norfolk. These schools represent a mix of both rural and urban school districts with a range of school populations. Additional schools have expressed interest in replacing their chest coolers with bulk milk dispensers and are currently completing their applications.

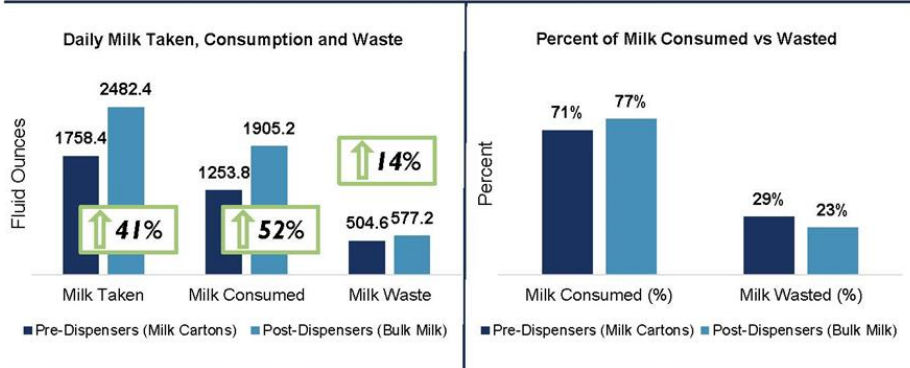
Schools that participate are required to submit reports that detail milk consumption, waste, costs, and student and staff satisfaction compared to the same time in the previous year. If results are similar

to the pilot school in Rockingham County, as seen in the graphic below, it is expected to be a resounding success.

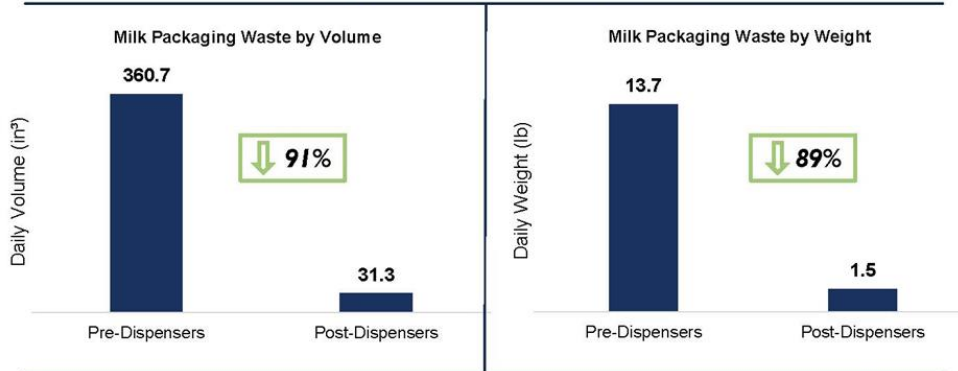
# Switching from Milk Cartons to Milk Dispensers at Bluestone Elementary School

Harrisonburg City Public Schools (HCPS) School Nutrition has implemented a new sustainable initiative in the school cafeteria of Bluestone Elementary School – milk dispensers. Instead of being offered a traditional eight-ounce carton of milk, students now use reusable cups to serve themselves bulk milk from milk dispensers when moving through the lunch line.

## Pre and Post Milk Dispenser Waste Study Results



**Daily milk taken increased 41%, daily milk consumed increased 52% and daily milk waste increased 14%. Of all milk taken daily, the percent of milk consumed increased and the percent of milk wasted decreased.**



**The switch to milk dispensers amounted to a 91% reduction of milk packaging waste by compacted volume and an 89% reduction of milk packaging waste by weight.**

### Staff Response

Overwhelmingly positive. Waste reduction aspect of the milk dispensers was most important to teaching and administrative staff. Staff recommends other schools implement dispensers based on their experience.

*“Bedford is a great example of where industry and this grant helped fund the first few units and the county proactively made the change at the rest of the schools. So far for three of the schools that have installed dispensers, they are showing a 24% increase in milk consumption. That is our hope for other counties as well.”*

*Eric Paulson, Executive Director  
Virginia State Dairymen’s Association*