

# ASSISTIVE TECHNOLOGY: IN & AROUND THE DAIRY BARN



Photo: Kendra Martin / AgrAbility PA / UCP Central PA

**Each year, AgrAbility PA works with dairy farmers throughout the state to make recommendations on assistive technology devices that are available to help in and around the dairy barn.**

Farmers are sometimes hesitant at the thought of changing the way they have milked their whole life. The logistics and finances can also cause some stress and doubt.

**However, many farmers who have worked with AgrAbility PA to modify their milking routine have shared that they wish they would have made the changes sooner.**

These modifications truly make a significant difference in a farmer's day-to-day routine around the barn.

## Rail System

This system acts as a carrier for the milking units in a tie stall barn and allows for the use of automatic takeoffs. With this system, the farmer does not have to carry or lift the milking units.

Rather, the units run on an overhead track from the milk house to the stalls where the cows are milked. The units can be easily attached to the milk pipeline and to the cow while the weight is still held by the rail. This reduces the wear and tear on a farmer's back, shoulders, and arms.



Photo: Abbie Spackman / AgrAbility PA / Penn State



## Automatic Takeoffs

Used with a rail system or in a parlor setting, automatic takeoffs can be installed. The takeoffs automatically release the milking unit from the udder of the cow when the milking is finished. With a rail system, the takeoffs are pulled up and away from the cow – ready to be moved along the rail to the next cow. This reduces the amount of squatting and bending that is required to check the cow and remove the milking unit.

**Automatic takeoffs can eliminate at least 100 instances of squatting or bending per day and can help conserve joints.**

  
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Cultivating Accessible Agriculture  
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## Gutter Grates

Installing gutter grates may seem like a simple idea, but for farmers with mobility impairments, gutter grates can make a huge difference. Gutter grates cover the gutters that run behind the cows in a tie stall barn. The gutters can be difficult to step across, causing a safety concern.

**The installation of gutter grates reduces the need to step across the gutter, thereby preventing trips and falls, while still allowing manure to be captured in the gutter.**

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## Milk Taxi or Calf Mobile

This helps to feed calves. There are different models, but generally, they are an insulated or heated milk storage tank on wheels with an easy dispensing system. This tool can easily transport milk from the milk house to the calves.

**It eliminates lifting or carrying heavy buckets and saves time by reducing the number of trips back and forth.**

Devices with a heating option can keep milk warm for longer periods, allowing a farmer to work at a slower pace if needed. Most are designed with self or easy clean-up setups.

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