

**Oracle® Agile Product Lifecycle Management for  
Process**

Nutrition Surveillance Management User Guide

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Oracle Agile Product Lifecycle Management for Process Nutrition Surveillance Management User Guide,  
Release 6.1.1.5

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# Preface

The *Agile Product Lifecycle Management for Process Nutrition Surveillance Management User Guide* explains how to use the Nutrition Surveillance Management (NSM) application to track nutrient surveillance results and compare them to existing nutrient values for raw material or finished goods. Nutrient data is saved and managed from individual samples or composited to be compared against current nutrient values of materials and finished goods. NSM also enables you to compare nutrient information between NSM and Global Specification Management (GSM).

This Preface contains these topics:

- [Audience](#)
- [Variability of Installations](#)
- [Documentation Accessibility](#)
- [Software Availability](#)
- [Related Documents](#)
- [Conventions](#)

## Audience

This guide is intended for end users who are responsible for creating and managing information in Agile Product Lifecycle Management (PLM) for Process. Information about administering the system resides in the *Oracle Agile Product Lifecycle Management for Process Administrator User Guide*.

## Variability of Installations

Descriptions and illustrations of the Agile PLM for Process user interface included in this manual may not match your installation. The user interface of Agile PLM for Process applications and the features included can vary greatly depending on such variables as:

- Which applications your organization has purchased and installed
- Configuration settings that may turn features off or on
- Customization specific to your organization
- Security settings as they apply to the system and your user account

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

### Access to Oracle Support

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## Software Availability

Oracle Software Delivery Cloud (OSDC) provides the latest copy of the core software. Note the core software does not include all patches and hot fixes. Access OSDC at: <http://edelivery.oracle.com>.

## Related Documents

For more information, see the following documents in the Oracle Agile Product Lifecycle Management for Process documentation set:

- *Agile Product Lifecycle Management for Process Administrator User Guide*
- *Agile Product Lifecycle Management for Process Global Specification Management User Guide*
- *Agile Product Lifecycle Management for Process Release Notes*. Up-to-date Release Notes and other documentation are posted on Oracle Technology Network (OTN) at this location:

<http://www.oracle.com/technetwork/documentation/agile-085940.html#plmprocess>

# Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.





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# Introduction to Nutrition Surveillance Management

You can use Nutrition Surveillance Management (NSM) to accurately track nutrient surveillance results and compare them to existing nutrient values for raw material or finished goods. You can save and manage nutrient data from individual samples or create composites and then compare these values to those that are declared on the approved specifications.

NSM acts as the clearinghouse for nutrient information. NSM can be the source of nutrient data for products and materials in GSM. Data from NSM can be imported into nutrient profiles or nutrient compositions, which in turn are used to generate nutrient information for labeling and communication to the supply chain.

Nutrient analysis and nutrient composites form the core features of NSM. NSM also has functionality to compare nutrient data in nutrient analyses, nutrient composites, and GSM specifications.

## Touch Points with Other Oracle Agile Applications

Nutrition Surveillance Management interfaces with the Global Specification Management (GSM) application in the following ways:

- Nutrient information from nutrient analyses are used by specifications in GSM.
- Nutrient information from nutrient composites are used by specifications in GSM.

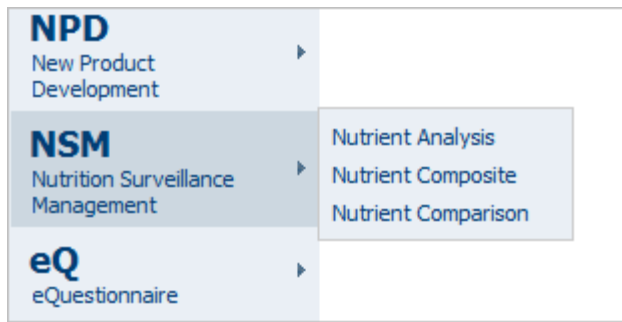
The Nutrient Comparison feature enables you to compare the nutrient values currently assigned to the specification in GSM against those of one or multiple specifications, nutrient composites, or nutrient analyses.

These topics are covered in this guide. For more information, refer to the *Agile Product Lifecycle Management for Process Global Specification Management User Guide*.

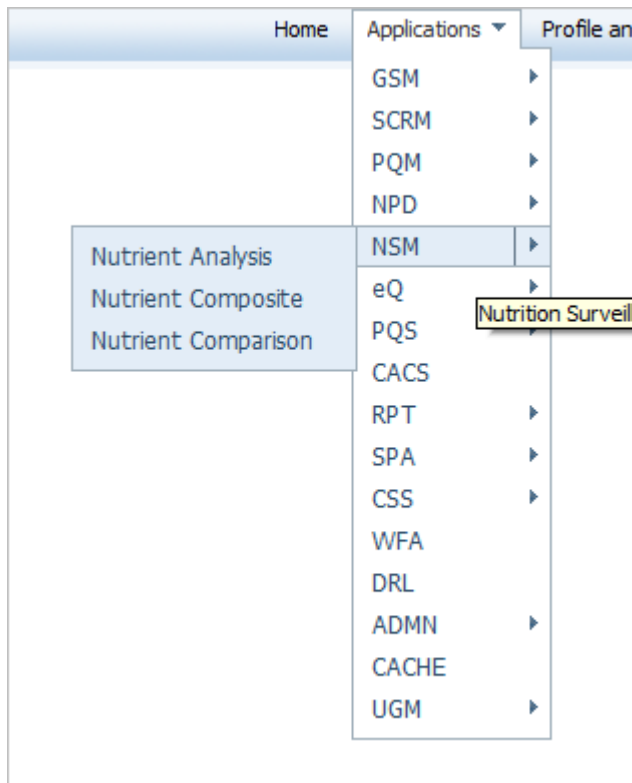
## Getting Started with Nutrition Surveillance Management

To access the Nutrition Surveillance Management application, select NSM from the left navigation panel as shown in [Figure 1-1](#), or select NSM from the Applications menu of the top menu bar, as shown in [Figure 1-2](#).

**Figure 1–1 NSM on the left navigation panel**



**Figure 1–2 NSM on the Applications menu of the top menu bar**



For more information on using Agile PLM for Process software, see the *Agile Product Lifecycle Management for Process Getting Started Guide*.

## Using Nutrition Surveillance Management

This chapter presents basic information about using the Nutrition Surveillance Management (NSM) application. Topics in this chapter include:

- [Nutrient Analysis](#)
- [Nutrient Composite](#)
- [Nutrient Comparison](#)

### Nutrient Analysis

You can navigate to a nutrient analysis by clicking **Nutrient Analysis** in the left navigation panel. Provide search criteria in the Nutrient Analysis search page and then click **Search**. The search results display the analysis number and the specification name in addition to information such as date, description, and sample type, as [Figure 2–1](#) shows:

**Figure 2–1 Search results**

The screenshot shows the 'Nutrient Analysis Search' interface. At the top, there's a header bar with a menu icon and the title 'Nutrient Analysis Search'. Below this is a search criteria section with a dropdown for 'Specification', a 'Contains One' operator, and a text input field containing '4:1 Beef Patty - Australia, 4:1 Beef Patty, 4:1 Beef Patty'. There are 'Reset' and 'Search' buttons. Below the search criteria is a 'Search Results' section with an 'Export' link. The results are displayed in a table with columns: Analysis, Specification, Description, Date of Analysis, Sample Type, Sample #, GTIN/UPC, and Composite(s). The table shows 10 results, with the first result being a 'comparer' analysis from 06/20/2005. The last result is from 01/09/2012 with sample type 'qweqw' and sample number 'eqw'. There are pagination controls at the bottom right showing '10' items per page and page numbers '1', '2', and '...2'.

Analysis	Specification	Description	Date of Analysis	Sample Type	Sample #	GTIN/UPC	Composite(s)
0000085	4:1 Beef Patty (5084160-001)	comparer	06/20/2005				0000142, 0000205, 0000197, 0000094, 0000643, 0000061
0000253	4:1 Beef Patty - Australia (5080389-001)	123123123123123	11/14/2006		123	12312312312	
0000367	4:1 Beef Patty - Australia (5080389-001)		03/15/2007				
0000752	4:1 Beef Patty (5084160-001)	Dg NA Comp A	07/23/2007				0000223
0000753	4:1 Beef Patty (5084160-001)	DG NA Comp B	07/23/2007				0000223
0001207	4:1 Beef Patty (5084160-001)		07/21/2008				
0001415	4:1 Beef Patty (5084160-001)		04/20/2009				
0001507	4:1 Beef Patty - Australia (5080389-001)		05/18/2009				
0002281	4:1 Beef Patty (5084160-001)		01/09/2012				
0002282	4:1 Beef Patty (5084160-001)		01/09/2012	qweqw	eqw	ewqe	0000646

Some important fields displayed in the results are:

**Analysis Number**—A unique identifier assigned to each nutrient analysis in NSM. This is an autogenerated number.

**Specification**—The name of the GSM specification that the nutrient analysis is tied to. The specification number and issue number are displayed in parentheses.

**Composite(s)**—This column lists all the nutrient composites where this nutrient analysis is consumed.

Click anywhere in a row to open an analysis.


## Nutrient Analysis Page

The Nutrient Analysis page consists of two tabs: Summary and Related Specs.

### Summary Tab









As [Figure 2–2](#) shows, the Summary tab has two sections: Summary Information and Nutrient Analysis.

Figure 2–2 Nutrient Analysis page, Summary tab










**Distilled Vinegar Sampling #9 (0002241)**  
 Nutrient Analysis

Summary   Related Specs

Summary Information

Analysis Number: 0002241  
 Specification:    
 Context:    
 Source Facility:    
 Sample Number:   
 GTIN/UPC:   
 Sample Type:   
 Business Unit(s):    
 Description:    
 Date of Analysis:    
 Date Sent to Lab:    
 Date Received From Lab:    
 Date of Last Update: 2/4/2011  
 Originator: Sally Jones

Nutrient Analysis

	Nutrient	Per 100g 	Method	Source	Comments
	Calories	69.00000 kcal		<a href="#">Material Specification (5077413-001)</a>	
	Energy kJ	290.00000 kJ		<a href="#">Material Specification (5077413-001)</a>	
	Protein	1.50000 g		<a href="#">Material Specification (5077413-001)</a>	
	Carbohydrates	17.60000 g		<a href="#">Material Specification (5077413-001)</a>	
	Total Sugar	8.55000 g		<a href="#">Material Specification (5077413-001)</a>	
	Total Fat	0.10000 g		<a href="#">Material Specification (5077413-001)</a>	
	Vitamin C	54.10000 mg		<a href="#">Material Specification (5077413-001)</a>	

Add   Import   Compare

### Summary Information Section

The Summary Information section contains general information about the nutrient analysis:

- **Analysis Number** — Autogenerated analysis number. This field cannot be changed.
- **Specification** — The GSM specification the analysis is tied to. The specification number and issue number are also displayed. Click the hyperlinked specification name to view the specification in GSM.
- **Context** — Available when the selected specification is a material created by a formulation specification. Select the formulation specification context from the dropdown list to show which formulation specification the material being tested was created from.

- **Source Facility** — The facility where the sample is sourced. Click the hyperlinked facility name to view the facility profile in Supply Chain Relationship Management (SCRM). The message “Not authorized to see facility” appears if the user does not have access to the facility associated to the nutrient analysis.
- **Sample Number**—User-defined number for the sample. This can be alpha or numeric.
- **GTIN/UPC** — Free-text field identifying reference codes.
- **Sample Type** — User-defined field denoting the type of sample, such as raw material or finished product.
- **Business Unit(s)**—Business units the analysis is tied to.
- **Date of Analysis** — Date of the analysis.
- **Date of Last Update** — Date of the last save of the analysis.
- **Date Sent to Lab** — Date the analysis was sent to the lab.
- **Date Received from Lab** — Date the analysis was received from the lab.
- **Description** — Description of the analysis.
- **Originator** — The name of the user who created the analysis. This field is autogenerated and cannot be changed.

### Nutrient Analysis Section

The Nutrient Analysis section holds the nutrient information for the sample. The columns in this section are:

- **Nutrient** — The name of the nutrient.
- **Per 100g** — The amount of nutrient per 100 grams.
- **Method** — Lists the testing method.
- **Source** — If the nutrient information is from an external source like a standard reference library or a lab, it is included here. This list is managed by an administrator. Refer to the *Agile Product Lifecycle Management for Process Administrator User Guide* for more information.
- **Comments** — Additional comments about this particular nutrient.

## Related Specs Tab

As [Figure 2–3](#) shows, the Related Specs tab consists of two sections: Related Specifications and Related Composite(s).

### Related Specifications Section

The Related Specifications section lists all the specifications in GSM that have imported values from and are still referencing this particular nutrient analysis.

### Related Composites Section

The Related Composites section lists all the nutrient composites that are built using this nutrient analysis.

Figure 2–3 Related Specifications and Related Composites sections

**Distilled Vinegar Sampling #9 (0002241)**  
Nutrient Analysis

Summary Related Specs

▼ Related Specifications

Spec #	Specification Name	Specification Type	Status

▼ Related Composite(s)

Composite	Specification	Date	Title
<a href="#">0000637</a>	Vinegar - Distilled - White - 100 Grain (5077413-001)	11-May-2011	Vinegar Composite

## Creating a Nutrient Analysis

To create a nutrient analysis:

1. In the NSM application, select **New > Nutrient Analysis** from the left navigation panel. NSM creates a new nutrient analysis.
2. In the Summary Information section, complete the following fields:

**Specification**—The name of the GSM specification that the nutrient analysis is tied to. This is a required field. Select a specification by clicking the search icon (🔍). The specification search page displays. Select a specification type from the dropdown list, enter search criteria, then click **Search**. Select a specification from the search results. That specification and its related specification number and issue number populate this field.

**Source Facility** — Select the source facility for this sample by clicking the search icon (🔍). A search page displays. Search for and select a facility. The facility name populates this field.

**Business Unit** — If the analysis applies to specific business units, select business units by clicking the search icon (🔍). NSM displays the business unit dialog box. Select business units and click **Done** to populate this field.

3. Click **Save**. To add nutrients to the analysis, complete the steps described below in "[Adding Nutrients to a Nutrient Analysis](#)". The Nutrient Analysis section, shown in [Figure 2–2](#), hosts all the analysis data for all the nutrients tested for in the product sample.

## Adding Nutrients to a Nutrient Analysis

There are three ways to add nutrients to a nutrient analysis. You can manually add nutrients that are already defined in the application, you can import nutrients from Food Composition Library (FCL), or you can leverage existing analyses.

To add nutrients to a nutrient analysis, select one of the following methods:

1. **Adding Nutrients**—With the Nutrient Analysis, Summary page in edit mode, click **Add**. A dialog box displays. Select nutrients to include in this analysis. Note that when you manually add nutrients, only the names of the nutrients are added. The rest of the columns must be manually entered. Click **Done** to close the dialog box. Click **Save**.

2. **Importing Nutrients from FCL** — With the Nutrient Analysis, Summary page in edit mode, click **Import**. A search page displays with Food Composition Library selected in the dropdown list. Enter the search criteria, then click **Search**. Select the food item name by clicking anywhere in the row in the Search Results section. You now see the nutrient composition of that particular food item. Select the nutrients you want to import and click **Import**. The nutrients that you selected are imported along with the values in the Per 100g column and the Source column on the Nutrient Analysis page. Click **Save**. [Figure 2–4](#) shows nutrients in a food item from FCL. For more details on FCL, please refer to the *Agile Product Lifecycle Management for Process Global Specification Management User Guide*.

**Figure 2–4** Nutrients in a food item

Import Nutrient Items

Nutrients & Properties / 100 grams

	Nutrient	Value
<input type="checkbox"/>	Copper	0.057 mg
<input type="checkbox"/>	Energy kJ	290 kJ
<input type="checkbox"/>	Carbohydrates	17.6 g
<input type="checkbox"/>	Calcium	8 mg
<input type="checkbox"/>	Phosphorus	47 mg
<input type="checkbox"/>	Vitamin C	54.1 mg
<input type="checkbox"/>	Alcohol	0.05 g
<input type="checkbox"/>	Manganese	0.182 mg
<input type="checkbox"/>	Total Fat	0.1 g
<input type="checkbox"/>	Total Sugar	8.55 g
<input type="checkbox"/>	Potassium	304 mg
<input type="checkbox"/>	Calories	69 kcal
<input type="checkbox"/>	Protein	1.5 g
<input type="checkbox"/>	Zinc	0.31 mg
<input type="checkbox"/>	Magnesium	24 mg
<input type="checkbox"/>	Ash	0.9 g
<input type="checkbox"/>	Saturated Fat	0.014 g
<input type="checkbox"/>	Sodium	20 mg
<input type="checkbox"/>	Iron	1.61 mg
<input type="checkbox"/>	Fructose	3.8 g
<input type="checkbox"/>	Vitamin A - Total	5 IU

Select All

Deselect All

Import

Cancel





3. **Importing Nutrients from Other Analyses** — Instead of using FCL, select nutrients from existing nutrient analyses. With the page in edit mode, click **Import**. On the search page, select **Nutrient Analysis** from the dropdown list. Enter the search criteria, then click **Search**. Select the analysis by clicking anywhere in the row in the Search Results section. A page similar to [Figure 2-4](#) above is displayed. Select the nutrients you want to import and click **Import**. They are imported into the new nutrient analysis along with their associated per 100 g values. Click **Save**.


[Figure 2-5](#) shows examples of nutrients that are either manually added or imported. The Source column tells you where the nutrient information was obtained from.

**Figure 2-5 Nutrient Analysis section, added nutrients**



Nutrient Analysis					
Nutrient	Per 100g		Method	Source	Comments
Calories	100.00000	kcal			
Protein	1.10000	g			
Carbohydrates	4.00000	g			
Carbohydrate (Available)	3.00000	g			
Dietary Fiber	1.10000	g			
Total Fat	9.00000	g			
<input type="button" value="Add"/> <input type="button" value="Import"/> <input type="button" value="Compare"/>					

## Modifying Values

[Figure 2-6](#) shows the Nutrient Analysis page in edit mode. To update the Per 100g value, you can either click the edit icon (  ) next to each nutrient, or click the edit icon (  ) next to the Per 100g column header, shown in [figure 2-5](#) above.

You can update nutrient values as well as the sources in this page. Click the apply changes icon (  ) next to the Per 100g column header to save the changes. If you modify a nutrient value that was imported from FCL or nutrient analysis, the source column is cleared.

**Figure 2-6 Modifying a nutrient value**

Nutrient Analysis					
Nutrient	Per 100g		Method	Source	Comments
Calories	<input type="text" value="100.00000"/> <input type="text" value="kcal"/>	 	<input type="radio"/> Calculated	<input type="text" value=""/>	<input type="text" value=""/>
Protein	<input type="text" value="1.10000"/> <input type="text" value="g"/>			<input type="text" value=""/>	<input type="text" value=""/>
Carbohydrates	<input type="text" value="4.00000"/> <input type="text" value="g"/>		<input type="radio"/> Calculated	<input type="text" value=""/>	<input type="text" value=""/>
Carbohydrate (Available)	<input type="text" value="3.00000"/> <input type="text" value="g"/>			<input type="text" value=""/>	<input type="text" value=""/>
Dietary Fiber	<input type="text" value="1.10000"/> <input type="text" value="g"/>		<input type="radio"/> AOAC Method 985.29 (Modified) <input type="radio"/> Calculated	<input type="text" value=""/>	<input type="text" value=""/>
Total Fat	<input type="text" value="9.00000"/> <input type="text" value="g"/>			<input type="text" value=""/>	<input type="text" value=""/>
<input type="button" value="Add"/> <input type="button" value="Import"/> <input type="button" value="Compare"/>					

Once done, click **Save** or **Save & Close**.

## Comparing Nutrient Analyses

The nutrient comparison feature enables you to compare the nutrient values currently assigned to the specification in GSM against the nutrient values declared in this particular nutrient analysis. In order to compare nutrient information, open a nutrient analysis and scroll to the bottom of the Summary tab. Click **Compare**. The Compare Nutrition dialog box displays. It shows the compared nutrient information.

The Compare Nutrition dialog box, shown in [Figure 2-7](#), contains the following columns:

- **Nutrient**—Lists the name of the nutrient.
- **Per 100 g**—Displays the amount of nutrient in 100g sample. This value is from the nutrient analysis.
- **Specification Per 100g** — Displays the amount of nutrient per 100g declared on the specification. This value is from the specification in GSM.
- **Change per 100g**—Difference between the nutrient values in the specification and the nutrient analysis.
- **% Change**—The difference in percentage.

**Figure 2-7 Compare Nutrition dialog box**

Compare Nutrition <span>Close</span>				
Nutrient	Per 100g	Specification Per 100g	Change Per 100g	% Change
Calories	69.00000 kcal	69.00000 kcal		
Energy kJ	290.00000 kJ	290.00000 kJ		
Protein	1.50000 g	0.00000 g	+ 1.50000 g	100.00 %
Carbohydrates	17.60000 g	17.60000 g		
Total Sugar	8.55000 g	8.55000 g		
Total Fat	0.10000 g	0.10000 g		
Saturated Fat		0.01400 g		
Ash		0.90000 g		
Vitamin A - Total		5.00000 IU		
Vitamin C	54.10000 mg	54.10000 mg		
Calcium	8.00000 mg	8.00000 mg		
Iron		1.61000 mg		
Magnesium	24.00000 mg	24.00000 mg		
Phosphorus		47.00000 mg		
Potassium	304.00000 mg	304.00000 mg		
Sodium	20.00000 mg	20.00000 mg		
Zinc		0.31000 mg		
Copper		0.05700 mg		

## Copying a Nutrient Analysis

To copy a nutrient analysis, click **Create Copy**. A new analysis is created. The relevant information from the Summary tab of the current nutrient analysis is copied into the new one. Data from the Related Spec tab is not copied to the new analysis. The new analysis is opened in edit mode by default.

## Nutrient Composite

NSM has the ability to composite sample values to obtain representative nutrient values from a number of sample analyses. You can use this feature to create composites for data obtained from multiple suppliers, from multiple labs, or from multiple samples. Nutrient information from nutrient composites can be leveraged by specifications in GSM.

In order to access nutrient composites, navigate to NSM and click **Nutrient Composite**. Just like in nutrient analysis, use the standard search tool to find the composites you are looking for. The search result page displays the nutrient composites that match your search criteria, as [Figure 2–8](#) shows.

**Figure 2–8 Search results**

The screenshot shows the 'Nutrient Composite Search' window. At the top, there's a 'Search Criteria' section with a 'Load' button and a 'Save' button. Below this, there's a search bar with a dropdown menu set to 'Contains' and a text input field containing 's'. To the right of the search bar are 'Reset' and 'Search' buttons. Below the search bar, there's a 'Recent Items' section with a plus icon. The main area displays 'Search Results' with an 'Export' button. Below this, there's a table with 4 columns: 'Composite', 'Date Of Composite', 'Specification', and 'Title'. The table contains 11 rows of data. At the bottom of the table, there's a pagination bar with a dropdown menu set to '10' and a series of buttons for page navigation (1, 2, 3, 4, 5, 6, 7, 8, ...8 ▶).

Composite	Date Of Composite	Specification	Title
0000038	06/19/2005	Test Menu Item 1 (5079852-001)	composite
0000076	07/11/2007	Spice Oil - Pork and Beans (5077509-001)	Oil composite
0000085	09/14/2006	PQS Ingredient Spec 20060825 0933 (5080854-001)	rgs 20060907 1422
0000097	11/10/2006	CACS Sweetwater (5081466-001)	CACS sweetwater
0000099	11/10/2006	CACS Lemonade (5081467-001)	CACS Lemonade
0000100	11/13/2006	CACS Lemonade 20061018 (5081358-002)	Lemonade composite
0000112	11/21/2006	CACS Lemonade (5081609-001)	Lemonade composite
0000113	11/27/2006	NSM Spec A 20061127 0835 (5081657-001)	NSM Test Composite A 20061127 1001
0000114	11/27/2006	CACS Lemonade (5081467-001)	NSM
0000121	01/10/2007	Alpha Dex (5077464-001)	Alpha Dex Composite

The table includes the following columns:

- **Composite Number**—The autogenerated ID for the nutrient composite.
- **Date of Composite**—Displays the date that the nutrient composite was created.
- **Specification**—Displays the GSM specification that the nutrient composite refers to. The GSM specification number and issue number are displayed in parentheses.
- **Title**—Displays the name of the nutrient composite.

Click anywhere in a row to open the nutrient composite.

## Nutrient Composite Page

The Nutrient Composite page, shown in [Figure 2–9](#), consists of two tabs: Summary and Related Specs.

### Summary Tab

**Figure 2–9** Summary Tab sections

**Orange Juice Composite (0000294)**  
Nutrient Composite

**Summary** | Related Specs

☒ **Summary Information**

**Composite Number:** 0000294

**Title:**

**Specification:**

**Business Unit(s):**

**Description:**

**Date of Composite:**

**Date of Last Update:**

**Originator:** Sally Jones

☒ **Composite**

Analysis	Specification	Date	Weight	Comments
<a href="#">0001103</a>	Orange Juice - Concentrated (5080156-001)	06-Feb-2008	3.00000	
<a href="#">0001114</a>	Orange Juice - Concentrated (5080156-001)	06-Feb-2008	6.00000	
<a href="#">0001112</a>	Orange Juice - Concentrated (5080156-001)	06-Feb-2008	1.00000	

☒ **Results**

Nutrient	Per 100g
Calories	52.05324 kcal
Energy kJ	184.00000 kJ
Protein	1.08000 g
Carbohydrates	10.06000 g
Total Fat	0.76800 g
Saturated Fat	0.31160 g
Vitamin C	29.87000 mg
Calcium	8.00000 mg
Potassium	190.00000 mg

The Summary tab consists of the following sections: Summary Information, Composite, and Results.

## Summary Information Section

This section includes fields that describe the nutrient composite:

- **Composite Number** — Autogenerated unique identifier assigned to each nutrient composite in NSM. This field cannot be changed.
- **Title** — The title of the nutrient composite. This is a required field.
- **Specification** — The name, number, and issue number of the GSM specification that the nutrient composite refers to. This is a required field.
- **Context** — Available when the selected specification is a material created by a formulation specification. Select the formulation specification context from the dropdown list to show which formulation specification the material being tested was created from.
- **Business Unit(s)** — Business units tied to the nutrient composite.
- **Date of Composite** — Date the composite was saved.
- **Date of Last Update** — Date of the last save of the composite.
- **Description** — Detailed text describing the nutrient composite.
- **Originator** — The name of the user who created the nutrient composite. The system populates this field.

## Composite Section

This section lists the nutrient analyses that form this composite, including:

- Analysis number
- GSM specification associated with the nutrient analysis. NSM displays the message "Not authorized to see facility" if the user does not have access to the facility associated to the nutrient composite.
- Date the analysis was created
- Weight of each nutrient analysis in the composite

## Weight Analysis

Analyses can be weighted separately when building the composites, so that one analysis can be considered more heavily than another when aggregating the results for the composite. For example, if you have two nutrient analyses, one with 2 g of sugar and the other with 5 g, and they have a weight of 1 each, the resulting composite will have 3.5 g of sugar. The composite would be calculated as follows:

$$((2 \text{ g} \times 1) + (5 \text{ g} \times 1)) / 2 = 3.5 \text{ g}$$

However, if the weight of the second nutrient analyses is set to 2, the sugar value in the resulting composite is calculated as follows:

$$((2 \text{ g} \times 1) + (5 \text{ g} \times 2)) / 3 = 4 \text{ g}$$

## Results Section

This section lists the composited nutrient information.

## Related Specs Tab

The Related Specs tab, shown in [Figure 2–10](#), lists all the GSM specifications that have imported this nutrient composite.

**Figure 2–10** *Related specifications*



Veg Burger (0000217) Nutrient Composite											
Summary		Related Specs									
<div> <input checked="" type="checkbox"/> Related Specifications </div> <table border="1"> <thead> <tr> <th>Spec #</th> <th>Specification Name</th> <th>Specification Type</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td><a href="#">5087256-001</a></td> <td>Veg Patty</td> <td>Product Specification</td> <td>Draft</td> </tr> </tbody> </table>				Spec #	Specification Name	Specification Type	Status	<a href="#">5087256-001</a>	Veg Patty	Product Specification	Draft
Spec #	Specification Name	Specification Type	Status								
<a href="#">5087256-001</a>	Veg Patty	Product Specification	Draft								

The table includes the following columns:



- **Spec #** — Clicking the specification number link displays the specification in GSM.
- **Specification Name** — The name of the specification.
- **Specification Type** — The type of specification.
- **Status** — The status of the specification in GSM.

## Creating a Nutrient Composite

To create a nutrient composite:

1. Click **New > Nutrient Composite** in the action menu, or click the create new icon (  ). NSM creates a new nutrient composite.
2. In the Composite section, click **Add New** to include nutrient analyses in the nutrient composite. The Search page opens.
3. Search for a nutrient analysis.
4. On the results page, click anywhere in a row to include the analysis in the nutrient composite. The nutrient analysis is added in to the Composite section. You can make multiple selections.
5. Click **Done**.
6. If you need to change the weight, click the edit icon (  ) for the row to change. The row displays in edit mode. Change the weight and add necessary comments, as [Figure 2–11](#) shows.

**Figure 2–11** *Editing a weight*

Composite					
	Analysis	Specification	Date	Weight	Comments
	<a href="#">0001103</a>	Orange Juice - Concentrated (5080156-001)	06-Feb-2008	<input type="text" value="4.00000"/>	
	<a href="#">0001114</a>	Orange Juice - Concentrated (5080156-001)	06-Feb-2008	6.00000	
	<a href="#">0001112</a>	Orange Juice - Concentrated (5080156-001)	06-Feb-2008	1.00000	

Add New



- Click the apply changes icon (✔) to save changes to the row. The Results section displays the composited nutrients, as Figure 2–12 shows:

**Figure 2–12** Composited nutrients

Composite

Analysis	Specification	Date	Weight	Comments
<a href="#">0001103</a>	Orange Juice - Concentrated (5080156-001)	06-Feb-2008	4.00000	
<a href="#">0001114</a>	Orange Juice - Concentrated (5080156-001)	06-Feb-2008	6.00000	
<a href="#">0001112</a>	Orange Juice - Concentrated (5080156-001)	06-Feb-2008	1.00000	

Add New

Results

Nutrient	Per 100g
Calories	51.54948 kcal
Energy kJ	184.00000 kJ
Protein	1.05455 g
Carbohydrates	10.06000 g
Total Fat	0.72273 g
Saturated Fat	0.28591 g
Vitamin C	30.14545 mg
Calcium	8.18182 mg
Potassium	190.00000 mg

Compare

- Click **Save** or **Save & Close** in the action menu.

**Note:** The Results section displays a warning message when nutrients are not present in all the nutrient analyses.

## Comparing Nutrient Composites

The nutrient comparison feature allows you to compare the nutrient values currently assigned to the specification in GSM against nutrient make-up of a particular nutrient composite. In order to compare nutrient information, open a nutrient composite and scroll to the bottom of the Summary tab. Click **Compare**. The Compare Nutrition dialog box displays the compared nutrient information and includes the following columns:

- Nutrient** — Name of the nutrient.
- Per 100g** — Amount of nutrient in 100 g sample. This value is from the nutrient composite.
- Specification Per 100g** — Amount of nutrient in a 100 g sample of the specification. This value is from the specification in GSM.
- Change Per 100g** — Difference between the nutrient values in the specification and the nutrient analysis.
- % Change** — Difference in percentage.

Figure 2–13 shows the Compare Nutrition dialog box.

**Figure 2–13** Compare Nutrition dialog box

Compare Nutrition					Close
Nutrient	Per 100g	Specification Per 100g	Change Per 100g	% Change	
Calories		143.17921 kcal			
Energy kJ	200.00000 kJ	599.07618 kJ	-399.07618 kJ	-66.62 %	
Protein	232.00000 g	30.80341 g	+ 201.19659 g	653.16 %	
Protein (Nx6.25)	g				
Casein (Nx6.38)	g				
Whey (Nx6.38)					
Carbohydrates		4.43637 g			



## Nutrient Comparison

Nutrient comparison enables you to compare nutrient analyses, nutrient composites, and GSM specifications against each other. Examples of comparisons are:

- One nutrient analysis against one or more nutrient analyses
- One nutrient analysis against a nutrient analysis and a nutrient composite
- One GSM specification against another GSM specification
- One GSM specification against a nutrient composite and several nutrient analyses

In general, you can compare nutrient information between two or more entities, either of the same type or of different types. Entities available for comparison are:

- Nutrient analysis
- Nutrient composite
- Material specification
- Product specification
- Menu item specification
- Trade specification

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**Note:** To ensure optimal performance, your Agile administrator may limit the number of specifications that NSM can compare to a preset maximum.

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## Nutrient Comparison Page

Figure 2–14 shows a nutrient analysis, denoted by (na), being compared to a nutrient analysis (na) and a product specification (prod).

**Figure 2–14** Comparison among nutrient analysis, product specification, and nutrient analysis

**Nutrient Comparison**

Compare Nutrition

Show Children: ☐ Yes ☒ No

Base Specification: 0000310 (na) -- BBQ Beef and Vegetable Dinner - 11 oz (5077539-001)

Compare With:

- 1) 0000752 (na) -- 4:1 Beef Patty (5084160-001)
- 2) 5084160-001 (prod) -- 4:1 Beef Patty

Compare

When you click **Compare**, the nutrient comparison of the three displays, as shown in [Figure 2–15](#).

**Figure 2–15 Comparison results**

Results					
Nutrient	0000310 (na)	1) 0000752 (na)		2) 5084160-001 (prod)	
	Per 100g	Per 100g	% Diff	Per 100g	% Diff
Calories		---			
Protein		1.000			
Carbohydrates				20.000	
Dietary Fiber				2.000	
Maltose		0.000			
Saturated Fat	1.000 g				
Cholesterol				100.000	
Vitamin C				5.000	
Vitamin D				5.000	
Calcium		---		10.000	
Iron	0.080 mg			15.000 mg	+18650.000 %
Magnesium		0.000			
Phosphorus		2.000			
Potassium	3.000 mg	3.000 mg	0.000 %		
Sodium	4.000 mg				
Zinc		99.999			
Copper		---			
Manganese		0.000			
Nitrogen				1.000	
Starch				1.000	

The % Diff values are calculated with respect to the base specification. Cells are grayed out if the nutrient is not defined for that column.

If you select a menu item specification as the base specification and then select **Yes** for Show Children, you can compare the nutrients of child specifications (top-level bill of materials) of the parent specification, as shown in [Figure 2–16](#).

**Figure 2–16 Comparison of a product specification (child of a menu item specification) against other specifications**

▼ Compare Nutrition

Show Children: ☒ Yes ☐ No

Base Specification:

- ☒ 5084163-001 (menu) -- Cheeseburger
- ☐ 5084161-001 (prod) -- Cheese Slice
- ☐ 5080388-001 (prod) -- 4:1 Beef Patty - Asia
- ☐ 5084162-001 (prod) -- Bun

Compare With:

- 1) ☒ 5083098-001 (menu) -- Veggie Burger
- ☐ 5080385-002 (prod) -- Bun - Fresh - Asia
- ☐ 5083109-001 (prod) -- Veggie Pattie
- ☐ 5079864-001 (menu) -- Child Alternate menu item

Compare

Results

