Egg Substitutions

Although the good news is that just about any recipe that calls for eggs can be made eggless by using the proper egg substitute, there is no single answer to what the best substitute will be.

Eggs perform 6 different functions. Four of these functions are leavening agent, strengthen gluten to provide structure, binder or source of moisture.

For 90% of baking, one could probably use: **3 tablespoons applesauce** + **½-1 tsp baking soda** + **1 tsp vinegar or 3 tablespoons applesauce** + **½-1 tsp baking** powder to replace each egg (generally ½ to 1 teaspoon of leavening agent per cup of flour). Another common one used is the ground flax seed, below. Here is a list of other substitutes, then guidance on when to use what follows.

The easiest, of course, is to search for the name of the baked good and put the word "vegan" in front of it and find a recipe someone else has already made the egg substitution!

Each * below replaces One Egg

- 3 TBS applesauce +1 tsp baking powder
- * 3 TBS applesauce +1 tsp baking soda + 1 tsp vinegar
- 3 TBS pureed pumpkin or mashed potato or pureed sweet potato +1 tsp baking soda + 1 tsp vinegar
- * 1/2 banana, mashed (medium size) +1 tsp baking soda + 1 tsp vinegar
- * 1 tsp baking soda + 1 TBS vinegar
- * 1 tsp baking soda + 2 TBS lemon juice
- * 1 tsp baking powder + 1 TBS water + 1 TBS vinegar
- * 1/2 tsp baking powder + 2 TBS water + 2 TBS flour + 1/2 TBS vegetable shortening
- * 1 tsp baking powder + 1 1/2 TBS water + 1 1/2 TBS oil
- * 2 TBS ground flax seed + 3 TBS water (mix and let sit for 2 minutes until it looks like a gel) +1 tsp baking soda + 1 tsp vinegar
- * 2 TBS chia seed + 3 TBS water (mix and let sit for 2 minutes until it looks like a gel) +1 tsp baking soda + 1 tsp vinegar
- * 2 TBS arrowroot flour or potato starch mixed in 3 TBS water
- 1 TBS tapioca starch in 3 tablespoons (mix well & allow to gel a bit before using)
- * 3 TBS Mori-Nu box tofu pureed until smooth
- * 1 TBS cornstarch + 3 TBS water

First, determine what the egg is doing for the recipe, and it may be doing multiple functions, like both binding and providing moisture. An egg provides about three tablespoons of moisture.

If you need lift then you need to use one of the baking powder or baking soda substitutions with vinegar or lemon juice. Vinegar/lemon juice (the acid) starts the chemical reaction with the baking powder/baking soda (the base) in your recipe that CREATES the lift. NO, you will NOT taste the vinegar in the finished product. Vinegar is slightly more acidic than lemon juice which is why you need less of it in a recipe to get the chemical reaction you need. Some use commercially purchased Ener-G.

If you need **binding without moisture**, then the cornstarch or arrowroot or other starch substitutions would be appropriate. You can also use the ground flax seed or the chia seed that will gel with moisture in your recipe to bind.

If you need **both binding and moisture** then a puree might work better than a baking powder based substitution. But many things would work including ground flax seed or chia seed or blended Mori-Nu.

Note: You MIGHT be able to **taste** the banana, sweet potato or pumpkin in a recipe (which is desirable in some products like waffles or muffins!) You will <u>see</u> specks in light cookies if you use the flax or chia seeds. Both flax and chia seeds are high in brain healthy Omega-3s and contain fiber and are really good for you. Mori-Nu should be blended like in a bullet until tofu is smooth and creamy. While it won't alter the flavor of a recipe, using tofu as an egg substitute will make baked goods a bit on the heavy and thick side, so it works well in brownies and coffeecake, but wouldn't work well in something that needs to be light and fluffy.

Ener-G is a versatile and easy to use commercial egg replacer available in health food or larger grocery stores. It is a little pricy when compared to other substitution methods. It works well for cake where eggs serve as a leavening agent, helping to make the cake light and fluffy.

Specific Suggestions:

Pancakes: 3 tablespoons applesauce + ½-1 tsp baking soda + 1 tsp vinegar per egg replaced. Mix vinegar with the non-dairy milk then mix all ingredients. Let batter rest for 5 minutes before cooking to allow for the chemical reaction that will cause the lift. Can also use the other puree options like banana or sweet potato but that may affect taste or color.

Quick breads like banana bread: 1 tsp baking soda + 1 TBS vinegar

Box Cake Mix: 8oz soda-OMIT eggs, oil and water. Batter will be thick, needs to be thick because the gluten with the Co2 from the soda is doing the lifting.

OR

If box calls for 3 eggs, ½ cup oil, 1 cup water, then OMIT those and instead mix in 1½ tsp baking powder to the box mix. Mix 3 tablespoons soda pop in with 3 tablespoons GROUND flax seed and let sit a minute. Add ¼ cup softened vegan margarine, 2 teaspoons vinegar (for lift) and 8 ounces of soda then flax mix to cake mix. Mix and bake according to package directions. Place in pre heated oven IMMEDIATELY for best rising. Batter will be thicker than one is used to, that is to give it the lift when baking.

Bisquick Coffeecake: 3 TBS Mori-Nu box tofu pureed until smooth (makes it very moist!)

Oatmeal Cookies: 2 TBS ground flax seed + 3 TBS water (mix and let sit for 2 minutes until it looks like a gel)

Peanut Butter Cookies: 3 tablespoons applesauce + 1 tsp baking soda + 1 tsp vinegar

Cakes or Brownies: Find a recipe where someone else has already figured it out. There are tons of recipes online!

Home-made Ener-g egg replacer

1 cup potato flour 3/4 cup tapioca flour 2 tsp baking powder Mix well, keep in air-tight jar. 1 1/2 tsp of mix + 1 Tbsp water = 1 egg yolk 1 1/2 tsp of mix + 2 Tbsp water = 1 whole egg

Shake well in a screw top jar, add to the dry ingredients in baking, then increase the liquid in the recipe accordingly. Since this has baking powder in it, it should also work fine in baked goods where the egg is needed for leavening.