ENHANCEMENT AND EXPANSION OF DATA DISSEMINATION FORMATS FOR THE USDA NATIONAL NUTRIENT DATABASE FOR STANDARD REFERENCE
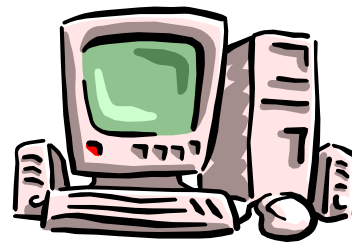
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OBJECTIVE: In keeping with the current administration's e-government initiative, the Nutrient Data Laboratory (NDL) of the USDA is working to improve the delivery of our information and services to the public. The aim is to bring our dissemination formats in line with current information technologies. To reach this goal we proposed both enhancements of existing delivery methods and creation of new distribution platforms for dissemination of our data.

METHODS AND MATERIALS: Through a Cooperative Research and Development Agreement (CRADA) with HealtheTech, Inc., we designed and developed new software applications that allow users to search for foods in the National Nutrient Database. These applications blend the nutrient database with customized user interfaces and are designed to run on personal computers (PCs) and personal digital assistants (PDAs). For our Web-based data delivery, we worked with the National Agricultural Library, the longtime host of the NDL Web site, in reprogramming our online application to search the nutrient database.

RESULTS: The USDA National Nutrient Database for the Palm OS® was released in October of 2002 and over 20,000 copies have already been downloaded. The USDA National Nutrient Database for Windows™ and the online search application have release dates of spring and summer 2003, respectively. Specific features introduced with these new applications include the ability to browse through food groups and the ability to modify existing portion sizes. Also, the redesigned online application now has greater Boolean search capabilities, an enhanced speed for searching, and is linked to a new ground beef regression module.

SIGNIFICANCE: These applications make accurate and current nutrient data for more than 6,000 food items readily available in multiple formats to consumers, schools, the media, food industry, and health professionals. We believe that these improvements and innovations correspond well with the USDA e-government mission to *Transform and enhance the delivery of USDA's programs, services, and information* and vision of *USDA, electronically available any place, any time.*
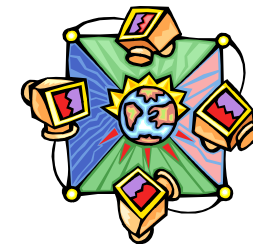
USDA National Nutrient Database for Windows®

➢ Designed for use on personal computers running the Windows® operating system (Windows 98 or later)

➢ Downloadable from the NDL Web site and available on CD-Rom

➢ Downloadable file is ~30 Megabytes (MB) and the file installs a ~60 MB application

➢ Users no longer need to be connected to the Internet to access the nutrient database

➢ Users can retrieve all foods and all nutrients in the database

➢ Database searchable by keyword, common name, or NDB number and users can browse through each food group

➢ Keywords can be excluded with the Boolean search term "NOT"

➢ Multiple portion sizes available for each food item

➢ Portion sizes scalable

➢ Software released April 2003 and ~9,000 have been downloaded since

USDA National Nutrient Database for the PalmOS®

➢ Designed for use on personal digital assistants (PDAs) running the Palm™ operating system

➢ Downloadable from the NDL Web site

➢ Download available for both Windows and Mac operating systems users

➢ Downloadable file takes up ~2 Megabytes (MB) of memory on a PDA

➢ Portability is the primary value - users can have access to the nutrient database wherever they go

➢ Users can retrieve all foods and 30 nutrients from the database

➢ Database searchable by keyword or common name and users can also browse through each food group

➢Multiple portion sizes available for each food item

➢ Portion sizes scalable

➢ Software released October 2002 and ~23,000 have been downloaded since

NDL Enhanced Online Search Application

➢ Enhancement of existing online nutrient database search application

➢ Application revised to make more user-friendly and to add new features

➢ Projected release for Summer 2003

➢Web-based application will be accessible from NDL Web site

➢ Users can retrieve all foods and all nutrients in the database

➢ Database searchable by keyword, common name, or NDB number

➢ Keywords can be excluded with the Boolean search term "NOT"

➢ Multiple portion sizes available for each food item

➢ Portion sizes scalable

➢ New ground beef module planned for inclusion in the online application. Module will allows users to retrieve nutrient data for any specified level of fat/lean ratio