


## What's for Lunch



### ANSWER KEY Worksheet 3 – Is it Whole Grain-rich?

Indicate whether each food item meets the **whole grain-rich (WGR) general standard** or whether you need to obtain a product formulation statement (PFS) from the manufacturer to provide more information. To meet the WGR general standard, a product must comply with three criteria:



1. contains **at least 50 percent whole grains** by weight (a whole grain is the first ingredient or if water is the first ingredient, the second ingredient must be a whole grain);
2. any remaining grain ingredients are **enriched**; and
3. any **noncreditable grain ingredients comply with limit of** less than 2 percent of the product formula (less than 3.99 grams for Groups A-G and less than 6.99 grams for Groups H and I).

| Ingredients Statement   | Is Product WGR?  |
|---|--|
| <p><b>Product 1 – All Natural Whole-Wheat Pasta</b><br/>           Ingredients: <b>WHOLE GRAIN WHEAT FLOUR, WHEAT FLOUR, OAT FIBER.</b></p>  | <p style="text-align: center;"> <input type="checkbox"/> Yes    <input type="checkbox"/> No    <input checked="" type="checkbox"/> PFS Needed         </p> <p><b>WGR Criteria:</b></p> <p> <input checked="" type="checkbox"/> WGR Criterion 1 – <b>WHOLE GRAIN</b><br/> <input checked="" type="checkbox"/> WGR Criterion 2 – <b>ENRICHED</b><br/> <input type="checkbox"/> WGR Criterion 3 – <b>NONCREDITABLE</b> </p> <p>Whole-wheat flour is the first and only grain ingredient (criteria 1 and 2). This product contains <b>two noncreditable grains</b> (wheat flour and oat fiber). To determine if this product meets criterion 3, the menu planner must obtain a PFS from the manufacturer. If the combined weight of the wheat flour and oat fiber is less than 6.99 grams, this product complies with the noncreditable grains limit (criterion 3) and meets the WGR definition.</p> <p>Products containing noncreditable grains in amounts more than 2 percent of the product formula (6.99 grams for groups H and I) cannot contribute toward the reimbursable meal.</p> |



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| Ingredients Statement   | Is Product WGR?   |
|---|---|
| <p><b>Product 2 – Whole Grain Chicken Corn Dog</b></p>  <p><b>Batter Ingredients:</b> Water, <b>WHOLE WHEAT FLOUR, WHOLE GRAIN CORN</b>, vegetable oil, sugar, contains 2% or less of leavening (sodium acid pyrophosphate, sodium bicarbonate), salt, ascorbic acid, egg white, dried honey, artificial flavor.</p> <p><b>Chicken Frank Ingredients:</b> Mechanically separated chicken, water, corn syrup solids, contains less than 2% of spices, salt, sodium phosphate, potassium chloride, flavorings, sodium diacetate, sodium erythorbate, sodium nitrite. Contains wheat.</p> | <p><input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> PFS Needed</p> <p><b>WGR Criteria:</b></p> <p><input checked="" type="checkbox"/> WGR Criterion 1 – <b>WHOLE GRAIN</b><br/> <input checked="" type="checkbox"/> WGR Criterion 2 – <b>ENRICHED</b><br/> <input checked="" type="checkbox"/> WGR Criterion 3 – <b>NONCREDITABLE</b></p> <p>Corn dogs are combination foods because they contribute to both the grains and meat/meat alternates components. To review this product for compliance with WGR requirement, we only need to look at the grain ingredients in the <b>batter</b> (grains component).</p> <p>Whole-wheat flour is the first grain ingredient in the batter and all other grains (whole grain corn) are whole (criteria 1 and 2). There are no noncreditable grains (criterion 3).</p> <p>Remember that if the first ingredient of a grain product is water, a whole grain may be listed as the second ingredient and still meet the criteria.</p> |
| <p><b>Product 3 – Whole Wheat Bagel</b></p>  <p>Ingredients: <b>WHOLE-WHEAT FLOUR</b>, sugar, wheat gluten. <b>Contains 2% or less of each of the following:</b> honey, salt, <b>YELLOW CORN FLOUR</b>, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes.</p>  | <p><input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> PFS Needed</p> <p><b>WGR Criteria:</b></p> <p><input checked="" type="checkbox"/> WGR Criterion 1 – <b>WHOLE GRAIN</b><br/> <input checked="" type="checkbox"/> WGR Criterion 2 – <b>ENRICHED</b><br/> <input checked="" type="checkbox"/> WGR Criterion 3 – <b>NONCREDITABLE</b></p> <p>Whole-wheat flour is the first and only grain ingredient (criteria 1 and 2). This product contains only <b>one noncreditable grain</b> (yellow corn flour) listed after the statement “contains 2% or less of,” and therefore complies with the noncreditable grains limit (criterion 3).</p>  |


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| Ingredients Statement  | Is Product WGR?   |
|--|---|
| <p><b>Product 4 – Brand A White Whole Wheat Bread Sticks</b></p> <p>Ingredients: <b>WHOLE WHEAT FLOUR, UNBLEACHED UNBROMATED ENRICHED WHEAT FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE, RIBOFLAVIN, ENZYMES, FOLIC ACID)</b>, honey, yeast, salt, dough conditioners (mono &amp; diglycerides, datem, l-cysteine, ascorbic acid, enzymes), <b>MODIFIED FOOD STARCH, FAVA BEAN FLOUR</b>, flavor (natural flavor, modified vegetable gum, hydrolyzed starch, maltodextrin), <b>MALTED BARLEY FLOUR</b>, dextrose, <b>RYE FLOUR</b>.</p>  | <p style="text-align: center;"><input type="checkbox"/> Yes   <input type="checkbox"/> No   <input checked="" type="checkbox"/> PFS Needed</p> <p><b>WGR Criteria:</b></p> <p><input checked="" type="checkbox"/> WGR Criterion 1 – <b>WHOLE GRAIN</b><br/> <input checked="" type="checkbox"/> WGR Criterion 2 – <b>ENRICHED</b><br/> <input type="checkbox"/> WGR Criterion 3 – <b>NONCREDITABLE</b></p> <p>Whole wheat flour is the first ingredient after water (criterion 1). The second ingredient is enriched flour (criterion 2).</p> <p>This product contains <b>four noncreditable grains</b> (modified food starch, fava bean flour, malted barley flour, rye flour). To determine if this product meets criterion 3, the menu planner must obtain a PFS from the manufacturer. If the combined weight of the modified food starch, fava bean flour, malted barley flour, rye flour is less than 3.99 grams, this product complies with the noncreditable grains limit (criterion 3) and meets the WGR definition.</p> <p>Products containing noncreditable grains in amounts more than 2 percent of the product formula (3.99 grams for groups A-G) cannot contribute toward the reimbursable meal.</p> |
| <p><b>Product 5 – Brand B White Whole-Wheat Bread Sticks</b></p> <p>Ingredients: <b>WHOLE WHEAT FLOUR, WATER, ENRICHED UNBLEACHED WHEAT FLOUR (WHEAT FLOUR, MALTED BARLEY FLOUR, NIACIN, IRON AS FERROUS SULFATE, THIAMINE MONONITRITE, ENZYME, RIBOFLAVIN, FOLIC ACID)</b>, yeast, sugar, wheat gluten. <b>Contains less than 2% of the following:</b> soybean oil, salt, <b>OAT FIBER</b>, honey, sodium stearoyl lactylate, datem, ascorbic acid, enzyme. May contain milk, soy, egg and sesame.</p>   | <p style="text-align: center;"><input checked="" type="checkbox"/> Yes *   <input type="checkbox"/> No   <input type="checkbox"/> PFS Needed</p> <p><b>WGR Criteria:</b></p> <p><input checked="" type="checkbox"/> WGR Criterion 1 – <b>WHOLE GRAIN</b><br/> <input checked="" type="checkbox"/> WGR Criterion 2 – <b>ENRICHED</b><br/> <input checked="" type="checkbox"/> WGR Criterion 3 – <b>NONCREDITABLE</b></p> <p>Whole-wheat flour is the first grain ingredient (criterion 1). The second ingredient is enriched flour (criterion 2).</p> <p>This product contains only <b>one noncreditable grain</b> (oat fiber) listed after the statement “contains 2% or less of,” and therefore complies with the noncreditable grains limit (criterion 3).</p> <p>This shows the importance of checking each individual product. You cannot assume that similar products are the same. Even though products 4 and 5 are both white whole-wheat bread stick, they have different ingredients and one requires a PFS while the other does not.</p>  |

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| Ingredients Statement  | Is Product WGR?  |
|--|--|
| <p><b>Product 6 – Whole-grain Cereal Bar</b></p> <p>Ingredients: <b>WHOLE GRAIN ROLLED OATS</b>, brown sugar, <b>CRISP BROWN RICE, WHOLE GRAIN ROLLED WHEAT</b>, soybean oil, <b>WHOLE WHEAT FLOUR</b>, almonds, water, freeze dried bananas, <b>WHOLE CORN FLOUR</b>, sodiumbicarbonate, malted barley extract, soy lecithin, natural flavor, caramel color, alpha tocopherol acetate, BHT.</p>  | <p><input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> PFS Needed</p> <p><b>WGR Criteria:</b></p> <p><input checked="" type="checkbox"/> WGR Criterion 1 – <b>WHOLE GRAIN</b><br/> <input checked="" type="checkbox"/> WGR Criterion 2 – <b>ENRICHED</b><br/> <input checked="" type="checkbox"/> WGR Criterion 3 – <b>NONCREDITABLE</b></p> <p>Whole-grain rolled oats is the first grain ingredient and all other grains (crisp brown rice, whole-grain rolled wheat, whole-wheat flour and whole corn flour) listed are also whole (criteria 1 and 2). There are no noncreditable grains (criterion 3).</p>  |
| <p><b>Product 7 – Reduced Carb Wheat Tortilla</b></p> <p>Ingredients: Water, <b>MODIFIED FOOD STARCH, WHOLE-WHEAT FLOUR</b>, wheat gluten, powdered cellulose, hydrogenated soybean oil, caramel color, wheat protein isolate (wheat gluten, lactic acid, sulfite), sodium bicarbonate, <b>contains 1% or less of</b> salt, cellulose gum, <b>CORNSTARCH</b>, distilled monoglycerides.</p>      | <p><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No   <input type="checkbox"/> PFS Needed</p> <p><b>WGR Criteria:</b></p> <p><input type="checkbox"/> WGR Criterion 1 – <b>WHOLE GRAIN</b><br/> <input checked="" type="checkbox"/> WGR Criterion 2 – <b>ENRICHED</b><br/> <input type="checkbox"/> WGR Criterion 3 – <b>NONCREDITABLE</b></p> <p>This product does not have a whole grain as the first ingredient (criterion 1). There are no grains other than whole-wheat flour so it meets criterion 2.</p> <p>It contains modified food starch as the first ingredient after water, and also contains cornstarch. Modified food starch and cornstarch are noncreditable grains, and must be less than 2 percent of the product formula (i.e., no more than 3.99 grams) for the product to count as the grains component.</p> |


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| Ingredients Statement   | Is Product WGR?  |
|---|--|
| <p><b>Product 8 – Whole-Grain Cheese Pizza</b></p> <p>Ingredients: <b>CRUST</b><br/> <b>(FLOUR BLEND</b><br/> <b>[WHOLE WHEAT</b><br/> <b>FLOUR, ENRICHED</b><br/> <b>WHEAT FLOUR</b><br/> <b>{BLEACHED WHEAT</b><br/> <b>FLOUR, MALTED</b><br/> <b>BARLEY FLOUR,</b><br/> <b>NIACIN, REDUCED IRON, THIAMINE</b><br/> <b>MONONITRATE, RIBOFLAVIN, FOLIC ACID}</b>,<br/>           water, soybean oil, dextrose, baking powder, yeast, salt,<br/>           dough conditioners [<b>WHEAT FLOUR</b>, salt, soy oil,<br/>           ascorbic acid], wheat gluten). <b>SHREDDED</b><br/> <b>MOZZARELLA CHEESE</b> (Pasteurized part skim<br/>           milk, cheese cultures, salt, enzymes). <b>SHREDDED</b><br/> <b>MOZZARELLA CHEESE SUBSTITUTE</b> (Water, oil<br/>           [soybean oil, partially hydrogenated soybean oil with<br/>           citric acid], casein, milk protein concentrate, modified<br/>           food starch, contains 2% or less of the following:<br/>           sodium aluminum phosphate, salt, lactic acid,<br/>           mozzarella cheese type flavor [cheese {milk, culture,<br/>           rennet, salt}, milk solids, disodium phosphate],<br/>           disodium phosphate, sorbic acid. <b>SAUCE</b> (Water,<br/>           tomato paste [not less than 28% NTSS], pizza seasoning<br/>           [salt, sugar, spices, dehydrated onion, guar and xanthan<br/>           gum, garlic powder, potassium sorbate, citric acid,<br/>           tricalcium phosphate and soybean oil {prevent caking}],<br/> <b>MODIFIED FOOD STARCH</b>). Contains: wheat, milk,<br/>           and soy.</p>  | <p style="text-align: center;"><input type="checkbox"/> Yes    <input type="checkbox"/> No    <input checked="" type="checkbox"/> PFS Needed</p> <p><b>WGR Criteria:</b></p> <p><input type="checkbox"/> WGR Criterion 1 – WHOLE GRAIN<br/> <input checked="" type="checkbox"/> WGR Criterion 2 – ENRICHED<br/> <input type="checkbox"/> WGR Criterion 3 – NONCREDITABLE</p> <p>This product is a “combination food” – it contains other food groups besides the grains component (cheese, cheese substitute from the meat/meat alternates component and tomato sauce from the vegetables component). To review this product for compliance with the WGR requirement, we only need to look at the grain ingredients (crust).</p> <p>For criterion 1, this product contains a <b>flour blend</b> of whole-wheat flour and enriched flour. We need to know the weight of <b>each individual ingredient</b> in the flour blend. The manufacturer’s PFS must document that the weight of the whole-wheat flour is more than the weight of the soybean oil.</p> <p>To meet criterion 3, the manufacturer’s PFS must document that the weight of the wheat flour is less than 3.99 grams.</p> <p>The <b>modified food starch</b> is listed as an ingredient in the “<b>sauce</b>” so it does <b>not</b> count toward the noncreditable grains because it is not part of the “crust.”</p> |



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| Ingredients Statement   | Is Product WGR?   |
|---|---|
| <p><b>Product 9 – Whole-Grain Ready-To-Eat Cereal</b></p> <p>Ingredients: <b>WHOLE GRAIN WHEAT</b>, sugar, <b>BROWN RICE FLOUR</b>, <b>WHOLE GRAIN OATS</b>, honey, canola oil, maltodextrin, salt, corn syrup, cinnamon, barley malt syrup, barley malt extract, color added, soy lecithin, artificial flavor, baking soda, trisodium phosphate, vitamin E (mixed tocopherols) and BHT added to preserve freshness.</p> <p>Vitamins and Minerals: Calcium Carbonate, Vitamin E acetate, a <b>B VITAMIN (NIACINAMIDE)</b>, Vitamin C (sodium ascorbate), <b>IRON</b> (a mineral nutrient), Vitamin B6 (pyridoxine hydrochloride, <b>VITAMIN B2 (RIBOFLAVIN)</b>, <b>VITAMIN B1</b> (thiamin mononitrate), <b>FOLIC ACID</b>, Vitamin A (palmitate), Vitamin B12, Vitamin D3.</p>         | <p style="text-align: center;"><input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> PFS Needed</p> <p><b>WGR Criteria:</b></p> <p><input checked="" type="checkbox"/> <b>WGR Criterion 1 – WHOLE GRAIN</b><br/> <input checked="" type="checkbox"/> <b>WGR Criterion 2 – ENRICHED</b><br/> <input checked="" type="checkbox"/> <b>WGR Criterion 3 – NONCREDITABLE</b></p> <p>To meet the WGR criteria, ready-to-eat (RTE) breakfast cereals must list a whole grain first in the ingredient list and the cereal must be fortified. This cereal meets both requirements.</p> <p>Whole-grain wheat is the first grain ingredient and the other grain ingredients (brown rice flour and whole grain oats) are whole grains (criteria 1 and 2). There are no noncreditable grains (criterion 3).</p> <p>We know it is fortified because it contains the five <b>enrichment</b> nutrients (iron, thiamin, riboflavin, niacin and folic acid) and seven <b>additional</b> nutrients: Calcium Carbonate, Vitamin E acetate Vitamin C (sodium ascorbate), Vitamin B6 (pyridoxine hydrochloride, Vitamin A (palmitate), Vitamin B12, Vitamin D3.</p> |
| <p><b>Product 10 – Blueberry Muffin</b></p> <p>Ingredients: <b>WHOLE-WHEAT FLOUR</b>, sugar, eggs, water, blueberries, <b>enriched flour (flour, malted barley flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid)</b>, invert sugar, soybean oil, <b>contains 2% or less of:</b> palm oil, canola oil, propylene glycol mono- and diesters of fats and fatty acids, <b>OAT FIBER</b>, leavening (baking soda, sodium aluminum phosphate, monocalcium phosphate), mono- and diglycerides, <b>MODIFIED FOOD STARCH</b>, potassium sorbate (preservative), sodium alginate, salt, soy lecithin, natural and artificial flavor, sodium stearoyl lactylate, <b>WHEAT STARCH</b>, blackberry juice concentrate, blueberry juice concentrate, malic acid, enzymes</p>  | <p style="text-align: center;"><input type="checkbox"/> Yes   <input type="checkbox"/> No   <input checked="" type="checkbox"/> PFS Needed</p> <p><b>WGR Criteria:</b></p> <p><input checked="" type="checkbox"/> <b>WGR Criterion 1 – WHOLE GRAIN</b><br/> <input checked="" type="checkbox"/> <b>WGR Criterion 2 – ENRICHED</b><br/> <input type="checkbox"/> <b>WGR Criterion 3 – NONCREDITABLE</b></p> <p>Whole wheat flour is the first ingredient (criterion 1) and the product contains enriched flour (criterion 2).</p> <p>This product contains three noncreditable grains (oat fiber, modified food starch and wheat starch). To determine if this product meets criterion 3, the menu planner must obtain a PFS from the manufacturer. If the combined weight of the oat fiber, modified food starch and wheat starch) is less than 3.99 grams, this product complies with the noncreditable grains limit (criterion 3) and meets the WGR definition.</p> <p>Products containing noncreditable grains in amounts more than 2 percent of the product formula (3.99 grams for groups A-G) cannot contribute toward the reimbursable meal.</p>                                 |



The Connecticut State Department of Education's (CSDE) **What's for Lunch** workshop training materials are available on the CSDE's [Meal Pattern Training Materials](#) Web page. This worksheet is available at [www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/wfl/wflws3A](http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/wfl/wflws3A).