

PENNY SAVER NEWS

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What's all the Fuss about Bread?

You probably heard all the news reports recently about how there is 'rubber in our bread!' Not only were they claiming there was rubber in one company's bread, it was in all kinds of bread, from many different companies. Some of them immediately 'pledged' to have it removed. It certainly made for a lot of loud news reports.

But unless you decided to imitate your puppy and start chewing on a flip-flop, you were in no danger of eating any rubber! So what was all the fuss about? And more importantly, why was this ingredient there in the first place? Here are some facts.

The ingredient in question is azodicarbonamide. Big name, so it is usually just called ADA. It is used in bread and other doughs as a 'dough conditioner'. It helps the dough rise, and makes it easier to handle by keeping the dough from being so sticky. It works this way. Freshly ground wheat flour is hard to make into bread. The proteins won't stick together easily, so the dough is sticky. And, if they don't stick together they can't trap the carbon dioxide from the yeast or baking powder. The gas escapes and the bread doesn't rise.

Centuries ago millers recognized that old flour made better bread than fresh flour. If flour is allowed to sit and age for months, oxygen gradually ties onto the proteins naturally. That lets the proteins stick to each other. But a lot of flour sitting around getting old takes up space and time. The space costs money. You don't get your money until you sell it. Bugs are likely to get into it. Then, back in the 1950s it was discovered that some chemicals can speed up the process of putting oxygen into the protein. Several have been used, and ADA is one of them. It was approved by the FDA for use in dough in 1962.

ADA also produces some gas on its own, just as baking powder and baking soda do. So that too helps the bread to rise. It doesn't take very much to improve the quality of the flour. Only 1 tablespoon is enough for 100 pounds of flour. That's less than a Tbsp in over 100 loaves of bread (or 4 feet in 16 miles).

When the bread is baked some of the ADA breaks down into two other chemicals. The one that seems to have the food bloggers in a snit is urethane. Yes, it does show up in bread made with treated flour. But it shows up in bread anyway, whether the flour was treated or not. If you grind your own flour and make your own bread, a food lab will still be able to measure urethane in your bread. And if you prefer your good homemade bread toasted, well sorry, but that creates even more urethane! It is also made naturally in many fermented foods (I guess we need to blame the yeast for it!), brandy and some other alcoholic beverages. No wine with your toast either!

So, that's why it is in bread. Why is it in rubber and plastic? It does a similar job there. It helps the strands of rubber or plastic stick to each other so they make a better net for trapping gas. And it makes tiny bubbles to make the rubber or plastic soft, light and spongy, instead of hard, flat and solid. Stiff, hard soles on our sneakers are not comfortable. Flip-flops that feel like boards under our feet are not good. ADA helps make them spongy and flexible.

ADA is certainly not the only chemical that is used in both food and industry. Vinegar (acetic acid), salt, and hundreds of others find uses in more than food. Calcium for our bones also makes drywall. There's a new process, not commercial yet but they're working on it, to make plastic from banana peels. Will we stop eating bananas because now it will be in plastic? I certainly hope not!

Here's a recipe for muffins that are easy to make, and super-easy to put in your child's hand for breakfast on the way out the door to school. Have one yourself on your way to work too. Your brain will thank you for it!

Cheesy Ham Breakfast Muffins

1 cup all-purpose flour

1 cup whole wheat flour

1 Tbsp baking powder

½ tsp salt

1 cup low fat milk

1 Tbsp lemon juice

1 egg

3 Tbsp vegetable oil

1 ¼ cup cooked, chopped lean ham

1 ½ cups shredded low fat or 50% reduced fat cheese, Cheddar or Swiss

Preheat oven to 400° F. Spray muffin pan with cooking spray, or put muffin papers in each cup. Put lemon juice in measuring cup and add milk to make 1 cup. Stir. Mix both flours, salt and baking powder in large bowl. In small bowl beat egg with oil, stir in soured milk and mix well. Add ham and cheese and mix. Pour the liquid mixture into the bowl of flour, and stir with a rubber spatula just until combined. Do not overmix, it's okay if there are some lumps. Spoon batter into muffin cups, dividing it among 12 cups. Each should be about ¾ full. Bake 20 minutes until browned. Remove from pan to cool. Makes 12 muffins.

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