# Computerized Dietary Analysis Systems

Chapter 5

## Advantages of Computerized Nutrient Analysis

- Save time
- Less labor intense
- Money saving
- Reduces errors

#### Consideration in Selecting Software

- Define specific needs for the nutrient analysis
  - What type of information output is needed
  - Choose a software that meet your needs
- Consider the
  - Database
  - Program operation
  - System output

#### **Nutrient Database**

- USDA Nutrient Data Laboratory operates the National Nutrient Databank
- Food composition values published since 1896.
- Data obtained from
  - USDA Food Composition Laboratory & other government labs.
  - Food industry
  - University researchers

## Selecting a Commercial Computerized Dietary Analysis

- Number of foods and nutrients analyzed
- Are brand names of foods included?
- Regular database updates (once/year)
- Missing values (zero or flagged)
- Services offered by vendor & number of years in business
- Cost of upgrades

#### **Program Operation**

- Hardware requirements
- Cost of the software package (\$200-\$600)
- Support service
  - Quality of user's manual and help screens
- Ease of searching for and entering foods for analysis
- Editing the database

### **Program Operation**

- Capabilities of the system
  - Preview a single food nutrients
  - Ability to use a variety of volume or weight measures
  - Ability to edit food list
  - Food entry number limit
  - Ability for averaging multiple days
  - Standards for comparison
  - Type of output report

### System Output

- Ability of the program
  - To print a variety of reports
    - Tabular or graphic forms
    - Selected nutrient of interests
    - Personal messages
  - To export data to electronic file for further analysis (statistical)
- Make sure the output is appropriate, meaningful and useful for your needs

# Steps in Using a Computerized Nutrient Analysis

- Locate appropriate food in the databank
- Make substitution if necessary
- Determine volume or weight measure
- Add, delete or modify entry (if needed)
- Select a nutrient standard for comparisons

#### REMEMBER

 Computerized nutrient analysis do <u>not</u> offer a precise description of nutrient intake.

