

## RECIPE MODIFICATION

*How much do you know?*

Feeling like your food choices are limited? This is not necessarily so...many delicious recipes are available after you make some simple changes to lower the amount of phenylalanine (phe).

This exercise is designed to help you learn about ways you can change recipes to fit into a low phe food pattern.

Let's start with a short "quiz" to see how much you already know.



**PART 1:** Circle *T* if the statement is true. Circle *F* if the statement is false.

1. T F The phe content of most standard cookbook recipes can be decreased by changing some of the ingredients.
2. T F Regular mayonnaise has less phe than Miracle Whip.
3. T F Margarine can be substituted for butter in most recipes.
4. T F Margarine without milk solids has less phe than margarine with milk solids.
5. T F Low protein pasta and rice can be used in recipes that call for pasta and rice.
6. T F Some recipes may be high in phe because they contain "hidden" high phe ingredients such as butter or mayonnaise.

**PART 2:** Circle the best answer.

7. If a recipe calls for pork, you should:
  - a. not add the pork
  - b. add only half of the amount that is called for
  - c. add the pork and eat everything but the pork
  - d. do not know what to do
8. If a recipe calls for 1 cup milk, it is best substituted with:
  - a. 1 cup non-dairy creamer (e.g., Mocha Mix)
  - b. 1 cup water
  - c. ½ cup non-dairy creamer (e.g., Mocha Mix) plus ½ cup water
  - d. nothing
9. To lower the amount of phe in a recipe, you should:
  - a. leave out the high phe ingredients
  - b. use low phe ingredients in place of the high- or moderate-phe ingredients
  - c. reduce the quantity of moderate phe ingredients
  - d. do all of the above



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# RECIPE MODIFICATION



## Directions:

1. Turn to the page with the recipe your group will modify.
  - Cross out high phe ingredients to leave out.
  - Cross out moderate phe ingredients or change the amount called for.
  - Add low phe ingredients in the blank rows.
  - Calculate the amount of phe in the original recipe and in the modified version.

**HINTS:** Use the Low Protein Food List to look up the phe values for ingredients.  
Use the Alternative Food Choices List to select lower phe ingredients. (Use this handout to modify your family's recipes too!)

2. When your group has agreed on a lower-phe version of the recipe, use the markers to modify the transparency.
3. Share your new and improved recipe with the entire group. Be sure to share:
  - The ingredients that were eliminated and/or decreased
  - The ingredients that were added
  - How much phe you "saved"



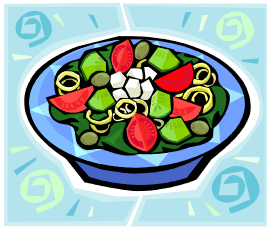
## WHEN MODIFYING RECIPES...

1. Leave out the high phe ingredients.
2. Use low phe ingredients in place of the high- and moderately high- phe ingredients.
3. Decrease the amount of moderately-high phe ingredients.
4. Add low phe ingredients that are appealing to you.



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## Waldorf Salad

INGREDIENT	ORIGINAL RECIPE mg phe	NEW RECIPE mg phe
1 cup diced celery		
1 cup diced apples		
1 cup grapes, halved and seeded		
½ cup raisins		
1 cup miniature marshmallows		
½ cup walnuts or pecans		
1 cup mayonnaise		
½ cup whipped cream		
<b>TOTAL PHE</b>		



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## Moroccan Pilaf



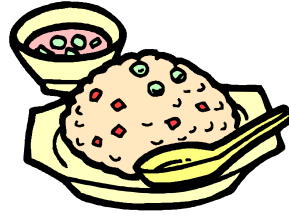
INGREDIENT	ORIGINAL RECIPE mg phe	NEW RECIPE mg phe
2 Tbsp butter		
½ cup chopped onion		
½ cup diced carrots		
¼ cup chopped raisins		
½ tsp cayenne pepper		
1 Tbsp chopped fresh parsley		
4 ounces cooked shrimp		
½ cup chopped pecans		
1 ½ cup cooked rice		
½ cup orange juice		
¼ cup bread crumbs		
¼ cup grated cheese		
<b>TOTAL PHE</b>		



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## Chinese Fried Rice



INGREDIENT	ORIGINAL RECIPE mg phe	NEW RECIPE mg phe
3 Tbsp vegetable oil		
2 beaten eggs		
½ cup diced, fully cooked ham or pork		
¼ cup finely chopped fresh mushrooms		
¼ cup thinly sliced green onion		
4 cups cooked rice		
3 Tbsp soy sauce		
<b>TOTAL PHE</b>		



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## Creamy Potato Salad

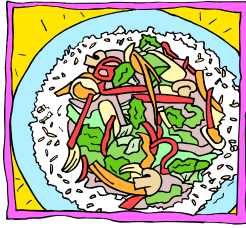


INGREDIENT	ORIGINAL RECIPE mg phe	NEW RECIPE mg phe
6 medium potatoes		
1 cup thinly sliced celery		
½ cup finely chopped onion		
¼ cup chopped sweet pickle		
1 ¼ cups mayonnaise or salad dressing		
2 tsp sugar		
2 tsp celery seed		
2 tsp vinegar		
2 tsp prepared mustard		
1 ½ tsp salt		
2 hard cooked eggs, coarsely chopped		
<b>TOTAL PHE</b>		



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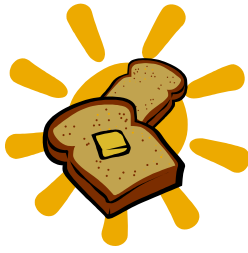
## Mexican Rice

INGREDIENT	ORIGINAL RECIPE mg phe	NEW RECIPE mg phe
1 cup rice, cooked		
½ cup tomato juice		
6 slices bacon		
¼ cup chopped red onion		
¼ cup chopped green or red bell pepper		
1 Tbsp butter		
¼ tsp ground cumin		
1/8 tsp crushed red pepper		
¼ tsp salt		
½ tsp chili powder		
1 Tbsp vinegar		
2 tsp canned diced green chilies		
½ cup whole kernel corn		
<b>TOTAL PHE</b>		

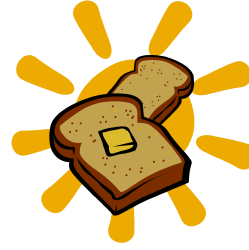


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## French Toast



INGREDIENT	ORIGINAL RECIPE mg phe	NEW RECIPE mg phe
3 beaten eggs		
¾ cup milk		
1 Tbsp sugar		
1/8 tsp ground cinnamon		
10 slices dry, white bread		
butter		
<b>TOTAL PHE</b>		

Cooking directions: In a shallow bowl, beat together eggs, milk, sugar, cinnamon, and ¼ tsp salt. Dip bread in egg mixture, coating both sides. In a skillet, cook bread on both sides in a small amount of butter over medium-high heat until golden brown; add more butter as needed. Serve with maple-flavored syrup. Makes 5 servings.



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## RECIPE MODIFICATION

*How much did you learn?*

This activity focused on modifying recipes to lower the amount of phenylalanine (phe). See how much you learned by completing the exercise below.



**PART 1:** For each ingredient, decide what you would do to decrease the amount of phe. Write the change on the line next to the ingredient.

1. 1 cup white rice \_\_\_\_\_
2. 2 Tbsp butter \_\_\_\_\_
3. 4 Tbsp soy sauce \_\_\_\_\_
4. 1 cube bouillon \_\_\_\_\_
5. 1 cup corn \_\_\_\_\_

**PART 2:** Circle T if the statement is true. Circle F if the statement is false.

6. T F The phe content of most standard cookbook recipes can be decreased by changing some of the ingredients.
7. T F Regular mayonnaise has less phe than Miracle Whip.
8. T F Low protein pasta and rice can be used in recipes that call for pasta and rice.
9. T F To modify recipes for baked goods, such as cookies and cakes, substitute low protein baking mixes for flour.
10. T F Egg replacer can be substituted for eggs in any recipe.
11. T F Using 1 cup low protein rice instead of 1 cup regular rice can decrease the amount of phe by more than 200 mg.
12. T F When thickening sauces or gravy, use flour instead of cornstarch because it has less phe.



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**PART 3:** Circle the best answer:

13. The best way to keep the flavor of an ingredient (such as soy sauce) and decrease the amount of phe is to:

- a. not change the ingredient
- b. leave the ingredient out
- c. use less of the ingredient than the recipe calls for
- d. not bother making the recipe because you cannot keep the same flavor and decrease the phe content

14. To lower the amount of phe in a recipe, you should:

- a. leave out the high phe ingredients
- b. use low phe ingredients in place of the high- or moderate-phe ingredients
- c. reduce the quantity of moderate phe ingredients
- d. do all of the above



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