The Gas in your Refrigerator

Do you ever notice that sometimes things seem to spoil a little bit faster in the refrigerator than we expect them to? That head of lettuce that was just fresh 2 days ago is suddenly speckled with brown. The asparagus that seemed so lovely in the store turns out to be tough and chewy this time, but was great the first time you bought it. While maybe they were just older than they appeared, there might be some other, invisible hand in the pot here. There might be ethylene gas in the refrigerator.

No one put it there. It didn’t come from the store. Stop and think back a second. Did you have apples in the crisper drawer too? A few pears maybe, or part of an avocado? They might be your culprit! These fruits and many others naturally produce ethylene as they ripen. They’ll make more of it if they’re injured, cut or bruised. They make even more when they’re over-ripe and starting to rot. The old saying “One rotten apple will spoil the barrel.” is completely true. If one apple started to rot in a whole case or barrel of apples, pretty soon the whole barrel would be black mush.

Without this ripening gas the fruit would not ripen normally. It’s part of the chemical changes that turn a rock-hard green pear into a juicy sweet soft yellow handful of deliciousness. Other fruits that produce ethylene in significant amounts include cantaloupes, peaches, bananas and nectarines. Others produce just a little of it.

All that’s fine, we like ripe pears and peaches. The problem is that many other things, especially many vegetables, are sensitive to ethylene even though they don’t produce it. Some of the more sensitive veggies include all kinds of lettuce and other
greens. Green onions, some dry onions and mushrooms, turnip roots as well as greens, and even potatoes are sensitive.

What happens when something is 'sensitive' to this gas? They might ripen too fast or get over-ripe, soft and mushy. A soft pear is good, a soft onion is not. Asparagus gets tough and chewy, instead of staying crisp. Broccoli turns yellow much faster when there’s ripening gas in the air. Watermelon will lose its flavor and get watery when exposed to ethylene.

A couple of generations ago, when fruits and vegetables were stored in root cellars, people were careful to pack things separately. They didn’t know why it happened, they just knew the cabbage would never make it through the winter if they put the apples in the same room. Our commercial producers know which things can share a warehouse and which must be kept separate. They continuously pump air out of storage units to pull the ethylene out before it builds up. For a few fruits they will pump extra in to speed up the ripening process.

We don’t try to keep fresh produce for months in our refrigerators, but if there’s enough gas even a few days can be enough to affect our veggies. Refrigerators today seal tightly enough that any gas that’s produced can’t get out, so it can build up quickly. But most refrigerators do have 2 crisper drawers. You can at least designate one for the produce that makes the gas (apples, pears, peaches, nectarines, bananas, avocado and cantaloupe) and the other for this things that are sensitive to it (lettuce and greens, onions, mushrooms, turnips, broccoli, asparagus, tomatoes and potatoes). Not everyone keeps bananas, tomatoes or potatoes in the refrigerator, but some people do. The cold won’t make them unsafe, but it does affect how they look. Keeping these two
groups of foods separate can help them last a lot longer in the refrigerator. No one has money to throw away on rotting food these days!

Here’s a variation on the traditional broccoli salad and on standard coleslaw.

Look for the package of broccoli slaw, all ready shredded, in the section with bagged salads in the grocery. If you don’t have a sweet onion use 4 green onions, chopped.

Broccoslaw

1 (12-oz) package broccoli slaw 1 cup sunflower seeds
½ cup slivered almonds 1/3 cup vegetable oil
½ cup chopped strawberry onion or sweet onion 1/3 cup white vinegar
1/3 cup equivalent sugar substitute (or sugar) 1 pkg ramen noodles
½ cup raisins or dried cranberries, optional

Combine the slaw, seeds, almonds, onion and raisins if using in large bowl and mix well. Whisk the oil, vinegar and sugar substitute in small bowl until dissolved. Pour over slaw mixture and toss gently until coated. Add the noodles (discard the seasoning packet) and mix. Cover and chill 2-10 hours. Serves 8.