A Partnership for Public Health: USDA Global Branded Food Products Database

A publicly available database of food product nutrient composition & ingredient information.
Over 368,000 products and growing!
About the USDA Global Branded Food Products Database
Partnership Journey

- **Partnership Formed**
- **Database Launch at GODAN Summit**
- **FAO INFOODS Request for Global Expansion**
- **Products in Database**
  - 2013: 100,000
  - 2014: 215,000
  - 2015: 251,000
  - 2016: 300,000
  - 2017: 368,686
  - And Counting!

**Logos:**
- USDA
- Institute for the Advancement of Food and Nutrition Sciences
- GS1 US
- World Sync
- Label Insight
- University of Maryland
USDA FoodData Central

The Global Branded Food Products Database is located in USDA FoodData Central

fdc.nal.usda.gov
Unprecedented Data

Every one of the 368,000+ products in the USDA Global Branded Food Products Database includes the following data:

- Nutrient values per RACC and 100-unit
  - Per 100g/100mL calculated by USDA if not provided by manufacturer
- Ingredients
- GTIN/UPC
- Brand Owner
- Product Description
- Food Category
- Date Stamp Associated with Current Product Formulation
- Market Country
Data Submission to the USDA Global Branded Food Products Database

Two options for data submission:

1. **1WorldSync** - using GS1 Global Data Synchronization Network (GDSN)

2. **Label Insight** - by uploading package flat artwork images

University of Maryland receives product data directly from the above partners, aggregates, and publishes to the USDA GBFPD.
## Data Quality in the USDA Global Branded Food Products Database

### Quality Assurance Processes

Checks for completeness and consistency:
- “Hard” and “Soft” Data Entry Validations
- Outliers and Profiling
- Random Sampling

### Time Stamps

Dates of when the product record was:
- Provided by the data provider to 1WorldSync or Label Insight
- Last modified by the data provider
- Added to FoodData Central
Nutrient Derivation Code Attribute:

GS1 Global Data Synchronization Network (GDSN), utilized by 1WorldSync, has an attribute to capture how the supplier arrived at the nutrient content.

- **Analyzed**: The product’s nutrient content was analytically determined in a lab.
- **Calculated**: The product’s nutrient content was calculated based on information from other sources, e.g., ingredient supplier or Foundation Foods/SR Legacy.
- **Analyzed and Calculated**: The nutrient content was derived using analysis and calculation.

Manufacturers can increase the quality of their data in the GBFPD by submitting analytically-derived nutrient values when possible.
### Unprecedented Access

<table>
<thead>
<tr>
<th>59.7 million API requests</th>
<th>3.2 Million Unique Web Users</th>
<th>37 Million Pageviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 API Traffic</td>
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### Unprecedented Coverage

<table>
<thead>
<tr>
<th>368K+ products</th>
<th>85% US Sales Coverage</th>
<th>238 Food Categories</th>
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Applications of the USDA GBFPD

- Assess ingredient use within product categories
- Establish links between diet and chronic disease
- Inform dietary tracking software and apps
- Support Federal surveys used to inform policymaking on food & nutrition assistance policy
- Enable use of Machine Learning to predict label nutrients

- Research Community
- Policy Officials
- Public Health Community
- Food Industry
- Consumers
Current and Upcoming Partnership Initiatives
Increase Coverage of Private Label Data

- **Goal:** Achieve greater visibility and representation of private label product lines in a database with robust domestic and international usage

- Data gap identified by USDA ERS, as part of USDA National Household Food Acquisition and Purchase Survey (FoodAPS)
  - ERS looks to the USDA GBFPD to obtain accurate nutrition and ingredient information in foods reported in FoodAPS
Collaborations with USDA FNS

USDA Foods for the National School Lunch Program (FNS Food Distribution)

- Fulfills a requirement to make nutrition, allergen, and ingredient information available for USDA Foods products for the National School Lunch Program (NSLP) program participants.
- FNS/AMS leveraging the USDA GBFPD infrastructure which suppliers are using

FNS Child Nutrition Database

- Collect data for food products marketed and sold to schools
- FNS/CN Database leveraging the USDA GBFPD to increase the visibility of child food products
Goal: To collect information for select USDA Foods purchased for the NSLP and increase transparency by making this information available to States and school districts.

- Concluded 1st pilot Q1 of 2020
- Conducted 2nd pilot Q2 of 2021
  - Testing additional attributes - Child Nutrition Information & Product Formulation Statement
- USDA Foods suppliers will be required to submit all data via GS1 Global Data Synchronization Network (GDSN®) by December 2021
FNS Child Nutrition Database

**Goal:** To collect metadata on products and identify and collect more foods marketed and sold to schools.

- Creation of a new trade channel for data providers to use to highlight product market

**Status:** In development

- Moving forward with implementation and outreach to data providers to fill out this new trade channel.
Global Collaboration & Expansion

• **11 countries** have expressed interest in conducting a pilot project with the Partnership

• **6 Guiding Principles** for prioritizing opportunities for global expansion

Global Expansion Pilots:
• Canada - Q1 2021
• New Zealand - Q3 2021
• Costa Rica - Expected Q1 2022
Continue to be Engaged

Submit Product Data
• Ensure your branded/private label products are represented and current

Provide Feedback
• Identify data gaps
• Provide suggestions for expanding the database
  - How can the database further support research queries, federal programs?
  - fdc.nal.usda.gov/contact.html
Partners

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