



CORPORATE OFFICE  
200 Sales Drive  
Education Division  
Harrison, OH 45030  
Phone 800-626-  
2308/513-367-4900 Fax  
513-367-3508

**PRODUCT ANALYSIS FORM FOR CHILD NUTRITION PRODUCTS**  
**PRODUCT FORMULATION STATEMENT (PFS) FOR MEAT/MEAT ALTERNATE (M/MA),**  
**VEGETABLE COMPONENT SUB – GROUPS (VEG) AND EQUIVALENT GRAINS (EG)**

Product Name: Three Cheese Cavatappi Macaroni and Cheese Code Number: 5773

Manufacturer: J.T.M. Provisions Company, Inc. Case/Pack/Count/Portion Size: 30 lb/cs, 6 - 5 lb bags, 6 oz portion

### I. Meat/Meat Alternate

The chart below shows the creditable amount of Meat/Meat Alternate determination.

Description of Creditable Ingredients per Food Buying Guide	Ounces per Raw Portion of Creditable Ingredient	Multiply	Food Buying Guide Yield	Creditable Amount*
PROCESS CHEESE	1.8132	x	100%	1.8132
		x		
		x		
<b>A. Total Creditable Amount<sup>1</sup></b>				1.8132

\*Creditable Amount – Multiply ounces per raw portion of creditable ingredient by the Food Buying Guide yield.

### II. Alternate Protein Product (APP)

If the product contains APP, the chart below to determine the creditable amount of APP is filled out. If APP is used, documentation as described in Attachment A of the sample statement for each APP used is provided.

Description of APP, Manufacturer's name, and code number	Ounces Dry APP Per Portion	Multiply	% of Protein As-Is*	Divide by 18**	Creditable Amount APP***
NONFAT DRY MILK	0.0907	x	31	18	0.1562
CHEESE FLAVOR	0.0604	x	18	18	0.0604
		x			
<b>B. Total Creditable Amount<sup>1</sup></b>					0.2166
<b>C. TOTAL CREDITABLE AMOUNT (A + B rounded down to nearest ¼ oz)<sup>1</sup></b>					2.00

\*Percent of Protein As-Is is provided on the attached APP documentation.

\*\*18 is the percent of protein when fully hydrated.

\*\*\*Creditable amount of APP equals ounces of Dry APP multiplied by the percent of protein as-is divided by 18.

<sup>1</sup>Total Creditable Amount must be rounded **down** to the nearest 0.25oz (1.49 would round down to 1.25 oz meat equivalent). Do **not** round up. If you are also crediting APP, you do not need to round down in box A until after you have added the creditable APP amount from box B.

### III. Grain Equivalent

**I. Does the product meet the Whole Grain-Rich Criteria:** Yes No (Circle correct answer)

(Refer to SP 30-2012 Grain Requirements for the National School Lunch Program and School Breakfast Program.)

**II. Does the product contain non- creditable grains:** Yes No **How many grams:** 3.40

(Products with more than 0.24 oz equivalent or 3.99 grams for Groups A-G or 6.99 grams for Group H of non-creditable grains may not credit towards the grain requirements for school meals.)

**III. Use Policy Memorandum SP 30-2012 Grain Requirements for the National School Lunch Program and School Breakfast Program: Exhibit A to determine if the product fits into Groups A-G (baked goods), Group H (cereal grains) or Group I (RTE breakfast cereals). (Different methodologies are applied to calculate servings of grain component based on creditable grains. Groups A-G use the standard of 16grams creditable grain per oz eq; Group H uses the standard of 28grams creditable grain per oz eq; and Group I is reported by volume or weight.)**

Indicate to which Exhibit A Group (A-I) the Product Belongs: H

### Total Creditable Amount

Description of Creditable Grain Ingredient	Grams of Creditable Grain Ingredient per Portion <sup>1</sup> A	Gram Standard of Creditable Grain per oz equivalent (16g or 28g) <sup>2</sup> B	Creditable Amount A ÷ B
DRY WGR CAVATAPPI MACARONI	28.93	28	1.0332
<b>Total Creditable Amount</b>			1.00

Creditable grains are whole-grain meal/flour and enriched meal/flour.

<sup>1</sup> (Serving size) X (% of creditable grain in formula). Please be aware that serving sizes other than grams must be converted to grams.

<sup>2</sup> Standard grams of creditable grains from the corresponding Group in Exhibit A.

<sup>3</sup> Total Creditable Amount must be rounded down to the nearest quarter (0.25) oz eq. Do not round up.

Total weight (per portion) of product as purchased 50 g (1.75oz)

Total contribution of product (per portion) 2.00 oz equivalent

I certify that the above information is true and correct and that a 1.75-ounce portion of this product (ready for serving) provides.

2.00 oz equivalent Grains. I further certify that non-creditable grains are not above 0.24 oz eq. per portion. Products with more than 0.24 oz equivalent or 3.99 grams for Groups A-G or 6.99 grams for Group H of non-creditable grains may not credit towards the grain requirements for school meals.

### IV. Vegetable Component

Please fill out the chart below to determine the creditable amount of vegetables.

Description of Creditable Ingredient per Food Buying Guide (FBG)	Vegetable Subgroup	Ounces per Raw Portion of Creditable Ingredient	Multiply	FBG Yield/ Purchase Unit	Creditable Amount <sup>1</sup> (quarter cups)
			X		
			X		
			X		
			X		
			X		
			X		
			X		
<b>Total Creditable Vegetable Amount:</b>					
<sup>1</sup> FBG calculations for vegetables are in quarter cups. See chart on following page for quarter cup to cup conversions. Vegetables and vegetable purees credit on volume served. At least 1/4 cup of recognizable vegetable is required to contribute towards the vegetable component or a specific vegetable subgroup. The other vegetable subgroup may be met with any additional amounts from the dark green, red/orange, and beans/peas (legumes) vegetable subgroups. School food authorities may offer any vegetable subgroup to meet the total weekly					<b>Total Cups Beans/Peas (Legumes)</b>
					<b>Total Cups Dark Green</b>

<p>requirement for the additional vegetable subgroup.</p> <ul style="list-style-type: none"> <li>Please note that raw leafy green vegetables credit as half the volume served in school meals (For example: 1 cup raw spinach credits as ½ cup dark green vegetable. Legumes may credit towards the vegetable component or the meat alternate component, but not as both in the same meal. The school menu planner will decide how to incorporate legumes into the school meal. However, a manufacturer should provide documentation to show how legumes contribute towards the vegetable component and the meat alternate component. See chart on the following page for conversion factors</li> <li>The PFS for meat/meat alternate may be used to document how legumes contribute towards the meat alternate component.</li> </ul>	<b>Total Cups Red/Orange</b>	
	<b>Total Cups Starchy</b>	
	<b>Total Cups Other</b>	

I certify the above information is true and correct and that 6.00 ounce serving of the above product contains N/A cup(s) of N/A vegetables.  
(Vegetable subgroup)

**Quarter Cup to Cup Conversions\***

0.5 Quarter Cups vegetable = ½ Cup vegetable or 0.5 ounces of equivalent meat alternate  
1.0 Quarter Cups vegetable = ¼ Cup vegetable or 1.0 ounce of equivalent meat alternate  
1.5 Quarter Cups vegetable = ¾ Cup vegetable or 1.5 ounces of equivalent meat alternate  
2.0 Quarter Cups vegetable = ½ Cup vegetable or 2.0 ounces of equivalent meat alternate  
2.5 Quarter Cups vegetable = ⅝ Cup vegetable or 2.5 ounces of equivalent meat alternate  
3.0 Quarter Cups vegetable = ¾ Cup vegetable or 3.0 ounces of equivalent meat alternate  
3.5 Quarter Cups vegetable = 7⁄8 Cup vegetable or 3.5 ounces of equivalent meat alternate  
4.0 Quarter Cups vegetable = 1 Cup vegetable or 4.0 ounces of equivalent meat alternate

\*The result of 0.9999 equals ⅞ cup but a result of 1.0 equals ¼ cup

**Total weight (per portion) of product as purchased:** 6.00

**I certify that the above information is true and correct and that a 6.00 ounce serving of the above product contains. 2.00 ounces of equivalent meat alternate and n/a cup(s) n/a vegetable and 1.00 oz equivalent grains when prepared according to directions.**

**(Reminder: Total creditable amount cannot count for more than the total weight of product)**

I further certify that any APP used in this product conforms to Food and Nutrition Service regulations (7CFR Parts 210, 220, 225 or 226 Appendix A).

*Brian Hofmeier*

Vice President of Education Sales

Signature

Title

Brian Hofmeier

6-15-23

800-626-2308

Printed Name

Date

Phone Number



American Cheese Base White  
NP16131-4

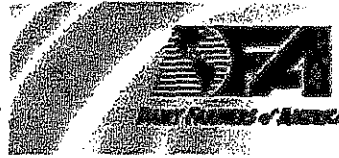
Documentation for Bluegrass Dairy and Food, Inc. American Cheese Base-White used as Alternated Protein Products (APP) for Child Nutrition Programs.

- a) Bluegrass Dairy and Food certifies that American Cheese Base-White meets all requirements for APP intended for used in foods manufactured for Child Nutrition Programs as described in Appendix A of 7 CFR 210, 225, and 226.
- b) Bluegrass Dairy and Food certifies that American Cheese Base-White has been processed so that some portions of the non-protein constituents have been removed by evaporation. Spray drying of the American Cheese Base-White removes the water in the product leaving dry protein.
- c) The Protein Digestibility Corrected Amino Acid Score (PDCAAS) for American Cheese Base-White is 1 which more than meets the PDCAAS requirement to be greater than 0.8.
- d) The protein level (20%) of American Cheese Base-White reconstitution rate of 1 part powder to 0.9 parts water meet the 18% required protein.
- e) The protein level of American Cheese Base-White is certified to be at least 20% on an “as-is” basis for the as-purchased product.

*SuEllen Noelck*

Technical Director

Bluegrass Dairy and Food, Inc.



DairyAmerica, Inc. 4974 E. Clinton Way, #C-221 Fresno, CA 93727-1520

**SPECIFICATIONS FOR NONFAT DRY MILK AS AN ALTERNATE PROTEIN PRODUCT**

**Dairy America Nonfat Dry Milk Extra Grade/Grade A Product codes: 6021, 6079 & 6080**  
**Dairy Farmers of America Nonfat Dry Milk Extra Grade/Grade A Low Heat**

1. Nonfat dry milk meets USDA-FNS requirements for Alternate Protein Products (APP) for the National School Lunch Program, School Breakfast Program, Summer Food Service Program, and Child and Adult Care Food Program as specified in Appendix A of 7 CFR 210, 220, 225, and 226.
2. Process: Nonfat dry milk is processed by removal of water and fat from milk.
3. PDCAAS: The biological value of nonfat dry milk is 1.00, (100% of casein) determined by performing a Protein Digestibility Corrected Amino Acid Score (PDCAAS).
4. Protein: Nonfat dry milk has a minimum protein level of 31% as is.
5. Hydration: To achieve 18% protein, hydrate at a ratio of 0.7222 water to 1 part nonfat dry milk by weight.

Typical Usage: Nonfat dry milk is not only a functional and versatile ingredient; it is also part of the commodity distribution program. Nonfat dry milk can be added to main dishes such as meatloaf and casseroles. It can also be used in other components of child nutrition meals such as potatoes, vegetables, puddings, snacks and desserts to boost overall nutrition and flavor.

Formulation and application ideas can be obtained by contacting either:

American Dairy Products Institute, 630-530-8700  
[www.adpi.org](http://www.adpi.org) or

Dairy Management Inc, 800-248-8829, [www.doitwithdairy.com](http://www.doitwithdairy.com)

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