

## **Confusing Food Safety with Food Quality**

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When chatting with people about food safety, I am frequently surprised at how many of them confuse safety with quality. These are two distinctly different attributes when it comes to most food materials.

As a general guideline, quality is something that relates to our senses and allows us to make evaluations of how appealing something is to us personally. On the other hand, safety relates to whether or not consuming the food will make us ill, or jeopardize our health in any way.

When it comes to quality, our first judgement call is usually based on appearance. Is the apple bright and shiny, are the bananas the proper colour, or do the potatoes have an appealing shape? If a cauliflower has started to turn from creamy white to brown, we know it is past its prime and we tend to avoid purchasing it. Sadly, many fruits and vegetables are rejected solely on their appearance. The “ugly” ones go to waste, even though they are as wholesome and nutritious as any of the others.

The next thing you might evaluate is the feel, or texture. We often thump cantaloupes before putting them in our shopping carts. We might try bending the stalks of celery to see if they have retained their turgor, or lost some of their moisture and become somewhat flaccid.

After purchasing our foods, we can then use our other senses (smell, taste, and even hearing) to evaluate their quality. Apples are full of tiny air sacs which tend to “snap” when we bite into them. If we don’t get that distinctive sound, we may lower our opinion of the apple’s quality. Similarly, we expect to hear the appropriate sound when we break a crisp carrot.

As they say, the proof of the pudding is in the eating, so taste and mouthfeel can be a major determinant of overall quality. Taste can be a highly individual and subjective preference, as is mouthfeel. Each of us has a range of attributes that meet our approval.

Smell rounds out our five basic senses. For most of us, the smell of cookies baking in the oven is quite enticing. We also associate smell with the quality of the produce we purchase. You may enjoy the pleasant, characteristic aromatic “notes” that accompany biting into a segment of a fresh juicy orange as the light volatile compounds flood your nasal cavities.

After going through the process of selecting what we feel is the highest quality product, we still have not addressed the issue of its “safety”. A simple way to think of “safety” is to ask the question, “Will this make me sick if I eat it?” Safe foods will not have any negative impact on your health, as we’ve already mentioned.

Unfortunately, we cannot see the real culprits that contribute to making foods unsafe to consume. These are pathogenic microorganisms which are too small to be seen by the naked eye. They may also be present without giving us any indication that they are there. If a product has grey, fuzzy, mold colonies on the surface, we know to avoid it. If the flesh of the fruit is soft and mushy, we should probably pass on that as well. The skin should also be free of blemishes and punctures since these can be indicative of other problems and may allow entry points for microorganisms.

Then, there is the old reliable “smell test”. If something doesn’t smell right, then we shouldn’t buy it or eat it. This is perhaps the best indicator that not everything is exactly as it should be – but it is not foolproof.

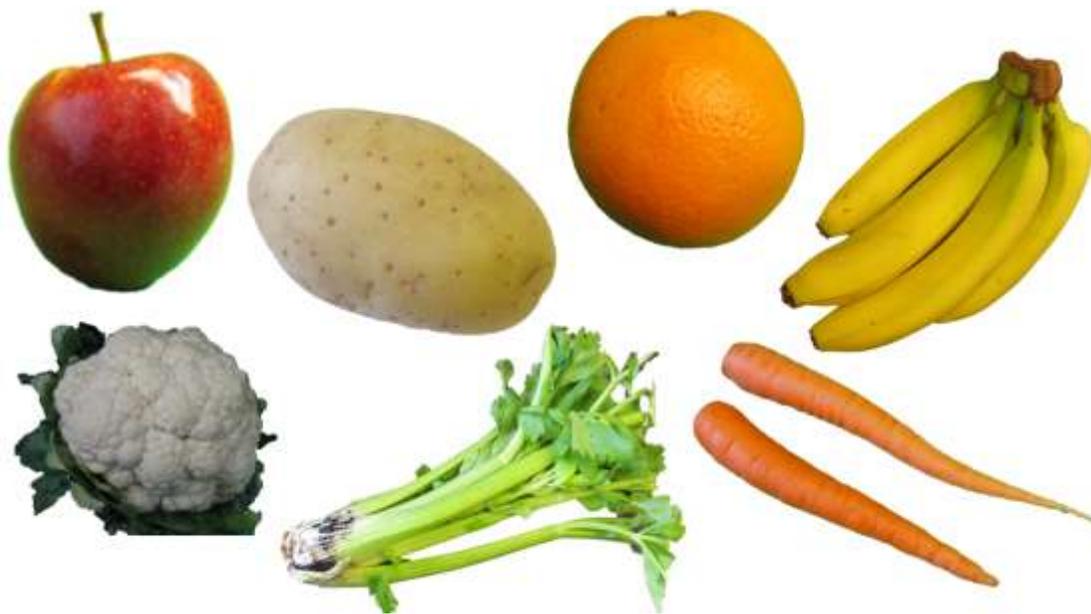
All of these fail to indicate the presence of harmful microorganisms before it’s too late. It doesn’t take many pathogenic microorganisms to endanger our health.

Simply eating tree fruits that have fallen to the ground where they may have come in contact with animal droppings can introduce harmful disease-causing microbes into our bodies. The same can be said for various berries. I know its “yucky”, but that’s what’s out there. Eating vegetables taken from the ground may have potentially harmful bacteria on their surfaces as a result of bacteria in the soil, or using natural fertilizers. This is why it is important to wash fruits and vegetables thoroughly before eating them.

When travelling, I usually wash fresh fruit with hand sanitizer and rinse it thoroughly with bottled water before eating it. Call me paranoid, but this has saved me from nasty bouts of “food poisoning” more than once. In these circumstances, I also try to eat fruits with a throw-away peel. This is another layer of protection between the edible portion of the fruit and the somewhat cruel outside world.

While Canada’s food supply is among the safest in the world, we still cannot dismiss some basic responsibilities that we as consumers have when it comes to ensuring our own safety. Most often, a simple washing in potable water will reduce the risks substantially.

As a closing thought - if you ever need a reminder about the difference between food safety and quality, just think about Snow White in the popular Disney story. The apple she was offered was of the highest possible quality, but it certainly wasn’t safe for her to eat.



**Can you really be sure that high quality fruit and vegetables are actually “safe” to eat?**