



Is organic really worth the hype?



THERE ARE A LOT OF MISUNDERSTANDINGS

around "organic" versus conventional products. It's important to know that the organic label is used for agricultural practices, not as a health or safety standard. Despite what is frequently quoted in the media and reinforced in articles by the Environmental Working Group (EWG) about the "Dirty Dozen," organic doesn't mean that food is more nutritious, safer or even pesticide-free. The most important thing to do is consume adequate amounts of produce, and, unfortunately, all of the attention around the "Dirty Dozen" has scared people about eating produce, making them think that if they can't afford organic, then it's better to not eat conventional fruits and vegetables at all.

The "Down-and-Dirty" About the "Dirty Dozen"

Much of the fear-based warnings around conventional products come from the EWG's "Dirty Dozen" list. This list claims that these 12 items have the highest levels of pesticides

on them. However, the EWG is only testing conventional produce, so they're not even comparing the levels of conventional with organic. Without a comparison, we don't actually know whether conventional produce has more residue than organic or not. This list also perpetuates the myth that organic means pesticide-free, when the reality is that organic farms just have to use organic pesticides, which doesn't necessarily mean they're safer. The EWG also neglects to give the scale of residual pesticide on the produce items it lists, which is tested in parts per billion. As with everything, it's the dose that makes the poison, and all farmers are motivated (as a matter of cost) to use pesticides as little as possible.





At SafeFruitsandVeggies.com, you can calculate the number of servings a child, teen, woman or man would need to consume to reach the threshold of potential harm as established by the FDA. This website uses the same data the EWG references for their "Dirty Dozen" list. For context, a child could consume 181 servings of strawberries in one day and still have no adverse effects, even if those strawberries contained the highest pesticide residue as recorded by the USDA, or United States Department of Agriculture (as referenced by the EWG)—and, if this were to happen, a child would have an upset stomach and stop eating well before he or she reached the danger level of health risks from pesticide residue.

The EWG does use data from the USDA's Pesticide Data Program report to create their lists, but they neglect to include that "<u>More than 99 percent of the products</u> <u>sampled through PDP had residues below the</u> <u>established EPA tolerances</u>." Without including this context about the safety of all produce, the EWG is just using scare tactics to create headlines, without an honest account of the facts.

What's the difference?

Currently, the majority of research shows no appreciable difference in the nutrition of organic versus conventionally grown produce. A 2012 review by Smith-Spangler et al. found that organic produce was significantly higher in phosphorous than conventional produce, but even this is not noteworthy as there are very few people with a phosphorous deficiency. Research also shows that the average American is eating only one serving of fruit and 1.5 servings of vegetables per day. The bigger issue facing Americans is not whether they're eating conventional or organic produce, it's whether they're eating *enough* produce.

A <u>2021 meta-analysis</u> showed that people who ate five servings of produce per day had a 10% lower risk of death from cancer, 12% lower risk of death from heart disease or stroke, and a 35% lower risk of death from respiratory disease than people who only ate two servings of fruits and vegetables per day. So the real goal is to eat more produce, whether that's fresh, frozen or canned; organic or conventional. With all produce (unless labeled as pre-washed and ready-to-eat), rinse produce under running tap water, even if you plan on peeling it.

What's in a label?

The organic label does mean that food does not contain GMO ingredients. However, GMO is not a bad thing. <u>Genetically Modified Organisms</u> refer to the process of bioengineering the desired genes from one plant, animal or organism and inserting that gene sequence into

another organism to grow. Breeding, hybridization and plant-grafts are all ways that humans have altered traits of different plants, but these methods are slower and not as selective as we can be in a lab. By using GMO, we are able to do things like increase certain nutrients; breed plants more resistant to bugs so that farming requires less pesticide use; help reduce food waste through aesthetic changes; breed more resilient plants: and reduce water demands in farming. GMO foods are only one way that we can help support the planet through climate change, so, really, it's surprising that the organic label means non-GMO.

When it comes to meat, "organic" means that livestock is raised on organic land, animals are not raised using genetic engineering, and the animals are not allowed to be treated with antibiotics. Conventionally raised livestock relies more on newer technologies because they are able to use all of those resources like antibiotics, genetic engineering, and pesticides—as needed. Again, the marketing labels are where things get confusing. You may see labels that say "antibiotic free," which implies that other meat must have antibiotics in it. However, there are strict standards of testing after treating sick animals with antibiotics to ensure that there's no antibiotic residue in food. "Hormone-free" labels are similarly confusing, as only beef may be treated with growth hormones—but the slightly higher levels of estrogen are extremely small as compared to other perfectly safe foods that naturally contain hormones, such as eggs or white bread, which contain significantly higher levels of estrogen naturally. Hormone-added beef contains 1.2ng of estrogen, whereas hormonefree beef contains 0.85ng of estrogen, while the same serving size of eggs contains 94ng of estrogen. In addition to minimal estrogenlevel differences, there are also no significant nutritional differences between organic versus conventional meat.



It's up to you...But keep it clean

Ultimately, the choice between organic or conventional products is up to each individual, but knowing understanding the labels can help us all make more informed choices.

THE BOTTOM LINE: Eat more produce, and, regardless of conventional or organic, be sure to run it under running water to clean it well... and then enjoy every bite!

Editor's note: The information provided in this newsletter is for educational purposes only. Please speak with your health care team about your specific dietary and health needs.