**IUNS 21st ICN
International Congress
of Nutrition**

"From Sciences to Nutrition Security"
Buenos Aires, Argentina, 15-20 October 2017

Sheraton Buenos Aires Hotel & Convention Center

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What's New: The USDA Branded Food Products Database

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Conflict of Interest Disclosure:

I have no conflict of interest to report in relation to this presentation.

USDA

A Partnership for Public Health: USDA Branded Food Products Database

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- The Partnership's goal is to enhance public health and to share open data by augmenting the USDA National Nutrient Database with nutrient composition and ingredient information on branded foods.

- The data is publicly available for use by federal agencies, the research community, international databases, proprietary databases and end users (i.e., app developers), and the food industry.

Nutrition Facts

Serving Size 2/3 cup (55g)
Servings Per Container About 8

Amount Per Serving

Calories 230   Calories from Fat 40

	% Daily Value*
Total Fat 8g	**12%**
Saturated Fat 1g	**5%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 160mg	**7%**
Total Carbohydrate 37g	**12%**
Dietary Fiber 4g	**16%**
Sugars 1g	
Protein 3g	
Vitamin A	10%
Vitamin C	8%
Calcium	20%
Iron	45%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

INGREDIENTS: ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMIN MONONITRATE (VITAMIN B₁), RIBOFLAVIN (VITAMIN B₂), FOLIC ACID), CORN SYRUP, SUGAR, SOYBEAN AND PALM OIL (WITH TBHQ FOR FRESHNESS), CORN SYRUP SOLIDS, DEXTROSE, HIGH FRUCTOSE CORN SYRUP, FRUCTOSE, GLYCERIN, CONTAINS 2% OR LESS OF COCOA (PROCESSED WITH ALKALI), POLYDEXTROSE, MODIFIED CORN STARCH, SALT, DRIED CREAM, CALCIUM CARBONATE, CORNSTARCH, LEAVENING (BAKING SODA, SODIUM ACID PYROPHOSPHATE, MONOCALCIUM PHOSPHATE, CALCIUM SULFATE), DISTILLED MONOGLYCERIDES, HYDROGENATED PALM KERNEL OIL, SODIUM STEAROYL LACTYLATE, GELATIN, COLOR ADDED, SOY LECITHIN, DATEM, NATURAL AND ARTIFICIAL FLAVOR, VANILLA EXTRACT, CARNAUBA WAX, XANTHAN GUM, VITAMIN A PALMITATE, YELLOW #5 LAKE, RED #40 LAKE, CARAMEL COLOR, NIACINAMIDE, BLUE #2 LAKE, REDUCED IRON, YELLOW #6 LAKE, PYRIDOXINE HYDROCHLORIDE (VITAMIN B₆), RIBOFLAVIN (VITAMIN B₂), THIAMIN HYDROCHLORIDE (VITAMIN B₁), CITRIC ACID, FOLIC ACID, RED #40, YELLOW #5, YELLOW #6, BLUE #2, BLUE #1.
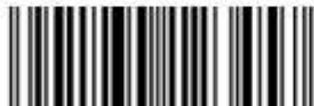
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1. **Parent Company or Private Label Name**

2. **Nutrition Facts Panel (NFP) and Expanded Facts Panel** (when available)
   - *Information available "as packaged" and "as prepared", with added ingredients*

3. **Product name and generic descriptor**

4. **Weights and measures**

5. **Serving size and servings per package**

6. **Date Stamp** associated with most current formulation (effective date of change/introduction)
   - *Historical data on food products will allow for tracking dietary trends.*

7. **Ingredient list and sub-list** (hierarchical and in descending order)
   - *This information has never been captured before in the USDA National Nutrient Database.*

8. **GTIN Number**
   - *Specific nutrient composition directly from the food product, correlated to this number, will be available.*

Two Options for Data Submission
to the
USDA Branded Food Products Database:

https://ndb.nal.usda.gov/ndb/

More About the Database

- The USDA Branded Food Products Database is hosted by USDA's National Agricultural Library, who also enhanced the search program to improve the user interface.

- The USDA Branded Food Products Database is accessed through the same search program as the USDA National Nutrient Database for Standard Reference, but is clearly identified as a distinctive, yet connected, Database.

Food Composition Databases Enter the World of Big Data

- The research community felt that the benefit of gaining a much larger amount of computed data by food manufacturers on food products far outweighed the desire for analytical data

- This was a paradigm shift for USDA

- USDA Branded Food Products Database now includes 215,000 foods and continues to grow…

Food Composition Databases Enter the World of Big Data

- For the research community, this means that dietary intake and exposure assessment are improved
  - Big data allows for more easily teasing out dietary patterns
  - Ability to search for products with a specific ingredient, i.e. raisins, carrots, maltodextrin

How to search by ingredient

The Numbers

- The Database currently contains ~215,000 products and continues to grow.

- Since its launch in September 2016, the USDA Branded Food Products Database and the USDA National Nutrient Database have had a combined 17 million page views from 1.2 million users.

Visitors to the USDA Branded Food Products Database

46% returning users
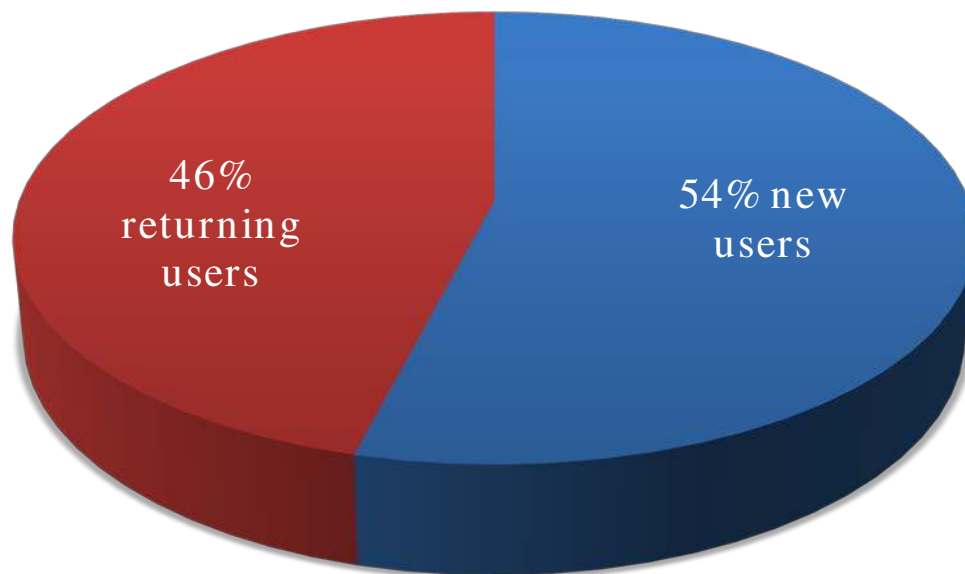
54% new users

In August 2017, 54% of users to the USDA Branded Food Products Database were new users, 46% were returning users

Database Metrics: Global Usage

Interest in the USDA Branded Food Products Database is global:

Location	Sessions	% of Total
United States	1,553,142	53.86%
Canada	133,636	4.63%
United Kingdom	79,220	2.75%
India	65,496	2.27%
Mexico	60,511	2.10%
Spain	54,889	1.90%
Australia	47,576	1.65%
Brazil	42,593	1.48%
Germany	35,554	1.23%
Italy	34,526	1.20%

USDA Branded Food Products Database: Stakeholders and their Questions

Food Industry and App Developers

- Downloads
- API
- Formulations
- Analytical methods
- Database updates

Educators

- Curriculum development
- Using as a tool to teach food labeling

Consumers

- Support for navigating the database
- Nutrients missing from database
- Nutrients in foods

Researchers

- Nutrient content of foods over time
- Nutrient retention

USDA Branded Food Products Database Sample Question Topics

Top 2 Questions Received:

- When will the Database be downloadable?
- How often is the Database updated?

Contact: usdabfpd@ars.usda.gov

How are the USDA Branded Food Products Database and the USDA National Nutrient Database for Standard Reference Accessed?

Devices Used for Database Access		
	Sessions	% of Total
Desktop	2,090,147	72.48%
Mobile	630,465	21.86%
Tablet	163,219	5.66%

October 2016- September 2017

How users search for the USDA Branded Food Products Database and the USDA National Nutrient Database for Standard Reference

	Sessions	% of Total
Search Engines	1,319,241	45.75%
Direct	954,980	33.11%
Referral from Other Websites	533,167	18.49%
Social Media	75,704	2.63%
(Other)	680	0.02%
Email	59	0.00%

October 2016- September 2017

Success Factors

- The Partners were successful in gaining voluntary submission of data from food manufacturers because of the two options available for data submission.

- Both of these options are trusted, secured mechanisms for manufacturers to submit their data for inclusion in the USDA Branded Food Products Database

- Options offered leverage current business practices, making the sharing of this data with the USDA seamless

- An unintended benefit discovered is accuracy. Products available in the database appear in the top of online searches – important to brand owners as they look to ensure _their_ product data is delivered to researchers and consumers

Success Factors

- The USDA Branded Food Products Database is embedded within the USDA National Nutrient Database, which is recognized by the research community worldwide as the gold standard for food composition databases.

Why was the USDA Branded Food Products Database established as a Public-Private Partnership?

- The 6 Partners came together:
  - With a shared goal
  - This could not be accomplished by one of the Partners alone
  - Expertise in data quality and management, data collection, supply chain standards, and research knowledge was essential
- This successful PPP is a model for how multiple sectors can collaborate to benefit public health.

Global Applicability

- Is there an interest to leverage this model in other regions/countries?

- How can we work together to fulfill data needs on products imported into our countries?

- The Partnership is willing to share our learnings and structure for this database

Next Steps for the Partnership

- Continue to grow the Database, create awareness, and increase use

- Move data from USDA Branded Food Products Database into USDA Food and Nutrient Database for Dietary Studies (FNDDS)

- Increase private label food items

- Add foods imported into the US

- Add restaurant foods

- Align on a standardized, validated algorithm that will be used across all food products to determine food groupings.

Questions?

Contact: usdabfpd@ars.usda.gov