Dining Room Design

Regardless of whether or not there is a kitchen in the household (see white paper on Care Setting Size and Configuration), the design of the dining room has important implications for residents, staff, and visitors. The activity of eating has complex undertones. We eat to nourish our bodies and provide energy for our daily activities. There are a variety of emotional aspects related to eating that are seldom considered. Some may eat to comfort emotional pain, while others may refuse to eat for the same reason. Some may enjoy the conversation that guests bring to a meal, while others may become overwhelmed by the stimulation and forget to eat the food in front of them. Some may have joyous memories of food and its related preparation activities, while others may have been deprived of food and thus have negative memories surrounding mealtimes. On the positive side, mealtime can be a social time for many residents that provides interaction with other residents and staff. For some, it is a means of nurturing and caring. Many of life’s celebratory events are tied to food, such as birthdays, holidays, and weddings.

Dedicated Room vs. Multipurpose Space

Ideally, one would want to design spaces for individual function (e.g., space for eating, spaces for staff retreat, spaces for family visiting). However, spatial constraints and patterns of use often cause spaces to be used for multiple purposes. This is true in homes in the community (e.g., where kids may do homework at the dining room table after dinner), as well as in long-term care settings. However, people with dementia have special challenges because they may have a harder time understanding different uses of a single space. Therefore, when the dining room is also routinely used for activities unrelated to food, it is important to give residents familiar cues when it is time for a meal. Designing to include easily accessible
storage will make it easier for staff and residents to set the tables prior to each meal, which can be a very effective cue. Similarly, it is important to be able to provide cues that a non-meal activity is occurring. For example, it may be important that furniture can be easily moved and tables temporarily stored in an accessible closet or alcove so the chairs can be placed in a circle. Prior to the design process, the provider needs to determine the different activities the room will be used for to accommodate the space and its different activities.

For people with dementia it may be more appropriate to have the dining room’s use be primarily limited to meals or other food-related activities. Sitting around after breakfast with a cup of coffee, visiting with guests and being able to offer them a piece of cake or fruit from the kitchen counter, or having late afternoon tea with good friends are all familiar activities that would normally take place in a dining or breakfast room. By keeping the use of the room related to meals and food, the residents may be better able to remember its use, which can cue more appropriate behaviors.

Centralized Versus Decentralized Dining

The kitchen and dining area is commonly the hub of activity in a home in the community. Decisions related to the location of these rooms in a care community can affect the flow of activity in the resident’s day. When a dining room that can seat a whole floor of residents is located in the center of a care community, some residents will have to travel a greater distance to get to their meal, and thus may be fatigued by the time they reach their table. If they require assistance from the staff, some residents are likely to be brought to the dining room 30, or even 45 to 60, minutes before the meal. This is a challenge for individuals with dementia because sitting around with nothing to do may not be tolerated well. They may also be overwhelmed by the bustle of such a large space and thus avoid it unless forced to attend. Conversely, when the dining area is at the center of a smaller household with fewer resident rooms surrounding it, the more controlled levels of activity may draw out less social residents. The level of stimulation may also be more tolerable for
individuals with dementia and the shorter distance from bedroom makes it easier for people to reach the dining room without being fatigued. The current trend is to design the food service to be more like home, in that the residents can eat when they want and what they want. This is best supported by having the dining room and kitchen in close proximity to the residents’ rooms.

**Larger Versus Smaller Dining Rooms**

The location of the dining room is related to the size of the dining room. Perivolaris found positive results with environmental changes, including reducing the size of dining rooms to accommodate no more than 25 to 30 residents \(^{(1)}\). Food intake increased significantly with the described changes. Interestingly, some residents confuse larger dining areas with restaurants and eat less, thinking they will receive a smaller “bill” at the end of the meal \(^{(2)}\).

There are a number of studies that suggest that smaller dining areas provide the best solution for residents with dementia. Non-institutional dining rooms have been associated with larger food intakes in residents with dementia \(^{(3)}\). Smaller areas reduce confusion as to the function of the room \(^{(4)}\). Family-style eating at smaller tables increased intake and improved eating behavior \(^{(5)}\). In another study, moving dining to two day rooms away from a large dining area decreased assaultive behavior \(^{(6)}\).

Smaller dining rooms create a more intimate and familiar ambience rather than an institutional character \(^{(7)}\). If the design accommodates a smaller dining room, it is best to stay on smaller scale throughout, such as 8 to 9 foot ceilings, smaller tables, and locations for knickknacks. Smaller dining rooms can be located along the walking route to the central activity space to shorten the walking distance for each resident \(^{(8)}\). More residents and families prefer a dining space that has circulation routes along the outside of the room because they do not want to be on display while eating \(^{(9)}\). Consider having a kitchen immediately adjacent to the dining area with the cabinets visible from the tables, which makes the room appear as a kitchen/eating area in a house.
When having several smaller dining areas is not an option, one way to create subgroups in a larger room is to subdivide the room with planters and low partitions\(^{(10)}\).

The dining area is often described as the “heart of the home” where most gathering takes place\(^{(11)}\). Having smaller dining areas also provides space for the household to gather, which is consistent with their past living arrangements. If the dining area is part of a larger hearth of the household, as in a Green House design, it can provide a natural extension for social opportunities\(^{(12)}\). A resident can be a part of the functioning of the facility by helping with the meals (i.e. setting the table, or serving) while still watching the activities occurring in the other social areas.

**Furniture Size and Design**

The dining room continues to be one of the more formal rooms of the typical residential house. Residents may perceive darker wood furniture and heavily draped windows as a room that is only for special occasions. However, a more casual décor with lighter woods can evoke memories of everyday eating. The designer should discuss with the client which design approach would be a better fit. If providing a more formal dining area is desired, this would include darker wood furniture, traditional furniture styles, and hutches, sideboards, and buffets. Chandeliers, formal window treatments, and hanging artwork all contribute to the feeling of being at home\(^{(13)}\). A more informal approach includes an eclectic mix of furniture\(^{(14)}\). The furnishings do not have to match exactly, as coordinated furnishings look more residential than over-decorated rooms.

Groupings of four individuals at a square table provides residents with the most definable personal space, which may be better for people with dementia\(^{(15)}\). Square tables can be further grouped together for other activities in the room. However, round tables may be safer to navigate around because of the lack of sharp corners\(^{(16)}\). Also, some argue that round tables are more flexible, accommodating 3 to 5 or 6 people more easily. There are tables (often used in restaurants) that convert from square to round. However, be aware that this can increase the depth of
the table, which limits the ability of the arms of a chair or wheelchair to pull under the table. Table height should be 30 to 34 inches and ideally some tables should be height adjustable\(^{(17)}\). Edges of the tables should be bull-nosed or rounded for comfort\(^{(18)}\). Avoid highly polished finishes to reduce glare\(^{(19)}\). If the majority of residents will be using wheelchairs at meals, tables need to be 42 inches or larger to allow space for leg extensions under the table. It is also important to recognize that individuals vary in their tolerance for stimulation. Some residents may be more independent eating alone or with only one person, while others will benefit from the socialization and cuing that eating with 3 to 4 other people brings. Providing tables that seat different numbers of people is helpful. One research project found that small tables (seating 4 rather than 6 or more people) improved communication\(^{(20)}\).

For individuals who are so distracted during meals that they have a hard time focusing on eating, creating quiet nooks that reduce stimulation, such as outside views or walking routes through the room, can help the resident with dementia focus on eating.

Residents should always sit in chairs with arms and the arms need to slide under the table\(^{(21)}\). This allows residents to get close enough to the table surface to focus their attention on eating\(^{(22)}\). The seat height of the chair should be 17 to 19 inches, which enables residents to sit with their feet on the floor\(^{(23)}\). Chairs of varying heights accommodate differences in body size among residents and enable them to find a comfortable seated position for dining. Fabrics used on chairs should be durable and highly moisture and stain resistant\(^{(24)}\). Chairs should be easy to push away from the table, but not so easy that they slide out from under the resident when transferring. Casters on all four legs should be avoided because many residents use furniture for support during ambulation and transfers. Putting casters on the front two legs may make it easier for someone to help the resident get close enough to the table.

Due to age-related changes in the eyes, the place setting should contrast in color with the table top to improve visibility. Increased consumption has been seen when there is high contrast between the plate and table\(^{(25)}\). For example, use a
navy blue tablecloth or dark table finish with white plates. Placement of a low profile centerpiece is reminiscent of a residential dining table and can brighten the space.

**Lighting, Flooring, and Wall Color**

Lighting is one of the most important details in a care community because it assists residents with their activities of daily life. Cove lights and indirect lighting are methods for illuminating the larger space of a dining area. Regardless of whether the room is used solely for dining or also for other activities, it should be designed to have the recommended lighting intensity of 50 foot-candles (fc) for dining in a care community\(^{(26)}\). Older adults require increased time to adjust to differing light levels. Therefore, the lighting should be even throughout the room. Reduce glare through a combination of direct- and indirect-light sources\(^{(27)}\). Natural light sources (e.g., windows, clerestory) should have the ability to be covered with semi sheer curtains because they can be a source of glare on bright days\(^{(28)}\). Avoid light fixtures that cast shadows because people with dementia may have trouble interpreting them\(^{(29)}\). If fluorescent lights are chosen, use electric ballasts because magnetic ballasts produce a hum that can become annoying to those with hearing aids\(^{(30)}\). Brush, Meehan, and Calkins increased the light levels at table level and found an increase in resident intake and independent feeding\(^{(31)}\).

After years of anecdotal reports of ambulation problems caused by flooring patterns, recent studies have confirmed this finding. Perritt found that bold patterns, or those with large motifs or high contrast patterns, may reinforce dependency\(^{(32)}\). Residents demonstrated problems with ambulation on such carpet, including side stepping, reaching for the handrail, and veering while walking. Carpeting that is appropriate for individuals with dementia include mottled and mini-print, low-contrast patterns. If tile is the flooring choice, one should avoid high contrast in the pattern or have no pattern at all. Residents with dementia were observed stepping over dark tiles or a dark strip in a doorway, even though there was no change in level in the floor\(^{(33)}\). The residents were reacting to the change in color of the flooring surface, possibly raising an inherent safety issue in the flooring.
Any flooring in a dining area must be maintained regularly. Laminate floors need to be mopped after meals, but avoid flooring that is highly reflective. Avoid applying wax and buffing to a bright sheen on any solid surface flooring material (e.g., VCT, linoleum, rubber). Carpet is more residential and a viable option if it is commercial grade for healthcare settings and maintained appropriately\(^{(34)}\). Carpet can also help with noise attenuation. Age-related changes to the inner ear decrease the ability to hear high frequency pitches, which makes hearing a normal conversation difficult and background noise (i.e., typically comprised of lower frequency sounds) more prominent\(^{(35)}\). Ensure that any transitions in flooring are made at the entrance to a room where people expect flooring to change and usually have something (i.e., door frame) to help steady themselves.

The effects of color are controversial. However, Marsden states that bold colors are considered cheerful, while dark colors were disliked\(^{(36)}\). Paint should be eggshell finish to avoid glare\(^{(37)}\). If wall coverings are chosen, they should be Type II with delustered acrylic protective finish\(^{(38)}\). Paint color for drywall ceilings should be half a gallon of wall color mixed with 5 gallons of white to reduce reflected glare\(^{(39)}\).
References


