practice applications of DIETETICS

Facility Menu Planning Step by Step

Planning a menu for a facility such as a school or long-term care facility can be tricky. Tastes, equipment, and budget all have to be accounted for, in addition to the regulations that cover your facility. If you're new to menu planning, it can seem overwhelming. However, it helps if you take the process step by step.

KNOW YOUR AUDIENCE

In menu planning, knowing your audience is fundamental. Barbara Wakeen, MA, RD, has owned and operated Correctional Nutrition Consultants in Canton, OH, since 1995, and has planned and analyzed menus for correctional facilities since 1989. Because correctional facilities include every kind of population from juveniles to older adults, and diverse ethnic groups, having a working knowledge of a variety of nutrition regulations is important. "You want to know if, for example, the facility is participating in the child nutrition program," says Wakeen. "You would have to build the National School Lunch Program and School Breakfast Program guidelines (1,2) into your menu planning." Wakeen adds that one facility could incorporate everything into their menu and another facility could have a main population menu, with modified foods for juveniles. "For example, [juveniles] might get the main population menu, but with milk added to it, and that would depend on whether the facility participated in the Child Nutrition Program; then the meal pattern would be totally different." Wakeen says that that some facilities might simply offer

This article was written by **Jim McCaffree**, a freelance writer in Los Angeles, CA. McCaffree is a former editor of the Journal and also a writer of short films focusing on the social sciences. doi: 10.1016/j.jada.2009.06.390 their older adult population a menu that had fewer calories. Some facilities offer separate menus for males and females; but overall, they try to simplify and keep it all the same, when possible.

Janel Welch, MS, RD, clinical nutrition manager of Unity Health System in Rochester, NY, has oversight of hospitals, nursing homes, an onsite child care center, adult day care centers, and a chemical dependency unit, as well as providing meals for on-site living centers. She advises starting out with regulations for the population the facility serves.

PLANNING WITHIN YOUR PARAMETERS Facility

Your menu must take into account the equipment and staff you have to work with. "You really need to take a look at what your facility can provide, from a production standpoint and a cost standpoint," Welch says. "Just because you want to put something on the menu, doesn't necessarily mean that you have the space to cook that product or the staff to be able to cook and deliver that [product]." Wakeen agrees, "You wouldn't put fried foods on the menu if you didn't have fryers."

Staff

If your menu doesn't fit the staff, it won't get prepared adequately. For example, says Susan Woods, MS, RD, child nutrition coordinator for the Hoover City Schools in Hoover City, AL, "Most school cafeteria employees work 6-hour shifts because schools only serve breakfast and lunch, and some may have 4-hour employees." So you have to know what your labor can do. It's a trade off, she says; some foods are more labor-intensive, like lasagna, as opposed to chicken nuggets. "But chicken nuggets require more oven space than lasagna."

The facility outside the kitchen can also affect what goes on the menu. For example, when planning a menu for a prison, one must take into account factors that don't exist in most other types of facilities. "I worked with a facility that had limited fruit," Wakeen says, "because the inmates clog up the plumbing with it, or they make 'hooch' [alcohol] with it, so as a result, the administrator would prefer to have minimal fruit on the menu." Another example, if a prison facility doesn't have knives, you couldn't put something on the menu that needs to be eaten with knives.

The skill level of the staff must also be taken into account. Complex menus and recipes may be beyond the understanding of some staff. Literacy and language barriers of the staff must also be taken into account. Some kitchen staff may be functionally illiterate or English is their second language. Assess staff abilities before planning a menu.

Region

While standards may apply to the entire nation, there is room for interpretation, taking into account regional preferences. "I'm from Nebraska originally," says Woods, "and now I'm in Alabama; trust me, there's a different language when it comes to food. I've never seen as many beans and peas in all my life as I have in the South."

Food Availability

In addition, some foods may not be available in a particular area: a rural area may not have the selection of foods as an urban area. Woods advises flexibility with your menu plan and use general descriptive terms such as "fresh fruit" instead of "strawberries" for seasonality, availability, and cost. "On our menus we always just say fresh fruit, it's available every day. We have raw vegetables and fresh fruit available ... we change and rotate depending on what's in season and affordable to us."

Woods also suggests keeping a small inventory of a substitute item that would work in any of the menus in the event of an emergency or a shortage from the vendor.

Type of Service

The next factor to be considered when menu planning is the type of food service your facility has—buffet, selfservice, cafeteria-style, sit-down, room delivery, or satelliting (some school districts have a central kitchen, where all the food is prepared, and then they send it to the schools). Not every menu item does well with every service type.

Next, Woods says, you have to plan what type of menu you're going to have, whether you're going to have a choice or selective menu. "We offer four choices on our menu every day," Woods says. "We have a pre-boxed salad and a pre-boxed sandwich meal and then two hot entree choices." Some hospitals have a cycle menu, and you have to determine the length of your cycle. Many hospitals have a restaurant-style menu, which doesn't change, much like a restaurant menu.

Woods says, "In terms of legality, I would just say it's good to have a disclaimer saying it's subject to change, or that your nutrient values are approximate and intended to be just general guidelines—and to make those disclaimers up front." Wakeen agrees, "I stipulate cooked and as-served portions. Items listed by weight are served by weight and items listed in cups, teaspoons, tablespoons, and fluid ounces are served by volume."

The long-term care industry is seeing a number of changes in meal service for the residents. Buffet, opendining, restaurant style, and 24/7 open kitchens are becoming popular as the industry is moving toward resident-centered care. Determining the type of service your facility provides is dependent on kitchen layout, dining room space, and the facility management's interest. Other trends in longterm care are the bistro, internet café, pubs, and the ever-popular ice cream parlor.

Regulations

When you work in any kind of institution where you're regulated by a governing body, you're certainly going to get audited, says Welch. However, the frequency will vary depending on the governing body. While as a registered dietitian you have the credentials to be able to interpret standards and guidelines, it is up to the discrepancy of the auditor to agree or disagree with that interpretation. If the

PRIMA—Production, Recipes, Inventory, and Menu Analysis
(Approved for use only by school food service programs managed by ARAMARK and is not available for purchase)
www.aramark.com
Primero Menu Planning
www.cybersoft.net
TrakNOW - Nutrition on the Web
www.pcsRCS.com
Visual B.O.S.S.
www.horizonsoftware.com
WinFSIM (Inventory Management)
www.mcssoftware.com
WinSNAP
www.school-linktechnologies.com

Figure 1. US Department of Agriculture-approved software for nutrient standard menu planning, as of May 29, 2009. Source: http://www.nutrition.gov/nal_display/index.php?info_center=14&tax_ level=2&tax_subject=234&topic_id=1209.

Nutrition Assistant	www.compucal.com
Computrition	www.computrition.com
DietMaster	www.dietmaster.com
First Data Bank	www.firstdatabank.com
GeriMenu	www.GeriMenu.com
High Tech Nutrition, Inc.	www.hightechnutrition.com
Momentus Health Information Systems	www.momentushealth.com
Surequest	www.surequest.com
The CBORD Group, Inc.	www.cbord.com
The Nutrition Company	www.nutritionco.com
UniSoft	www.unisoft-systems.com
iit/SourceTech	www.iit-sourcetech.com

Figure 2. Companies offering long-term care menu programs.

auditor does not agree, Welch says, there could be some kind of corrective action that would be necessary in order to get funding, for instance. "So there can be ramifications in terms of that governing body either penalizing you, or holding reimbursement toward your program."

"Sometimes what is challenging is interpretation," Welch says. The best recommendation is "however you interpret those guidelines, you need to put [them] into a policy format. Because most of these regulatory bodies want to make sure you're following your policies." That will help to build your case for how you interpreted the guidelines, and what resources you are using to back how you interpreted them. "Those are important things from the back end of menu development that you'll want to establish.³

Wakeen also stresses that it's important to know what is considered acceptable for food groups. For example, dry beans may be a protein, starch, or a vegetable, but may not be considered more than one of these groups in a particular meal. In other words, you cannot have a meal with just beans and say that the meal comprises three food groups.

However, governing bodies do provide guidance on interpreting their guidelines. The Child Nutrition Program actually identifies what is considered a starch, a vegetable, or a fruit, and how much you have to be serving, Welch says. However, the 2005 Dietary Guidelines for Americans (3) provides a little more space for interpretation, so it really depends on who the governing body is for your facility.

For example, long-term care regulations have federal and state components. The federal guidelines require menus must meet the Recommended Dietary Allowances, but state regulations may be more specific and therefore will supersede the federal regulations (4). In addition, it is important to read and understand the intent of the regulation. In long-term care the cycle menu must meet the Recommended Dietary Allowances, but the actual amount of food served to an individual resident should meet her/ his needs, not exceed them.

This is a big reason to use standardized recipes. "In centers that have reimbursement for their food, the governing body may hold back the reimbursement for those meals, if you don't have adequate documentation that you have recipes to support the nutritional analysis of that menu, or you didn't serve it correctly, or the portion size was incorrect, or you didn't have enough protein, or you had too much sodium, or if you are consistently not following certain guidelines," Welch says.

RESOURCES

Make sure that the institution vou're working for uses standardized recipes. In addition to providing a consistent product within budget, standardized recipes become the formula for reliable nutrition (5), which comes in handy when doing a nutritional analysis of the menu, and when audited. One place to find standardized menus is the US Department of Agriculture (USDA). "One [reference] that I use all the time, and that I've used for 30 years is Food for Fifty by Mary Molt (6)," says Woods. It's used a lot in educational institutions for training. "You can standardize your own [recipe] if you know how to do it properly, and that's why I like Food for Fifty . . . it goes step by step and instructs you how to standardize your own recipe, as does the USDA Web site," she says.

Software

"Software that has the USDA or [Food and Drug Administration] databases built into them is best,"

Welch says. When you pull up a certain item you can be very specific. For instance, if you know you're going to serve Special K (Kellogg Company, Battle Creek, MI), you can pull up Special K and then you know exactly what the nutrition is in that particular cereal. Some software, on the other hand, might have numbers for a generic corn flake. The USDA's Team Nutrition Web site provides numerous PDFs and indexes of standardized recipes and guidance on working with them at http://teamnutrition. usda.gov/Resources/usda_recipes. html. Team Nutrition also provides guidance on menu planning at http:// teamnutrition.usda.gov/Resources/ menuplanner.html.

An advantage of using software approved by your facility's governing body is that evaluating the menu using the same nutrition software and database that the regulator does ensures compliance. In fact, Welch says, "If you're in a child nutrition or adult day care center, you actually have to use an approved software to do your analysis because they want to be standard."

"Nutrikids [LunchByte Systems, Inc, Rochester, NY] is what our state department in Alabama uses; therefore, I use Nutrikids to analyze my menus," says Woods. "They're all based on Handbook 8 [USDA National Nutrient Database for Standard Reference] (7). That's a benchmark."

See the Figure 1 for a list of USDAapproved software. Figure 2 provides a list of software for menu planning in long-term care facilities.

EVALUATING AND EXPERIMENTING WITH YOUR MENU

The most nutritionally sound menu is worthless if no one eats it or if it's too expensive. The Hoover City School District in Alabama surveys its best customers: its students. "With the surveys we do with the kids, we give them some choices to let us know what they'd like to have that are already within our budget restraints," says Woods. The survey is facilitated in the classroom by the teachers, and in the future they will have a parents' survey on their Web site (8). In addition to surveying the population you serve, Woods says it is important to monitor the plate waste, examine your sales data (if applicable), and monitor the serving sizes and portions served by the employees; if they alter the planned serving size, then that alters your nutritional analysis. Just as important is keeping up with market trends and price reports to keep costs down.

In long-term care, the sole source of food is from the facility 24/7 365 days per year. It is important to get input from the residents on the food that is available. Many facilities have food committees or food forums to discuss menu options and resident favorites. It is important to change the menu with seasons: summer-more fruits, salads; winter-more soups and stews. Another great way to get resident input is have vendors bring in different food products and have a taste test, using the residents as the test panel. It empowers the residents knowing they are assisting in an important decision.

"I think it's important to always be testing new food products before you put them on the menu," Woods says, "at least initially, to get feedback from whatever population you're working with. And this is the same regardless of the population. I think it's important to get input from all people who are going to be eating with you regardless of where it is." When looking for new menu ideas, Woods likes to look at trade journals, magazines, and Web sites. Welch likes to use the USDA Web site, Healthy Meals (9), the American Dietetic Association Web site, and the Child and Adult Care Food Program guidelines (10).

Woods is so enthusiastic about trying new menu items that Hoover City schools may be getting a taste of Asia: "Right now we're looking at piloting some sushi at our two high schools."

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