

## Delivering Meals in Long Term Care

When it comes to feeding residents and patients in their rooms, there are a variety of ways to deliver food. You can get creative with many methods to ensure properly temped food makes it to the person(s) in your care whether you're offering traditional/bedside service or room service.

Some might be asking, which system of meal delivery is right *for you*? The right answer could depend on a variety of factors. Every organization has its own goals and objectives. Every property has its own circumstances, and every unit has its own nuances and resident requirements. What we'll do here is lay out the pros and cons of a variety of meal delivery systems. Our hope is that this will become a tool for you to help decide which system is best for you.

There are four different delivery systems that we'll discuss here. Those are: the pellet system, delivery carts with two cabinets, delivery carts with a single cabinet, and insulated trays.

Over the last 30 years the movement of food has been primarily solved by using the pellet system- a heated base, an insulated dome, and an ambient cart. Now there are new options. Every option comes with its own set of tradeoffs. That's why we say that the best option depends on the organization, the tradeoffs you are willing to consider, and the variables that must be accounted for.

### The Pellet System

The pellet heating system is the most used system for meal service within long term care facilities. This system contains a heating system for the entrée and insulated service ware for cold items. The process begins when the base, which holds the entrée, begins to heat because it's plugged into induction heaters. After heating the base, a heated plate is placed inside the base, the entrée is positioned on the plate, and covered with an insulated dome or cover. The entrée and cold items are then put onto trays, which in turn are placed in ambient temperature carts. These carts are delivered to the nursing stations to be passed by diet or nursing aids to the residents.

#### Benefits:

*-Established in the Market:* Pellet systems are the most used meal delivery system in long term care.



- *Relatively Low Introductory Price*- The pellet system is cheaper than other options up front.

### **Challenges:**

-*Limited Temperature Hold Time*: Generally speaking, pellet systems can only hold temperature for 30-45 minutes. Additional units or alternative heating sources may be required.

-*Lack of Food Quality*: Entrée's dry out quickly due to the temperature variance of the heated plate and cool insulated dome. This causes condensation build up.

-*Maintaining Cold Food Temperature*: There is nothing to ensure the cold food is kept cold beyond the performance of the insulation. Cold food has a high chance of becoming room temperature quickly.

-*Cost Efficiency*: The system requires proprietary bases, dome covers, and insulated ware, which drives up the initial cost as well as the cost of replacement parts. There are systems that are more cost effective as time passes.

### **Heated and Refrigerated Meal Delivery Carts with Dual Cabinets**

The concept of this system involves placing a hot portion of a meal in one cabinet and a cold portion in another cabinet all in one cart.

Subsequently, trays are transported to rooms using a dual-temperature cart. This method includes putting hot food on one tray, applying the lid, and stacking with the other hot meal trays on one side of a meal delivery cart. This same process is done on the refrigerated or ambient side of the cart for the trays that contain the cold food. Each resident is given one of each tray upon delivery. Once food is eaten, the dirty trays are put back in the cart and taken back to the washing station.



Another variation of this process occurs when a separate cart is used for both the hot and cold food for meals. Hot meal trays are in an all-heated cart and cold trays are in an all ambient or refrigerated cart.

### **Benefits:**

-*Maintain Hot Food Temperatures*: Having two sides to a cart meets the needs of maintaining both cold and hot food temperatures for long periods of time.

-*Less Expensive Trays*: Standard copolymer trays are used with heated carts, eliminating the excess material used in the pellet system.

-*Food Safety*: Decrease the chances of food born illness due to poor food temperature by using this system to ensure food is safe.

*-Multi-Functional:* Dual temperature carts with dual cabinets can also be transformed for bulk food delivery.

### **Challenges:**

*-Separate Handling Hot/Cold Food:* This system requires handling hot food and cold food separately until they're combined onto one tray. This means special attention must be paid to ensure ticketing systems are set up to print tickets for hot food and cold food.

*-Up-Front Investment:* This meal delivery system is a larger investment up front, but the return on your investment could pay off in as little as three years depending on your population.

*-Visibility:* In carts with refrigeration units height can become an issue, posing challenges to see over the cart for some caregivers.

### **Heated and Refrigerated Meal Delivery Cart with a Single Cabinet Cart**

Meals are served on one proprietary-designed tray that has the capability of accommodating both hot and cold food transport in a single cart. When traying up food using this system, place the cold food on one side of the tray and the hot food on the other. The tray is then placed inside of a dual temperature cart. One side of the cart is heated, while the other is refrigerated. Place food into the corresponding side. These carts are designed with a divider in the middle of the cart to prevent hot and cold air from migrating from one side of the cart to the other. When it comes time to hand over a meal, everything is on one tray and is ready to serve.



### **Benefits:**

*-Food Safety:* Decrease the chances of food born illness due to poor food temperature by using this system to ensure food is safe.

*-Temperature Control:* This system is great for maintaining temperature due to one side of the cart providing heat to the hot food and the other side providing refrigeration to the cold food.

*-Simplified Process:* the amount of work done for caregivers while using this system is minimal. Simply plate the food, place it on a tray, and serve to residents. There is minimal chance of a resident's meal being confused with another's while using this system.

### **Challenges:**

-*System Set-Up Cost*: This system comes with a higher start up cost as it is one of the newest systems on the market.

-*Tray Selection*: Trays are expensive for this system. Only one tray works for the specially designed divider within the cart, causing extra or replacement trays to be expensive.

## **Insulated Trays on Non-Insulated Cart**

A system that is easy to use for smaller populations would be the insulated tray on a non-insulated cart. Serve a meal into one tray, stack the next tray on top of it to act as a lid, and repeat this process until the satisfactory number of trays is reached. Use an open cart to get the meals to their destination. The trays can contain anywhere from four to six compartments for food. These trays are insulated, which means that delivery does not have to be in an enclosed cart. Open carts contain a bottom shelf and a top shelf. The bottom shelf is where the meals are stacked up and the top shelf can be utilized for drinks, dinnerware items, or additional trays. Once mealtime is over, stack trays back on the cart to take back for washing.



### **Benefits:**

-*Cost*: Using the least expensive cart to deliver food in this system. The trays are what maintain food temperatures, not the cart.

-*Stable Tray Stacking*: Trays in this system interlock leading to a highly stable stack of trays.

-*One Tray*: Because food is all on one tray, the fewest amount of dinnerware is used with this system.

### **Challenges:**

-*Bulky Trays*: Sometimes harder for caregivers to handle. This also causes more space being filled up on the cart due to the tray sizes.

-*Short Temperature Holding Time*: The length of time that trays can hold food is shorter than the length of time carts can hold food.

-*Presentation*: Hard to make food appear as appealing in insulated trays as a plate.

## **Conclusion**

There are many factors to consider when deciding which system is best for you. Your organization may decide to use a variety of systems, dependent upon the requirements for the different needs you serve.

Here's a list of things to consider:

What are the needs of the individuals in your different units?

Are your units/wings specialized? If so, what kind of challenges does mealtime pose?

How long are your meal periods?

What type of service do you conduct (traditional/bedside ordering vs room service)?

How large is your menu?

How long does it take you to serve meals?

Is electricity accessible throughout your property?

There is no one way to serve meals. Every organization is different, and every property presents its own unique set of challenges and services. You'll have to do your best to find a system that mitigates the threats of foodborne illnesses, provides speedy service, and maintains food quality for your patients/residents. All these options have their place. For long term care organizations that also feed people in cafeterias, we offer transport methods for bulk-food applications as well.

If there's one we can help you with please call JonesZylon!