

# Nutrition Info While On the Go

**P**icture, for example, a female health enthusiast cruising a grocery store's seafood counter. She wants to make sure she gets her recommended dietary allowance of protein. She whips out her personal digital assistant, or PDA, and up comes a searchable version of USDA's flagship nutrient database of more than 6,000 food items.

Our health enthusiast wants to see how much protein she'll get out of that tuna steak she's been eyeing. So she pulls out her stylus, skips the "Browse by Food Groups" option, and uses the search feature to go straight to "tuna." Hmm, a 3-ounce portion of cooked tuna steak has 25 grams of protein. With that choice, our 135-pound enthusiast will get half her recommended daily intake of dietary protein in one sitting. Not bad.

The new, portable version of USDA's National Nutrient Database for Standard Reference is now available for download free of charge onto hand-held PDAs running the Palm operating system (Palm OS) by going to [www.nal.usda.gov/fnic/](http://www.nal.usda.gov/fnic/)

foodcomp. The download takes about 30 seconds and requires about 2 megabytes of available memory on PDAs.

ARS and HealtheTech, Inc., of Golden, Colorado, worked together to provide the service through a cooperative research and development agreement (CRADA). ARS has entered into more than 1,000 CRADAs since federal technology transfer legislation was enacted in 1986. That legislation helps the federal government's research findings reach and benefit U.S. consumers and industry.

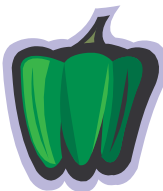
The PDA application was developed by scientists at ARS' Nutrient Data Laboratory—part of the Beltsville Human Nutrition Research Center, located in Beltsville, Maryland—and HealtheTech, which develops and markets medical devices and software that measure and monitor important health variables.

The unique product blends a custom-made searchable software application with the nutrient database. "Consumers,

health professionals, and educators seeking user-friendly nutrient data will no longer be limited to using the USDA's premier nutrient database only while online," says Phyllis E. Johnson, director of ARS' Henry A. Wallace Beltsville Agricultural Research Center.

Assembled by food groupings, the database allows users to search by food name or browse a given category by scrolling through foods listed alphabetically. Has the dietitian suggested you eat more high-calcium foods? Try scrolling through the "Dairy and Egg" food group and point to options that look appealing. Within seconds, the nutrient report with a calcium quantity in milligrams appears to hone your healthy choice. Did your doctor say you're not getting enough potassium? Try the "Fruits and Fruit Juices" group as well as the "Vegetables and Vegetable Products" group.

Another friendly option of the program is the "Portion Modifier." If the portion size listed isn't what you plan on eating, you can adjust it up or down.



STEPHEN AUSMUS (K10302-1)



The modified portion's nutrient content pops up to help you make a final decision.



The system provides information on about 30 nutrients for each food listed. This user-friendly searchable software application will soon be available for download onto personal computers, as well.—By **Rosalie Marion Bliss**, ARS.

*This research is part of Human Nutrition, an ARS National Program (#107) described on the World Wide Web at [www.nps.ars.usda.gov](http://www.nps.ars.usda.gov).*

*Rena Cutrufelli and Vincent de Jesus are with the USDA-ARS Nutrient Data Laboratory, 10300 Baltimore Ave., Bldg. 005, Beltsville, MD 20705-2350; phone (301) 504-0693 [Cutrufelli], (301) 504-0691 [de Jesus], fax (301) 504-0692, e-mail [rcutrufelli@rbhnrc.usda.gov](mailto:rcutrufelli@rbhnrc.usda.gov), [vdejesus@rbhnrc.usda.gov](mailto:vdejesus@rbhnrc.usda.gov). ★*



STEPHEN AUSMUS (K10301-1)



USDA's National Nutrient Database is now available for download onto hand-held personal digital assistants running the Palm operating system (above). At left, nutritionist Vincent de Jesus uses the portable database to find the nutrient content of bell peppers.

## Nutrient-Database Upgrades Coming Soon

The Nutrient Data Laboratory (NDL)—part of ARS' Beltsville (Maryland) Human Nutrition Research Center—provides the USDA National Nutrient Database for Standard Reference (SR) for public use. The database lists up to 117 nutrients for 6,220 food items and has been hailed by users as the major authoritative source of food composition in the United States.

While the PDA version may be the best thing since sliced bread for hand-held-computer techies, other upgrades soon to come will appeal equally to educators, consumers, and health professionals.

Those who continue to use the original version of SR via the Internet will find new search capabilities added to enhance their on-line experience. After keying in a food term, the user will not only trigger a listing of every item in the database containing that food term, but also a listing of which food groups contain that term. Users who want to narrow their search further can re-search within the food groups presented.

For example, a user searching for carrots may want to pursue carrots only in the "Baby Foods" group, bypassing the "Meals, Entrees, and Side Dishes" group.

Also new to the on-line version will be a "Portion Modifier" option. After clicking on "Carrots, raw," you'll be able to choose from a variety of standard portion sizes. But if you'd prefer to increase or decrease those portions—essentially customizing your measure—a box will allow you to do just that. Also new, the Boolean search term "not" will be added, allowing users to exclude unwanted foods, for example, "Carrots, not raw."

The new "Ground Beef Module" will be exclusive to the on-line version and allows users to trigger data to match specific lean-to-fat percentages offered regionally. While ground-beef data appears for five standard lean-to-fat ratios, ranging from 95 percent lean/5 percent fat to 75 percent lean/25 percent fat, local butchers could offer different ratios. With the "Ground Beef Module," the user can choose the percentage of lean meat content versus fat content, for example, 92 percent lean/8 percent fat, and nutrient data will be provided accordingly.

The upgrades will soon be available at [www.nal.usda.gov/fnic/foodcomp](http://www.nal.usda.gov/fnic/foodcomp).

Lastly, a new PC-download version will also launch soon. The NDL, working with HealthTech, Inc., of Golden, Colorado, through a cooperative research and development agreement, has enabled users to download a searchable version to their PC hard drives for their own use free of charge. The application runs on Windows XP, Windows 2000, Windows 98, or Windows ME. After the download is complete, Internet connectivity will no longer be required. This version will include the portion-size modifier and the Boolean "not" capability described above as well as the option to search the entire database at once or, more narrowly, by food group(s) alone. The PC-download version will also be available at the web address provided above.—By **Rosalie Marion Bliss**, ARS.

