# WHY EAT ORGANIC?



Less than 100 years ago, the food our ancestors ate was grown in their own gardens or on neighboring farms. Terms like "clean", "real", and "organic" food weren't used, because food was just that: clean, real, and organic. While eating an organic diet is a matter of personal preference, we believe such a diet makes a distinctly positive difference in one's health. And here's why:

## Major technological advancements have completely transformed food production.

Food production has become an industry. It is no longer comprised primarily of individuals growing food for their families and local communities. It has become a business—agribusiness—with goals of increasing production, minimizing expense, and maximizing profit. Agribusiness grows crops that are insect resistant, and uses pesticides to make the growing process more efficient and more profitable. Consequently, food can contain genetically modified organisms (GMOs), chemicals and pesticides, including hormones and antibiotics fed to conventionally raised livestock.

Yet, you see the word "Natural," on many food labels. Given what we know about farming practices used by agribusiness, what does the word mean in reference to the food we eat? It may surprise you to know, the Food and Drug Administration hasn't issued regulations regarding "Natural" on food labels.<sup>1</sup>

On the other hand, The National Organic Program of the United States Department of Agriculture (USDA) has developed rules and regulations governing USDA-certified organic foods<sup>2</sup>. According to these regulations, foods carrying the USDA organic seal must adhere to these standards:

- Produce must be grown in soil that has been free of prohibited substances for three years prior to harvest. Prohibited substances include most synthetic fertilizers and pesticides.
- Animals must be raised in living conditions accommodating their natural behaviors (like the ability to graze on pasture), fed 100% organic feed, and not administered antibiotics or hormones.
- Certified organic foods cannot be genetically engineered.
- Organic, multi-ingredient foods cannot contain artificial preservatives, colors, flavors, or GMOs, and all ingredients must be organic, with some minor exceptions.

### Many people choose organic food because they believe it is more nutritious than conventional food. Good evidence supports this belief.

A large meta-analysis<sup>3</sup>, including data from over 300 studies, found that organic fruits and vegetables have significantly more antioxidant polyphenols (flavonols), than conventionally grown produce.

Flavonols support these physiologic functions:

- Increased erythrocyte superoxide dismutase (an antioxidant enzyme found in red blood cells) activity.
- Decreased lymphocyte DNA damage.
- Decreased levels of urinary 8-hydroxy-2'-deoxyguanosine (a marker of oxidative damage).
- Increased antioxidant capacity (the ability to scavenge free radicals)<sup>4</sup>.





As a cancer survivor and medical doctor, I have firsthand experience with the critical importance of organic, wholesome nutrition and the vital role it plays in supporting the body in times of stress.

Following my cancer diagnosis, I was in desperate pursuit of a healthy, nutritious drink made with only high quality organic ingredients. The truth is, most "nutritional" shakes are anything but, containing long list of artificial ingredients, corn syrup, genetically modified soy, hormones, and antibiotics.

I made it my mission to formulate a drink that would actually make a difference in my health. It had to be certified organic, lower in sugar, high in organic protein, and also be free of artificial sweeteners. preservatives and colorings. After exhaustive work and research, and a lot of time in my kitchen working with real organic ingredients, I finally developed the perfect formulation that would later become Orgain<sup>®</sup> Nutrition Shakes, the first Orgain product.

Dr. Andrew Abraham Orgain® Founder

Organically grown fruits also contain more carotenoids and xanthophylls, chemicals responsible for the rich orange and yellow colors in fruits and vegetables. Carotenoids and xanthophylls are powerful antioxidants.

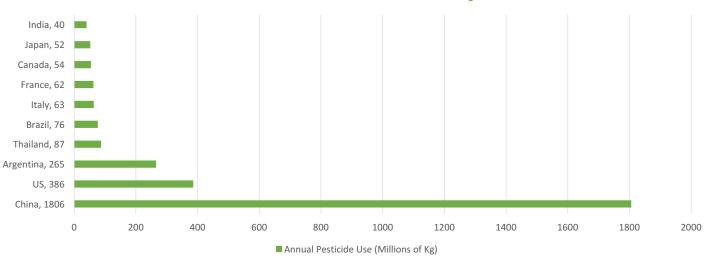
The elevated levels of all of these components in organic produce may help explain the link between eating fruits and vegetables and protection from cancer and other diseases<sup>5</sup>.

Another meta-analysis, this one studying the nutritional content of organic versus conventional cow milk<sup>6</sup>, showed the benefits of organic milk. Researchers analyzed results from 196 published studies. They found that, while the total amount of fat remained the same, there was significantly more total polyunsaturated fatty acids, and omega-3 fatty acids in organic milk than in conventional milk. When we think about healthful omega-3 fatty acids, we usually think about fish as the best source. This study shows that organic milk is another source of these healthy fatty acids.

When cows forage, they eat more grass than corn. The composition of their diet thus results in milk with a higher amount of omega-3 fatty acids and a healthier ratio of omega-3 to omega-6 fatty acids.

### Other people choose organic food to avoid pesticides. The former meta-analysis showed that organic food contains less pesticide residues compared to conventional foods.

The ten-top pesticide-using countries are shown in the graph. Worldwide, 40% of pesticide use comes from herbicides, 17% from insecticides, and 10% to fungicides<sup>7</sup>.



ANNUAL PESTICIDE USE (Millions of Kg)

Source: Top Pesticide Using Countries. http://www.worldatlas.com/articles/top-pesticide-consuming-countries-of-the-world.html. Accessed March 21, 2017

One of the most talked about pesticides is glyphosate. Glyphosate is a component of Monsanto's well-known herbicide, Roundup<sup>®</sup>. The compound, glyphosate, kills weeds that compete with crops by inhibiting their growth. Glyphosate is approved by the U.S. Environmental Protection Agency. However, in 2015, the International Agency for Research on Cancer of the World Health Organization identified glyphosate as a 'probable carcinogen' to humans<sup>8</sup>.

### Some people select organic food for reasons other than nutrition or to avoid pesticide residue. Those reasons include concern for animal welfare, the environment, and better taste<sup>9</sup>.

A 2014 Gallup poll showed that 45 percent of Americans prefer organic food<sup>10</sup>. Regardless of the reason, this trend is expected to grow.

#### How to start eating organically.<sup>11</sup>

Look for the USDA organic label. USDA-certified organic foods are free of synthetic fertilizers, pesticides, antibiotics, hormones, and GMOs.

Choose organic fruits and vegetables whenever possible. If you can't or don't want to buy all organic produce, buy organic when purchasing any of the so called "dirty dozen":



#### **DIRTY DOZEN** The Environmental Working Group's 2017 Shopper's Guide to Pesticides in Produce™ **STRAWBERRIES SPINACH NECTARINES APPLES PEACHES** PEARS **CHERRIES BLUEBERRIES** CELERY TOMATOES SWEET BELL PEPPERS POTATOES

The Environmental Working Group identifies these fruits and vegetables as particularly susceptible to retaining pesticide residues<sup>12</sup>.

If it is not possible to choose organic produce, wash fruits and vegetables thoroughly, scrubbing under running water. Peel the skin and remove outer leaves.

Choose organic milk, select organic meat and poultry or wild caught fish. If you use conventional animal meats, trim the fat off because pesticides can accumulate there.

#### Why being USDA certified organic is important to Orgain<sup>®</sup>.

At Orgain we believe that the healthiest and best tasting products come from high quality ingredients. That's why we maintain a deep commitment to using only organic ingredients, whenever possible, and why all Orgain products are gluten free, soy free, carrageenan free, non-GMO, and free of all artificial colors, sweeteners, flavors, and preservatives.

With our dairy-based shakes, we use USDA certified organic grass-fed milk protein. Our plant-based and vegan products use only the highest quality, certified organic plant-based proteins. That means no hormones, no antibiotics, and no pesticide and herbicide residues.

Just like we don't thrive on toxins, neither does the environment. When used in non-organic farming methods, those synthetic additives can seep into the ground, poison water supplies, harm local wildlife and disrupt the ecosystem. On the contrary, organic farming methods are far more sustainable as they preserve soil integrity and respect biodiversity, which we believe is very important.

More and more consumers view their spending as a way to "vote" for things that are important to them. When you purchase organic, your dollars likely support more than you realize. Companies that go the extra mile to be certified organic likely go the extra mile in other ways too. For example, Organic Organic Protein Almond Milk is produced in a way that saves water and is bee friendly.

If you are interested in learning more about Orgain or our sampling program, where you can receive product samples and educational brochures with coupons for your patients or clients, please contact an Orgain registered dietitian at medinfo@drinkorgain.com.

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