

# ReFresh Nebraska

Stop the Rot

Fall 2019

## Hail Hail the Steel Cow

Call to mind the 8 ounce milk carton, and chances are you'll find yourself back in the grade school lunch line, wishing it was chocolate milk day. Okay, maybe you never liked chocolate milk, and long suffered the sneaking suspicion they used slightly soured milk to make it - the point is that for many, 8 oz. milk cartons and school cafeterias are inextricably linked. Given today's focus on waste reduction, whether they should remain that way is another matter.

Let's start with the carton. Whether landfilled or recycled, the sheer number of single-use containers can be mind boggling. According to Lincoln Public Schools (LPS) for example, 31,000 cartons of milk are served and recycled each day. That translates to some 5.5 million over a 180 day school year. Scale that up to 30 million daily meals served by National School Lunch Program (NSLP) and we're talking around 5.5 billion cartons a year. Plastic alternatives can be easier to recycle, but in the age of China and Basel Convention import bans, such a switch would do nothing to relieve overburdened processors.

As for the milk itself, a USDA School Nutrition and Meal Cost Study released in April found

that 29 percent of milk served in schools gets tossed every day - the second highest rate of plate waste after vegetables (31%). Apply that average to LPS serving totals, and we're talking some 100,000 gallons thrown out each year. Unopened containers can be saved at schools offering food share tables, but otherwise it all goes down the drain.

While USDA found a significant association between the timing of lunch periods and plate waste (2% lower in meals served at or after 12:00pm), local studies in Oregon, Washington and Virginia focused on student perceptions. For example, some students said they didn't realize milk remained in the carton because they couldn't see it, while others complained that it didn't taste good. Still others report it was simply more than they could drink.

Which begs the question: who determined the size of milk cartons in the first place, and why are we tied to that amount? The answer is that NSLP guidelines require participating schools offer 8 oz. of milk with every meal. Offer anything less, the theory goes, and you're no longer in compliance with program guidelines. That's not an accurate interpretation however, as schools are only required to **offer** that amount.

Here's the distinction: NSLP's New Meal Pattern Requirements and Nutrition Standards states that five components **must be offered** with every meal: Fruits, Vegetables, Grains, Meat/Meat Alternate, and Milk. Meal patterns, sodium requirements, and milk choices aside, following are the only guidelines regarding what **must be taken** in order to qualify:

- Must take at least 3 of 5 components
- Must take at least 1/2 cup serving of the fruit or vegetable component

In other words, any meal containing three of the five components is eligible for reimbursement as long as one of those components is a full serving of fruit or vegetables. Only when milk is taken to fulfill a requirement, does it need to be 8 oz. School districts across the country have started taking notice, often at the request of students concerned with waste.

The solution they say, is a switch to reusable plastic cups and some good old fashioned technology affectionately referred to as the steel cow. No longer the commonplace equipment of old, such dispensers can still be found in places like summer camps or college dorms, and while  
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implementation can be challenging, they also appear to be a good fit for schools as well.

The impact on single-use packaging is profound, with schools reporting up to a 90 percent reduction in such waste. And this isn't the difference between recycling and the landfill either, this is source reduction - keeping materials from being produced in the first place.

Students not only report the milk tastes better, they're more likely to choose it when given the option to take only as much as they want. In fact, among pilot programs researched, all reported an overall increase in milk purchased. Some even saw a decrease in the amount wasted each day, and while others saw a slight increase, they still found it to be a smaller percentage of overall sales. Schools with a chocolate option found they can barely keep up with demand, and when applicable, the 8 oz requirement was as easy to enforce at checkout as cartoned milk.

Assuming an existing dishwasher, startup costs for a school of 400 can run from \$3,000 to \$4,200 and include the purchase of 9-10 oz. reusable plastic cups (sized to prevent spills), washing racks, and a two or three valve milk dispenser. That's a lot of money for cash-strapped food service departments, but some found relief through state sponsored waste reduction grants. Those that incurred the startup costs themselves figured to recoup them over time through reduced waste collection fees, combined with lower energy costs incurred by dispensers compared to milk coolers.

Cost comparisons of the milk itself varied depending on availability of bagged options. Some districts reported a \$.02 increase per 8 oz serving due to hand filling of bags at the dairy. Others report about the same amount in savings, thanks to reductions in packaging. Results may vary, but whatever the case and across pilot programs, students, cafeteria and custodial staff, teachers and administration alike, agreed that the benefits outweighed the disadvantages. Well, as long as meals remain in the cafeteria anyway, where staff can keep an eye on those cups. They may reach their lifecycle benefit after only 10 uses, but longevity is key if they're ever to replace the carton in the future recollections of today's students!

## Implementation Recommendations by Harrisonburg City Public Schools Harrisonburg VA

### Milk Dispenser Set-Up

- Place the machine before point of service
- Determine number of spouts in milk dispenser
- Have adequate electric outlets
- Have a place to store cups

### Issues to be Addressed in Kitchen Staff Training on Milk Service Procedures

- Proper storage and rotation of milk bags regarding expiration dates
- Proper cleaning and sanitizing of milk dispenser
- Monitoring temperature of milk dispenser
- Procedures for washing reusable cups
- Have at least one to two people capable of lifting three- to five-gallon milk bags

### Building Support from Teaching & Administrative Staff

- Educate staff on switch to bulk milk prior to implementation
- Promote waste reduction, a better school lunch experience for the students and the ability of students to mix white and chocolate milk

### Student Training and Education

- Educate students on the milk dispensers prior to implementation
- Allow students to use the milk dispensers and try milk prior to starting use in the lunch line
- Put pictures on the milk dispensers and educate students on how full to fill cups in order to meet federal school meal requirements as well as reduce spills

### Tracking Milk Consumption and Waste

- Consider completing a pre- and post-waste study looking at milk consumption, milk waste, etc.
- Conduct a weeklong pre study and a weeklong post study, the latter three to six or more months after implementation



Shopping your fridge first is an important strategy for reducing food waste. Here's a recipe idea that will help you use what you have before buying more!

## LEFTOVER PUMPKIN PIE & TURKEY CURRY

Ditch the Thanksgiving leftover rut. Breathe new life into pumpkin pie and turkey with this sweet, full-bodied curry recipe!

SERVINGS:  
10

USES UP:  
Pumpkin Pie & Turkey

### INGREDIENTS:

1/4 Cup Vegetable Oil  
1 Tablespoon Black Mustard Seed  
1 Large Red Onion - Diced  
8 Cloves Garlic - Thinly Sliced  
2 Fresh Red Chilies - Thinly Sliced  
2 Teaspoons Ground Cumin  
1 Tablespoon Garam Masala  
1 Tablespoon Ground Coriander  
2 Teaspoons Ground Turmeric

1/2 Pumpkin Pie - Filling & Crust Separated & Divided  
2 Tablespoons Maple Syrup  
1 Bunch Cilantro - Minced, Torn & Divided  
2 15 oz Cans Coconut Milk  
4 Cups Turkey - Cooked & Shredded  
1 Teaspoon Kosher Salt  
1 Cup Plain Yogurt (for serving)  
Steamed Basmati Rice (for serving)  
Lime Wedges (for serving)

### DIRECTIONS:

In a large Dutch oven, heat oil & mustard seeds over high heat. When seeds start to pop, add red onion, garlic & chilies. Reduce heat & sauté for 5 minutes until onions are soft, about 5 minutes.

Add spices & cook for 1 minute. Add pumpkin pie filling, maple syrup & cilantro stems. Cook another 3 minutes.

Add coconut milk & turkey. Season with salt, bring to a boil, cover & simmer for 10 minutes.

Serve curry topped with yogurt, cilantro leaves & crushed pie crust. Serve alongside rice & lime wedges.

**TIPS:** After scraping out filling, bake pie crust at 400°F about 10 minutes to re-crisp. Throw chili stems in soups & stews for a bit of heat (remove before serving) To get the onion & garlic scent off your hands, rub with parsley.

**CREDIT:** Joel Gamoran, Sur La Table National Chef and Host of Scraps

For those of you dedicated to the old school card file recipe box, here's the recipe in a 3"x5" format to print

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SAVETHEFOOD.COM

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# FOOD STORAGE TIPS FROM SAVETHEFOOD.COM

## ARTICHOKES

REFRIGERATE IT: Yes

AT FRESHEST: 1 week

**OPTIMAL STORAGE:** Don't wash until ready to use. Slice off stem end & sprinkle just that end with water. Store in airtight container in high-humidity fridge drawer. Cooked artichokes should be cooled completely & stored in an airtight container for up to 1 week.

**FREEZING:** Trim tops, rub cut surfaces with lemon to prevent browning & boil until "al dente" in lemon flavored water. Drain upside down. Place upside down on baking sheet & freeze, then transfer to airtight container. Artichokes can also be blanched, in lemon water - just be sure to blanch the core without cooking the outsides completely. Do not freeze raw.

**USE IT UP/REVIVAL:** Outside leaves may be bronzed due to frost - discoloration is cosmetic & doesn't affect edibility. Dried artichokes are often used in dried floral arrangements.

## ASPARAGUS

REFRIGERATE IT: Yes

AT FRESHEST: 3 to 5 days

**OPTIMAL STORAGE:** Put bundled stalks upright in a bowl or dish with 1 in/2.5 cm water & place on fridge shelf (best) or wrap cut ends in moist paper towel & put in a breathable bag in the high-humidity drawer. Refrigerate as quickly as possible.

**FREEZING:** Blanch, immerse in ice water, dry, place on baking sheet to freeze, then transfer to an airtight container.

**USE IT UP/REVIVAL:** To remove woody ends, bend until the stiff portion snaps off. Peel & slice woody ends into small rings to use in cooking or as part of a soup. If spears start to wilt, soak in cold water before cooking, or add 2 to 3 Tbsp sugar to the soaking water to restore the sugars it has lost.

## BEETS

REFRIGERATE IT: Yes AT FRESHEST: 7-10 days (greens 1-2 days)

**OPTIMAL STORAGE:** Do not wash until use. Store in breathable bag in high-humidity fridge drawer. Separate green tops from beets, leaving 1 in/2.5 cm stem. Green tops can be stored separately in a breathable bag & used like chard.

**FREEZING:** Wash, trim tops, cook fully (25 to 50 minutes, depending on size), cool in ice water, rub away peel, dry, slice, cube or purée, & seal in zip-top freezer bags. Freezing over mature beets can magnify woodiness, so isn't recommended.

**USE IT UP/REVIVAL:** Beets are the main ingredient in borscht. Peels & shriveled beets can be used for making natural dyes—rub hands with salt to remove any staining.

## BROCCOLI

REFRIGERATE IT: Yes

AT FRESHEST: 5 to 7 days

**OPTIMAL STORAGE:** Do not wash until ready to use. Refrigerate in the original wrapping or a breathable bag in the high-humidity drawer.

**FREEZING:** Wash, separate into smaller florets, blanch, immerse in ice water, and drain until dry. Lay florets out separately on a baking sheet and freeze, then transfer to an airtight container.

**USE IT UP/REVIVAL:** Eat the stalks! You can grate them and make a slaw, use in a stir-fry, or just chop and cook them like the broccoli tops. Depending on use, it helps to peel off the tough outer skin. To revive slightly limp broccoli, apply ice directly to the bunches or plunge into an ice-water bath, drain, & place in the fridge.

To download the entire Food Storage Guide, go to [www.savethefood.com/food-storage](http://www.savethefood.com/food-storage)

## QUICK TRICKS

### Reducing the Size of Recipes

Alice Henneman, MS, RDN, Extension Educator

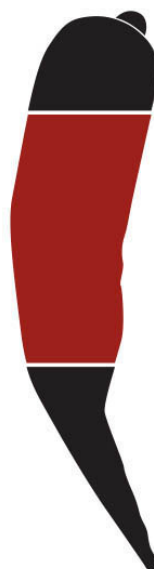
Many recipes can be cut in half or thirds. Here are some tips that will adapt a larger recipe to a smaller one.

1. It may be easier to make the entire recipe for baked goods and freeze half.
2. When reducing recipes, you may need to use smaller saucepans, skillets and baking pans. The time for baking smaller amounts of food may be less.
3. The standard size egg for recipes is the large egg. To halve an egg, break it, mix it together with a fork and use 2 tablespoons. Refrigerate the rest and use in an omelet or scrambled eggs within two days.
4. A 9"x2"x13" pan holds 14 to 15 cups; when halving a recipe use a square 8"x8"x2" pan or a round 9"x2" pan. When using a different pan size, try and keep the depth of food the same. Reduce the oven temperature by 25 o F when substituting a glass pan for a metal one.

For more ideas on how to makeover your leftovers, go to: [food.unl.edu/cook-it-quick-documents/makeover-your-leftovers.pdf](http://food.unl.edu/cook-it-quick-documents/makeover-your-leftovers.pdf)

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**45%**  
**ROOTS & TUBERS**  
**FOOD LOSSES**

In North America & Oceania alone, 5,814,000 tonnes of roots & tubers are wasted at the consumption stage alone



This equates to more than 1 billion bags of potatoes



**Keep Nebraska Beautiful**

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