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**HPS**  
**Data Synchronization Implementation Guide**

Version 1.0



# Data Synchronization Implementation Guide

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## REVISION HISTORY

Date	Ver #	Description of Change	Author
02/07/2017	1	Initial document	A. Dowdy
5/25/2021	2	Updated links within the guide	J. George



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## 1 HPS'S DATA SYNCHRONIZATION INFORMATION

### 1.1 Primary Data Synchronization Contact

Name: Thomas La Pres  
Phone: 269-795-3308  
Email: [tlapres@hpsnet.com](mailto:tlapres@hpsnet.com)

### 1.2 HPS's GLN - Publish To

Pre-Production: 0866449000304  
Production: 0866449000304



### 2 STEPS TO BEGIN SYNCING YOUR DATA WITH HPS

1. Have your accurate item data loaded into your home data pool and insure it is ready for publication
  - a. Contact your data pool for any education you might require completing this step.
2. If not already a member, join a GDSN data pool such as 1WorldSync
  - a. You can contact 1WorldSync at 866.280.4013 or [businessdevelopment@1worldsync.com](mailto:businessdevelopment@1worldsync.com) to get more information
  - b.
3. Complete the HPS Trading Partner Form found on <https://www.1worldsync.com/community/find-a-trading-partner/hps/>. This will trigger the data sync process.
4. Review attribute requirements in Section 3 of this document to insure you can meet our requirements.
5. HPS will create a subscription based on the Information Provider GLN.
6. HPS will send email to the supplier's primary data synchronization contact when they are ready for the first publications.
7. Publish all items you would like to make available to HPS in production to HPS GLN **0866449000304**.
  - a. For the first publication Suppliers are to publish all products as "Initial Load".
8. Investigate and respond to "Review" CIC responses. HPS will provide feedback on publications using the following method

#### **CIC Messages:**

**RECEIVED:** product has been received and has passed HPS and GDSN validations. This response will typically be sent within a few hours after receiving the publication.

**REVIEW:** Product does not pass HPS and GDSN validations or product has failed HPS's audit process and therefore has data discrepancies to be reviewed and addressed. Reason for Review status will be transmitted in CIC999. This response may follow a Received message and may take several days to resolve.

**SYNCHRONIZED:** Product has been fully accepted and loaded into HPS internal system and will be updated as revisions occur. This response will be sent after all validations and audits have been successfully completed.

**REJECTED:** Product has been de-listed by HPS.



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### 3 ATTRIBUTE REQUIREMENTS

Below is the list of GDSN mandatory attributes for all GTIN's transmitted to HPS.

Key		
<b>M</b>	<b>Mandatory</b>	<b>Minimum subset of attributes that are required in order to pass all audits</b>
<b>C</b>	<b>Conditional</b>	<b>Conditional</b>
<b>R</b>	<b>Requested</b>	<b>Additional attributes requested by (RECIPIENT)</b>

GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
GTIN	14-digit number used to identify item	<b>M</b>	14-Digit GTIN number
targetMarket	The target market indicates the country where the trade item is available for sale.	<b>M</b>	
informationProviderGLN	The party providing the information about the trade item.	<b>M</b>	The Information Provide may not be the original source of the item's information but has the responsibility to provide and maintain the data in the catalog.
informationProviderName	Name of information provider. May also be the manufacturer or brand owner or supplier	<b>M</b>	Defaulted from Information Provider GLN
shortDescription	A short textual description associated with the product	<b>C</b>	This description can be used on the cash register receipt. This is the first line of the description.
AdditionalDescription	Free text field used to record additional product attributes. Use for any additional information necessary to communicate to the industry to help define the product	<b>C</b>	
productDescription	An understandable and useable description of a trade item using brand and other descriptors. Allows for the representation of the same value in different languages but not for multiple values.	<b>C</b>	



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
globalClassificationCategory/code	Code specifying the Global Product Classification (GPC) for the item	<b>M</b>	An 8 digit code. For example 20000081 - Grape Variety.
productType	Hierarchical level of item	<b>M</b>	
dataCarrier/dataCarrierType Code	The type of data carrier of bar code physically present or visible on the trade item	<b>C</b>	Becomes mandatory if consumer unit and TM=US
grossWeight	The gross weight includes all packaging materials of the trade item. At pallet level the trade item, grossWeight includes the weight of the pallet itself.	<b>M</b>	If attribute isTradeItemAService = "No" then the Gross Weight field becomes required
grossWeightUOM	Gross weight of the item Unit of Measure	<b>C</b>	This UOM attribute becomes required when grossWeight is populated.
volume	The dimensions of an imaginary cube which can be drawn around the trade item as defined in the formula of H X W X D	<b>M</b>	
VolumeUOM	Volume of the item Unit of Measure	<b>C</b>	This UOM attribute becomes required when volume is populated.
netContent	The amount of the trade item contained by a package, usually as claimed on the label	<b>C</b>	Only required for the consumer unit or the EACH.
netContentUOM	The amount of the trade item contained by a package, usually as claimed on the label Unit of Measure	<b>C</b>	This UOM attribute becomes required when netContent is populated.
depth	Measurement, front to back of the item	<b>M</b>	
depthUOM	Measurement, front to back of the item Unit of Measure	<b>M</b>	
height	Measurement, vertical dimensions of the item	<b>M</b>	
heightUOM	Measurement, vertical dimensions of the item Unit of Measure	<b>M</b>	
width	Measurement, left to right of the item	<b>M</b>	



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
widthUOM	Measurement, left to right of the item Unit of Measure	<b>M</b>	
startAvailabilityDate	The date (YYYY-MM-DDTHH:MM:SS) from which the trade item becomes available from the supplier, including seasonal or temporary trade items and services	<b>M</b>	
effectiveDate	The date on which the information for "item add" or "item change" is sent to 1WorldSync Item Management Production	<b>M</b>	
isBaseUnit	An indicator identifying if the packaging level is the lowest level of an item's hierarchy	<b>M</b>	This level cannot have any lower levels.
isConsumerUnit	Identifies whether the trade item to be taken possession of, or to be consumed or used by an end user or both, as determined by the manufacturer	<b>M</b>	The end user could be, but is not limited to, a consumer as in items sold at retail, or an operator for foodservice such as restaurants, airlines, cafeterias, etc.
isDispatchUnit	An indicator identifying that the information provider considers the trade item as a dispatch (shipping) unit	<b>M</b>	This may be relationship dependent based on channel of trade or other point to point agreement.
isInvoiceUnit	An indicator identifying that the information provider will include this trade item on their billing or invoice	<b>M</b>	
isOrderableUnit	An indicator identifying that the information provider considers this trade item to be at a hierarchy level where they will accept orders from customers	<b>M</b>	This may be different from what the information provider identifies as a dispatch unit.
manufacturer/gln	The Global Location Number used to identify the organization that manufactures this trade item	<b>C</b>	





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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
manufacturer/name	The name of the manufacturer of this trade item.	<b>C</b>	
countryOfOrigin/countryCode	The country code in which the goods have been produced or manufactured, according to criteria established for the purposes of application of the value may or may not be presented on the trade item label	<b>M</b>	
brandOwnerGLN	A brand is owned by a particular organization	<b>M</b>	Populate this field with the GLN used to identify the owner of the brand.
brandOwnerName	Name of the party who owns the brand of the trade item	<b>M</b>	Defaulted based on the brandOwnerGLN provided.
brandName	Brand name for the item	<b>M</b>	
functionalName	Functional Name of the item (describes the use of the item)	<b>M</b>	Should help clarify the product classification associated with the GTIN.
gs1TradeItemIdentificationKey/value	A value for the alternative means to the Global Trade Item Number to identify a trade item	<b>R</b>	
gs1TradeItemIdentificationKey/code	Alternative means to the Global Trade Item Number to identify a trade item	<b>R</b>	If TM = US: If Consumer Unit Indicator is equal to 'true' and the Target Market is equal to US (United States) then Data Carrier Type Code must not be empty
hi	The number of layers that a pallet contains	<b>C</b>	Represents Pallet level hierarchy. Required if a pallet GTIN.
ti	Indicates the number of trade items in a layer	<b>C</b>	Represents Pallet level hierarchy. Required if a pallet GTIN.



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
nonGTINPalletHi	Only used if pallet has no GTIN. In this case it applies to the highest level of the item hierarchy and only 1 pallet configuration can be provided	<b>C</b>	Represents highest level of hierarchy if no pallet present. Required if a pallet level GTIN is not published.
nonGTINPalletTi	Only used if the pallet has no GTIN. It indicates the number of trade items placed on a pallet layer according to supplier or retailer preferences	<b>C</b>	Represents highest level of hierarchy if no pallet present. Required if a pallet level GTIN is not published.
packagingMarkedReturnable	Indicates whether the packaging has markings to indicate returnable packaging	<b>C</b>	Select 'Yes' if the package markings indicate the packaging can be returned.
isVariableWeightItem	'Yes' indicates that an article is not a fixed weight, but that the weight is variable	<b>C</b>	Example: poultry, fresh fruit and bulk items.
packagingInformation/platformTypeCode	Indicates whether the described dispatch unit is delivered on a pallet/platform and on which type of platform	<b>C</b>	If the dispatch unit is delivered on a platform, the platform type must be given here
alternateItemIdentification/agency	A trade item identifier, usually associated with a specific business need, that is in addition to the GTIN, for example, a buyer's or seller's item number	<b>C</b>	
alternateItemIdentification/id	A trade item identifier, usually associated with a specific business need, that is in addition to the GTIN, for example, a buyer's or seller's item number	<b>C</b>	



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
temperatureQualifierCode minimumTemperature/uom	Code qualifying the type of a temperature requirement for example Storage. The minimum temperature that a trade item can be held below defined by the manufacturer without affecting product safety or quality.	<b>R</b>	
temperatureQualifierCode maximumTemperature/uom	Code qualifying the type of a temperature requirement for example Storage. The maximum temperature that a trade item can be held below defined by the manufacturer without affecting product safety or quality.	<b>R</b>	
minimumTradeltemLifespanFromTimeOfProduction	The period of day, guaranteed by the manufacturer, before the expiration date of the product, based on the production.	<b>R</b>	
minimumTradeltemLifespanFromTimeOfArrival	The period of days, guaranteed by the manufacturer, before the expiration date of the trade item, based on arrival to a mutually agreed to point in the buyer's distribution system.	<b>R</b>	
netWeight	Used to identify the net weight of the trade item. Net weight excludes any packaging materials and applies to all levels but consumer unit level.	<b>M</b>	



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
netWeight/uom	Used to identify the net weight of the trade item. Net weight excludes any packaging materials and applies to all levels but consumer unit level.	<b>M</b>	
isTradeItemAVariableUnit	Yes indicates that an article is not a fixed weight, but that the weight is variable. Example: poultry, fresh fruit and bulk items.	<b>C</b>	
quantityOfTradeItemsPerPallet	The number of trade items contained in a pallet. Only used if the pallet has no GTIN. It indicates the number of trade items placed on a pallet according to supplier or retailer preferences.	<b>R</b>	
dietTypeCode(KOSHER)	Code indicating the diet for, which the product is suitable.	<b>C</b>	
dietTypeCode(HALAL)	Code indicating the diet for, which the product is suitable.	<b>C</b>	
dietTypeCode(ORGANIC)	Code indicating the diet for, which the product is suitable.	<b>C</b>	
dietTypeCode(VEGAN)	Code indicating the diet for, which the product is suitable.	<b>C</b>	
shippingContainerQuantityDescription	The quantity of the contents of the shipping container as described on the outside of the shipping container, for example 100 .5 oz envelopes	<b>C</b>	



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
hasBatchNumber	Indication whether the base trade item is batch or lot number requested by law, not batch or lot number requested by law but batch or lot number allocated, or not batch or lot number allocated.	<b>C</b>	
parentGTIN	Unique product identification number (GTIN) for a parent item with lower-level trade items (children) in a product hierarchy.	<b>C</b>	
childGTIN	Unique product identification number (GTIN) for a child item with a higher-level trade item (parent) in a product hierarchy. This item may repeat in the case of a combination pack (multiple GTINs in lower level).	<b>C</b>	
totalQuantityOfNextLowerLevelTradeItem	The TOTAL number of next lower level trade items that this trade item contains. For example, if there were 12 Each items contained in a Case item, the Qty of Next Level Item(s) on the Case would be 12.	<b>C</b>	Use this for Unit Quantity if Lower Level Packaging exists and has GTIN
quantityOfInnerPack	Indicates the number of non-GTIN assigned inner-packs of next lower level trade items within the current GTIN level.	<b>C</b>	Use this for Unit Quantity if Lower Level Packaging exists with no GTIN
quantityOfNextLevelTradeItemWithinInnerPack	Indicates the number of next lower level trade items contained within the physical non-GTIN assigned each or inner-packs (inner-pack).	<b>C</b>	Should be for unmarked inners; dup in 1WS attribute name
individualUnitMinimum	Minimum size of the individual unit inside the lowest level of packaging.	<b>R</b>	



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
individualUnitMaximum	Maximum size of the individual unit inside the lowest level of packaging.	<b>R</b>	
isNonSoldTradeItemReturnable	Indicates that the buyer can return the articles that are not sold. Used, for example; with magazines and bread. This is a y/n (Boolean) where y equals right of return. This is at least relevant to General Merchandise, Publishing industries and for some FMCG trade item.	<b>C</b>	
packagingMaterialTypeCode	The materials used for the packaging of the trade item for example glass or plastic.	<b>R</b>	
discontinuedDateTime/cancelledDateTime	The date on which the trade item is no longer to be manufactured. Allows the reuse of the GTIN after 48 months with the explicit exception of Apparel, being 30 months and the implicit exception for specialty products (e.g., steel beams). Communicates cancellation of the launch of a trade item that was never and will never be manufactured, but may have been presented to buyers. Allows the reuse of the GTIN 12 months after cancellation.	<b>R</b>	



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
consumerUsageStorageInstructions	Expresses in text the consumer usage instructions of a product which are normally held on the label or accompanying the product. This information may or may not be labeled on the pack. Instructions may refer to how the consumer is to use the product, This does not include storage, food preparations, and drug dosage and preparation instructions.	<b>R</b>	
tradeItemMarketingMessage	Marketing message associated to the Trade item.	<b>R</b>	
preparationType	A code specifying the technique used to make the product ready for consumption. For example: baking, boiling.	<b>C</b>	M if Preparation and Cooking Suggestions is populated
servingSuggestion	Free text field for serving suggestion.	<b>R</b>	
tradeItemContactInformation/contactTypeCode	The general category of the contact party for a trade item for example Purchasing.	<b>R</b>	
targetMarketCommunicationChannel/communicationChannel/communicationChannelCode	Means used to communicate with another party.	<b>R</b>	
targetMarketCommunicationChannel/communicationChannel/communicationValue	Number assigned to a specific means of communication.	<b>R</b>	
numberOfServingsPerPackage	The total number of servings contained in the package.	<b>C</b>	M if Food Product
isTradeItemMarkedAsRecyclable	Trade item has a recyclable indication marked on it. This may be a symbol from one of many regional agencies.	<b>R</b>	



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
servingSizeDescription	A free text field specifying the serving size for which the nutrient information has been stated for example: per 1/3 cup (42 g).	<b>M</b>	
preparationState	Code specifying whether the nutrient information applies to the prepared or unprepared state of the product.	<b>C</b>	M if any Nutrients Stated
ingredientStatement	Information on the constituent ingredient makeup of the product specified as one string.	<b>M</b>	
foodAndBevIngredient/ingredientSequence	A text sequence (01, 02, 03, sub-ingredients 01.01, 01.02, 01.03...) indicating the ingredient order by content percentage of the product. (major ingredient = 01, second ingredient = 02, Second Ingredient Sub-Ingredient 02.01, Second Ingredient second Sub-Ingredient 02.02) etc.	<b>R</b>	
additiveName & additiveInformation/LevelofContainmentCode	Represents the name of any additive or genetic modification contained or not contained in the trade item.  Code indicating the level of presence of the additive.	<b>R</b>	
servingSize	Measurement Value specifying the serving size in which the information per nutrient has been stated. Example: Per 100 grams.	<b>M</b>	





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### Allergens:

A trade item must specify the following GDSN attributes for each of the "Big 8" allergens for at least one level within the item hierarchy: allergenTypeCode & levelOfContainment \*The "Big 8" allergens include: Peanuts, Tree Nuts, Eggs, Milk, Fish, Molluscs or Crustacean, Soy, and Wheat. If a claim is not made for all eight allergens, the allergenRelevantDataProvided attribute must be published.

GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
allergenRelevantDataProvided	Allergen Information is populated for those values which are relevant or required to be populated on the product label or label equivalent. All values not populated are not relevant or not required to be populated on the product label by local regulations.	<b>R</b>	If provided value is Yes product passes Allergens audit
allergenSpecificationAgency	Agency that controls the allergen definition.	<b>R</b>	
allergenSpecificationName	Free text field containing the name and version of the regulation or standard that contains the definition of the allergen.	<b>R</b>	
allergenTypeCode (AC) & levelOfContainment	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Crustacean
allergenTypeCode(AE) & levelOfContainment	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Eggs
allergenTypeCode(AF) & levelOfContainment	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Fish
allergenTypeCode(AM) & levelOfContainment	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Milk



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
allergenTypeCode(AS) & levelOfContainment	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Sesame
allergenTypeCode(AN) & levelOfContainment	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Tree Nuts
allergenTypeCode(UW) & levelOfContainment	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Wheat
allergenTypeCode(AY) & levelOfContainment	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Soy
allergenTypeCode(AP) & levelOfContainmen	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Peanuts
allergenTypeCode (AU) & levelOfContainment	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Sulphites
allergenTypeCode(NM) & levelOfContainmen	Code indicating the type of allergen. Code indicating the level of presence of the allergen.	<b>R</b>	Corn



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### Nutrient Type Code:

\*\*All Nutrient Type Codes are from the list of the INFOODS food component tag names (<http://www.fao.org/infoods/infoods/standards-guidelines/food-component-identifiers-tagnames/en/>) identifying nutrients contained in the product. The percentage of the recommended daily intake of a nutrient as recommended by authorities of the target market.

GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(BIOT) & Measurement Precision & Nutrient Quantity Contained/uom	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Biotin
Nutrient Type Code(BIOT) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Biotin
Nutrient Type Code(CA) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Calcium
Nutrient Type Code(CA) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Calcium
Nutrient Type Code(ENER-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Calories
Nutrient Type Code(ENERPF) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Calories from Fat



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(CHO-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Carbohydrates
Nutrient Type Code(CHO-) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Carbohydrates
Nutrient Type Code(CHOAVL) Measurement Precision & Nutrient Quantity Contained/uom	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Other Carbohydrates
Nutrient Type Code(CHOAVL) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Other Carbohydrates
Nutrient Type Code(CLD) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Chloride
Nutrient Type Code(CLD) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Chloride
Nutrient Type Code(CHOL-) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Cholesterol
Nutrient Type Code(CHOL-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Cholesterol



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(CR) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Chromium
Nutrient Type Code(CR) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Chromium
Nutrient Type Code(CU) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Copper
Nutrient Type Code(CU) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Copper
Nutrient Type Code(FOL-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Folate
Nutrient Type Code(FOL-) & Percentage Of Daily Value Intake	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Folate



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(FIBINS) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Insoluble Fiber
Nutrient Type Code(FIBINS) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Insoluble Fiber
Nutrient Type Code(FE) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Iron
Nutrient Type Code(FE) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Iron
Nutrient Type Code(MG) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Magnesium
Nutrient Type Code(MG) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Magnesium



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(MN) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Manganese
Nutrient Type Code(MN) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Manganese
Nutrient Type Code(MO) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Molybdenum
Nutrient Type Code(MO) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Molybdenum
Nutrient Type Code(FAMS) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Monounsaturated Fat
Nutrient Type Code(FAMS) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Monounsaturated Fat



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(NIA) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Niacin
Nutrient Type Code(NIA) & Percentage Of Daily Value Intake	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Niacin
Nutrient Type Code(PANTAC) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Pantothenic
Nutrient Type Code(PANTAC) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Pantothenic
Nutrient Type Code(P) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Phosphorous
Nutrient Type Code(P) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Phosphorous





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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(FAPU) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Polyunsaturated Fat
Nutrient Type Code(FAPU) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Polyunsaturated Fat
Nutrient Type Code(K) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Potassium
Nutrient Type Code(K) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Potassium
Nutrient Type Code(PRO-) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Protein
Nutrient Type Code(PRO-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Protein
Nutrient Type Code(RIBF) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	RiboflavinB2



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(RIBF) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	RiboflavinB2
Nutrient Type Code(FASAT) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Saturated Fat
Nutrient Type Code(FASAT) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Saturated Fat
Nutrient Type Code(SE) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Selenium
Nutrient Type Code(SE) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Selenium
Nutrient Type Code(NA) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Sodium



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(NA) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Sodium
Nutrient Type Code(FIBSOL) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Soluble Fiber
Nutrient Type Code(FIBSOL) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Soluble Fiber
Nutrient Type Code(THIA) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Thiamin
Nutrient Type Code(THIA) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Thiamin
Nutrient Type Code(FIBTSW) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Total Dietary Fiber



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(FIBTSW) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Total Dietary Fiber
Nutrient Type Code(FAT) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Total Fat
Nutrient Type Code(FAT) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Total Fat
Nutrient Type Code(FOL-) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Total Folate
Nutrient Type Code(SUGAR-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Total Sugar
Nutrient Type Code(SUGAR-) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Total Sugar
Nutrient Type Code(FATR) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>M</b>	Trans fatty Acids
Nutrient Type Code(VITA-) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Vitamin A



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(VITA-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Vitamin A
Nutrient Type Code(VITB12) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Vitamin B12
Nutrient Type Code(VITB12) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Vitamin B12
Nutrient Type Code(VITB6-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Vitamin B6
Nutrient Type Code(VITB6-) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Vitamin B6
Nutrient Type Code(VITC-) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>M</b>	Vitamin C



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(VITC-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Vitamin C
Nutrient Type Code(VITD-) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Vitamin D
Nutrient Type Code(VITD-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Vitamin D
Nutrient Type Code(VITE-) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Vitamin E
Nutrient Type Code(VITE-) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Vitamin E
Nutrient Type Code(VITK) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Vitamin K



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
Nutrient Type Code(VITK) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Vitamin K
Nutrient Type Code(ZN) & Percentage Of Daily Value Intake	Is expressed relative to the serving size and base daily value intake.	<b>R</b>	Zinc
Nutrient Type Code(ZN) & Measurement Precision & Nutrient Quantity Contained/uom	Code indicating whether the specified nutrient content is exact or approximate. Measurement Value indicating the amount of nutrient contained in the product. Is expressed relative to the serving size.	<b>R</b>	Zinc
nutritionalClaimTypeCode/nutritionalClaimNutrientElementCode	A code depicting the degree to which a trade item contains a specific nutrient or ingredient in relation to a health claim	<b>R</b>	Ex. nutritionalClaimDetail/ = FREE_FROM & nutritionalClaimDetail/nutritionalClaimNutrientElementCode = GLUTEN, only if isTradeItemGlutenFree=Yes.
nutrientRelevantDataProvided	Nutrient Information is populated for those values which are relevant or required to be populated on the product label or label equivalent. All values not populated are not relevant or not required to be populated on the product label by local regulations.	<b>R</b>	If provided value is Yes product passes Nutrients audit
referencedFileTypeCode	The type of file that is being referenced for example Safety Data Sheet or Product Image.	<b>R</b>	



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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
uniformResourceIdentifier	Simple text string that refers to a resource on the internet, URL's may refer to documents, resources, people, etc.	<b>R</b>	
fileName	The name of the file that contains the external information.	<b>R</b>	
contentDescription	Free form description of the content of the file.	<b>O</b>	
fileFormatName	The name of the file format. Examples: PDF; JPEG; BMP	<b>R</b>	
fileEffectiveStartDateTime	The date upon which the target of this external link begins to be effective for use.	<b>R</b>	
fileEffectiveEndDateTime	The date upon which the target of this external link ceases to be effective for use.	<b>C</b>	Only provided if relevant
preparationType	A code specifying the technique used to make the product ready for consumption. For example: baking, boiling.	<b>R</b>	
preparationInstructions	Textual instruction on how to prepare the product before serving. Allows for the representation of the same value in different languages but not multiple values.	<b>R</b>	
servingSuggestion	Free text field for serving suggestion. Allows for the representation of the same value in different languages but not multiple values.	<b>R</b>	
numberOfServingsPerPackage	The total number of servings contained in the package.	<b>R</b>	
numberOfServingsPerPackage MeasurementPrecisionCode	Code indicating whether the number of servings per package is exact or approximate.	<b>R</b>	





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GDSN Attribute Name	Attribute Definition	Attribute Type	Additional Comments
servingsSizeDescription	A free text field specifying the serving size for which the nutrient information has been stated for example: per 1/3 cup (42 g). Allows for the representation of the same value in different languages but not for multiple values.	<b>R</b>	
servingSize	Measurement value specifying the serving size in which the information per nutrient has been stated. Example: Per 100 grams.	<b>R</b>	
servingSize UoM	Unit of Measurement associated with the Serving Size value.	<b>R</b>	
servingSizeWeight	The gram weight for the recommended serving size.	<b>R</b>	One instance with grams

### 3.1 HPS REQUESTED ATTRIBUTES

Please review the [HPS Attribute Guide](#) for additional review of HPS specific requested attributes.