

Add Healthy Foods to Your Recipes



Did you know that eating certain foods may help reduce your risk for developing chronic illnesses including hypertension, heart disease, diabetes, and cancer? These foods are called functional foods, and they provide health benefits beyond meeting basic nutrition needs. Foods that are considered functional include fruits, vegetables, nuts, whole grains, and many more.

It is important to note that the health benefits a food provides must be greater than its negative ingredient components (such as sugar and salt). For example, jams and jellies contain fruits, which, by themselves, are functional foods, but they also contain high amounts of sugar. The high sugar content in jams and jellies reduces the overall healthiness and functional benefits of the food.

Making a few easy substitutions and using healthy cooking techniques can help you refresh your favorite family recipes with a twist. Small changes can make big differences nutritionally. It is helpful to have the right utensils and good quality nonstick skillet, baking pans, and saucepans. These will allow you to sauté and bake without having to add extra fat. When experimenting with adding functional foods to recipes, you have many options for adding in a new ingredient. For example, you can add shredded carrots to lasagna. Substituting ingredients and refining a recipe can take some trial and error, but the healthier result will make the effort worth it.

When substituting an ingredient, think about what the original ingredient does for the food you are making. Make sure the functional foods you are adding have similar properties to the ingredients you are replacing. Make changes to your recipe gradually. Make one or two ingredient changes the first time you modify it to see how it turns out. If those changes work well, try another substitution the next time.

You can also add functional ingredients to foods you already eat, which requires less effort than modifying a recipe. Try adding fruit to things like cereal, oatmeal, and yogurt. Nut butters are a good addition to whole-grain toast because they contain healthy unsaturated fats that may reduce cholesterol levels. When making pizza, you can add vegetables, such as bell peppers, tomatoes, or spinach, to increase your consumption of functional foods.

Be careful when cutting back on the amount of sugar and fat in recipes. Decreasing sugar may affect the texture

and/or the volume of the food. Reducing fat can make baked goods tough or dry, or not rise properly. Reduced-fat baked goods tend to bake faster than those made with full fat. Try lowering the oven temperature by 25 degrees, and check for doneness a few minutes early when baking reduced-fat goods. Fat helps baked goods rise. You may need additional leavening if you have reduced the fat in a recipe. Baking soda is preferred if there is an acidic ingredient such as fruit puree in the recipe. Start by adding $\frac{1}{4}$ teaspoon baking soda for each half-cup of acidic ingredient. If there is no acidic ingredient, add some extra baking powder for lightness, starting with $\frac{1}{4}$ teaspoon. But be careful—too much additional leavening can leave a bitter aftertaste. Another way to add lightness is to whip egg whites to soft peaks and gently fold them into the prepared batter.

Success in using functional substitutions comes with practice. Don't be afraid to experiment!

Table 1 provides ideas for adding functional food ingredients to foods that would not normally contain them. It also identifies the health benefits of each substitution.

Additional Resources

MSU Extension Publication M1422 *Healthy Cooking for You and Your Family: Food Label and Recipe Modification*.

<http://extension.msstate.edu/publications/miscellaneous/healthy-cooking-for-you-and-your-family-food-label-and-recipe>

MSU Extension Publication IS1915 *Family Food Solutions: The Fruit Group*

<http://extension.msstate.edu/publications/family-food-solutions-the-fruit-group-how-sweet>

MSU Extension Publication IS1686 *Hidden Salt: High Sodium Foods*

<http://extension.msstate.edu/publications/information-sheets/hidden-salt-high-sodium-foods>

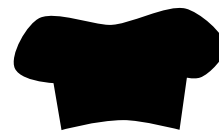
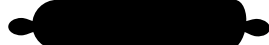
References

This publication contains information modified from a booklet by the Naval Hospital of Bremerton Health Promotion Department.

Naval Hospital of Bremerton Health Promotion. (2012). *Recipe Makeover Tips and Resources*. Bremerton, WA.

Table 1. Functional food recipe substitutions.

If your recipe calls for...	You can you use...	The science behind it is...
Salt	For sweets: cinnamon, nutmeg, cloves, or ginger	Like salt, these spices bring out the sweet flavor in baked goods.
	For savory foods: pepper, garlic, basil, or dill	These spices add flavor to savory foods. Many spices and herbs contain components that reduce inflammation and oxidation in the body, which are contributing factors to heart disease, diabetes, and cancer.
Oil	In baked goods: fruit purees that do not have a strong flavor, such as applesauce, pumpkin puree, and carrot puree	In baking, the role of oil is to coat the flour, preventing it from combining with the water (or other wet ingredients) and developing gluten. These purees are able to function in a similar way without adding fat to your baked good. Tip: First try substituting half of the oil and see how it turns out. If you are baking something light in color, avoid dark-colored purees because these will change the color.
Cream	In soups: pureed vegetables	In soup, cream is used to thicken. Adding vegetable purees will thicken the soup without the saturated fat found in cream and provide extra plant nutrients.
All-purpose flour	Whole-wheat flour or oat flour	These options provide extra fiber. One cup of whole-wheat flour has 12 grams of fiber, while 1 cup of all-purpose flour has just 3 grams. Tip: You may need to slightly reduce the liquid in your recipe when using these flours.
Sour cream	Plain, nonfat, Greek yogurt	Although sour cream and yogurt contain probiotics that are beneficial to health, sour cream has 5 grams of fat in 2 Tbsp. Nonfat yogurt contains less fat and, therefore, is more functional while offering a similar texture and flavor.
Ice cream	In a shake: frozen banana or frozen yogurt	If making a shake, you can use a banana to provide creaminess and sweetness instead of ice cream. Frozen yogurt still offers calcium and protein found in ice cream but has less fat and sugar.
Baking chocolate (1 oz)	3 Tbsp cocoa powder + 1 Tbsp water (or oil)	Eating cocoa may reduce the risk of heart disease, but processing to produce baking chocolate decreases some of its nutrients.
Sugar	Honey	Honey has anti-inflammatory properties and vitamins and minerals that table sugar does not. Tip: Honey is sweeter than sugar. Use about ¼ less honey than sugar. Depending on what you are making, you may need to reduce the liquid in your recipe so it will not be runny.



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