Nutritional Analysis and Meeting the DRI's

By Barbara Wakeen, MA, RD, LD

The menus we use in our facilities are approved by a registered and/or licensed dietitian.

Once the menus are initially planned and approved, the dietitian reviews the menus quarterly, semi-annually or annually based on the nationally recognized standards of their governing agencies. The goal of the approval is to ensure nutritionally adequate menus based on the Dietary References Intakes (DRI) and Recommended Dietary Allowances (RDA), along with any other governing agency standards, i.e. the Food Guide Pyramid, ACA Standards, NCCHC Standards, NSLP/SBP, Title 15 in California, North Carolina Administrative Code, special meal patterns, etc.

The basis for menu approval for the DRIs and RDAs is most often accomplished through a computerized nutritional analysis. Nutritional analysis programs can be integrated or stand-alone. Integrated programs provide a nutritional analysis, while interfacing with other databases for menu alterations, inventory and purchasing. Stand-alone programs enable only a nutritional analysis independent of menus, intakes, etc. Using a stand-alone program, menus must be created or altered in a separate program such as a spreadsheet or word processor.

Nutritional analysis data is available for various nutrient goals, along with a standard of reference created based on the population of the facility. For example, in an adult detention facility housing males and females, a "reference person" may be created using the highest nutrient goals for males and females in a selected age range and activity level, i.e.19-50, lightly active. Some nutrient values for males and females vary, thus selecting the higher values for each sex ensures meeting the nutrient goals for the entire population.

There is no universal mandate for the nutrients to include in a nutritional analysis. The nutritional analysis program defaults are often used; the dietitian may create a user-defined nutrient base (as mentioned above) or the governing agency may specify, i.e. all of the DRIs, those nutrients listed for Reference Daily Intakes (RDI) used in nutrition labeling, or any combinations thereof.

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Analyzing for all the DRIs provides more complete data, possibly quelling any potential litigation regarding the nutritional adequacy of a menu. It also produces a comprehensive report that includes nutrients for which there may not have been a previous DRI or that are usually reflective of popular therapeutic diet concerns, i.e. omega-3 and omega-6 fatty acids, sugars, saturated fats, polyunsaturated fats and now trans fats (mandatory on Nutrition Facts Panels in 2006).

Based on a recent query of the Dietitians in Corrections (DIC), the most common nutrients or combinations of nutrients considered in a nutritional analysis include the following:

- Calories
- Protein
- Carbohydrates
- Fat
- Saturated Fat
- Dietary Fiber
- Cholesterol
- Calcium
- Vitamin A
- B Vitamins
  - B1 - Thiamin
  - B2 - Riboflavin
  - B3 - Niacin
  - B6
  - B12
- Vitamin C
- Vitamin D
- Vitamin E
- Sodium
- Potassium
- Magnesium · Phosphorus
- Zinc
- Folic Acid
- Iron

Referencing the most recent Dietary Reference Intakes 1997-2002, there are 41 nutrients for which there are DRI and RDA values. Nutritional analysis programs usually include these and other nutrients as available from the database sources. Although the dietitian strives to meet 100 percent of all of these nutrients in menu planning, this is not always possible, as the nutrient database may be a limited by the nutrient information provided by manufacturers.

The Food and Drug Administration (FDA) dictates the vitamins, minerals and other nutrients for which manufacturers are liable in labeling (RDI), but manufacturers are only required to identify 14 nutrients on Nutrition Facts panels. When facility-specific food items are added to the database with these limited nutrients, our nutritional analysis may show some nutrient deficiencies that might otherwise be present with more complete nutrition information available. This is an ongoing challenge for the dietitian when trying to provide a statement of nutritional adequacy for menu approval. We can request additional database information from the food vendor or manufacturer, but sometimes it is not available. As a result, we often add a disclaimer to the nutrition statement about the deficient nutrients limited by incomplete nutrient database information available.

In Memory

Gaye Gordon-Rendon, MS, RD, LD, died suddenly in March 2004. Gaye was the Regional Dietitian for Compass Group, Canteen Correctional Services. She was a regular contributor to our DIC networking discussions. We will miss her friendship, expertise and contributions.

Meetings and Announcements:

2004 International Conference
August 15-19, 2004
Hyatt Regency Sacramento
Sacramento Convention Center
Sacramento, California

There will be a Dietitians in Corrections networking meeting at this conference - time and date to be announced.

NCCHC Updates in Correctional Health Care
May 22-25, 2004
Chicago, Illinois

NCCHC National Conference
November 13-17, 2004
New Orleans, Louisiana
For more information visit www.ncchc.org

Membership Information
If you would like to be added to the Dietitians in Corrections networking EML, please email me directly at *bwakeen@neo.rr.com*. This is an informal discussion group and your name/email address will be listed in each email sent to the group.

If you are interested in joining the Corrections Sub-unit, contact me directly at *bwakeen@neo.rr.com*. If you are already a member and want to subscribe the Corrections Sub-unit EML or be listed in the directory, visit the CD-HCF web site at *www.cdhcf.org*. Emails communicated through this group are sent through a private email address.