

Regenerative Agriculture – The Next Big Thing

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✓ Fact Checked

May 09, 2023

STORY AT-A-GLANCE

- › Regenerative agriculture was the buzz term at the 2018 organic trade show. Regenerative agriculture is a return to what organic originally was all about – the protection of biodiversity and rebuilding of topsoil
- › Conventional food brands lost more than \$19 billion in revenue between 2009 and 2014, as consumers have become increasingly aware of the many problems associated with conventional food and farming
- › The organic sector was projected to reach \$107.7 billion in sales by 2019. However, traditional organic has developed a number of pressing problems, thanks to manipulation by conventional food companies
- › There are a number of efforts to create standards and certifications for regenerative agriculture. Among the contenders is the Regenerative Organic Alliance, led by the Rodale Institute, the clothing company Patagonia and Dr. Bronner's
- › It's important to remember that without actual certification, regenerative claims on food products are nothing but a clever marketing ploy, like "all-natural" before it

Editor's Note: This article is a reprint. It was originally published March 27, 2018.

Judging by the buzz at the 2018 annual Expo West organic trade show, regenerative agriculture is where it's at,¹ and it's heartening to finally see a tidal change for the better. According to data presented at the show, conventional food brands lost more than \$19

billion in revenue between 2009 and 2014, as consumers have become increasingly aware of the many problems associated with conventional food and farming.

Projections suggest the natural and organic sector may reach \$107.7 billion in sales by next year. However, traditional organics have developed a number of increasingly pressing problems, thanks to manipulation by large food companies. In recent years, many trusted organic brands have been swallowed up by multinational corporations that, by and large, lack a historical interest in organic farming.

As a result, organic standards have been significantly watered down, in some cases to the point of no longer fulfilling even the most basic criteria. Case in point: The acceptance of hydroponics for organic certification. According to organic regulations, an organic grower's crop rotation plan must maintain or improve soil organic matter, yet hydroponics grow food without any soil at all. Without soil, how can their operations improve soil health?

Regenerative agriculture is a return to what organic was originally all about – the protection and rebuilding of topsoil and ecological biodiversity. Unfortunately, Big Food is acting quickly this time around. Companies are already trying to cash in on the burgeoning trend, and it becomes rather problematic when junk food is paraded as flagship products for regenerative agriculture.

Junk Food Now 'Supporting Regenerative Farming Practices'

Cookies and other processed snacks do not suddenly become health foods simply because they're made with ingredients that weren't doused with toxic chemicals.

Take Annie's (a division of General Mills), for example, which touts "advancing regenerative farming practices" with a limited edition organic Mac & Cheese and organic Bunny Grahams, made with ingredients grown according to "regenerative farming practices."² The products will be exclusively sold at Sprouts Farmers Market this spring. According to Carla Vernon, Annie's president:

"As part of the food industry, our biggest opportunity for impact is at the farm level, where we have a critical role to play in advancing regenerative practices that generate positive impact. At Annie's, we recognize the urgency of this, and we are more committed than ever to champion projects, big and small, to preserve the planet for generations to come.

Through these new limited edition products and direct-farm partnerships, we are showing consumers that food choices matter and can make a positive impact on the planet."

There's a range of farming practices that could be referred to as "regenerative," even though they're only slightly different from or better than conventional, chemical farming.

The fact that General Mills is partnering with Ben & Jerry's to promote their brands with regenerative agriculture for highly processed junk food like mac n' cheese, cookies and CAFO ice cream is a strange path forward.³ While it will take farmers, businesses and customers to advance regenerative practices, you have to be skeptical with this alliance of junk food products to promote regenerative agriculture.

Ben & Jerry's has been one of the worst offenders when it comes to environmental pollution, supporting CAFOs while knowingly harming the environment and maximizing profits. These products are as likely to regenerate diabetes as they are to regenerate the soil.

What most Americans really need is to start eating real food. That's what's going to save the planet and improve their health. Pesticide avoidance will only get you so far. It's an important part, for sure, but if you continue eating a diet chockful of processed foods, even if they're organic and regeneratively grown, your health is still going to suffer from nutritional imbalances.

Then there's McDonald's, which recently announced it is replacing frozen beef with fresh, cooked-to-order beef patties for two of the items on its burger menu⁴ — as if avoiding freezing will make that **CAFO beef** any healthier. What's next? Regeneratively grown french fries?

The beef is still coming from factory farms where the cattle are given drugs and antibiotics to quell disease and encourage growth. As a result, such meat is more prone to be contaminated with drug-resistant pathogens and has a poorer nutritional profile compared to organic grass fed beef. Aside from improving flavor, the shift to fresh beef is really inconsequential in terms of overall food quality and nutrition.

Regenerative Organic Certification In the Works

There are a number of separate efforts to create standards and certifications for regenerative agriculture, and unless close attention is paid, there's the risk of these standards being usurped by big business right from the start. Among the contenders is the Regenerative Organic Alliance, led by the Rodale Institute, the clothing company Patagonia and Dr. Bronner's. Its regenerative organic certification was launched at Expo West earlier this month. According to Politico:⁵

"Details of the Regenerative Organic Certification [ROC] are still fluid, but the basic idea is that USDA organic certification would be the baseline and requirements would be added on from there. The certification would also expand beyond agricultural practices to include animal welfare and worker standards ...

Standards for ROC are still in the works, and a number of companies are going to be taking part in a pilot to test various systems. DanoneWave ... has pledged to have its Vega One Organic line and its Horizon Organic grass fed offerings take part in the pilot. A number of other brands are also 'allies' of the concept, including Maple Hill Creamery, Justin's ... and Patagonia Provisions (Patagonia's food line)."

Biodynamic Certification Is the Gold Standard to Beat

It's well worth noting that top notch "gold standard" certification for regenerative farming already exists. Biodynamic farming is a spiritual-ethical-ecological approach to

agriculture initially developed by Austrian scholar Rudolf Steiner,⁶ Ph.D., (1861-1925). It's an approach that can provide far superior harvests compared to conventional chemical-based agriculture, while simultaneously healing the Earth.

Biodynamic standards are both organic and regenerative, and then some. Not only does biodynamic farming provide superior crops both in volume and increased density of nutrients, but biodynamic farms are also completely self-sustaining – something that cannot be said even for most organic farms. For example, biodynamic standards do not simply require farmers to use organic animal feed. Most of the feed must actually originate from the farm itself.

And, while an organic farmer can section off as little as 10% of the farm for the growing of certified organic goods, to be certified as a biodynamic, 100% of your farm must be in compliance. In addition to that, 10% of the land must be dedicated to increasing biodiversity.

This could take the form of forest land, wetland or insectary, for example. Biodynamic farming also has all of the features associated with regenerative agriculture, such as crop rotation, the use of cover crops and so on.

Having animals integrated on the farm, with a focus on animal welfare, is another core principle of biodynamic farming. In short, the farm is viewed as a living organism – a living, self-sustainable whole – and biodiversity of both plants and animals are viewed as integral. In my view, this is really as good as it gets, and buying foods produced by farms certified as biodynamic through Demeter offers the greatest assurance of food quality and environmental sustainability.

A catch-22 preventing biodynamic from spreading faster is the shortage of certified products in the national marketplace. Most Demeter members are small family farms that only sell locally or regionally.

The best we could hope for is for farmers to embrace biodynamic certification in greater numbers, rather than trying to invent new regenerative standards to compete with

organic. In reality, if there's competition, it's with biodynamic, and it's difficult to imagine standards can go much higher.

Grass Fed Standards

The American Grassfed Association (AGA) has also introduced grass fed standards and certification for American-grown grass fed dairy,⁷ which allows for greater transparency and conformity. Prior to this certification, dairy could be sold as "grass fed" whether the cows ate solely grass, or received silage, hay or even grains during certain times.

Considering how important a cow's diet is when it comes to the quality of its milk, especially when we're talking about raw milk, I would strongly advise you to ensure your raw dairy is AGA certified as grass fed.

Also, be sure to look for the AGA's grassfed label when buying grass fed meats. No other grass fed certification offers the same comprehensive assurances as the AGA's grass fed label, and no other grass fed program ensures compliance using third-party audits. An alternative is to get to know your local farmer and find out firsthand how he raises his cattle.

Many are more than happy to give you a tour and explain the details of their operation. Barring such face-to-face communication, the AGA grass fed logo is the only one able to guarantee that the meat comes from animals that:

- Have been fed a 100% forage diet
- Have never been confined in a feedlot
- Have never received antibiotics or hormones
- Were born and raised on American family farms

The last bullet point is an important one. A vast majority of grass fed meats sold in grocery stores are actually imported, and without country of origin labeling, there's no telling where it came from or what standards were followed. As noted by Feed Navigator⁸ last year, while the USDA has created a set of "best practices" to maintain the

integrity of organic imports, they really do not go far enough to ensure the integrity of organic standards.

For example, organic grain shipments have repeatedly been found to contain nonorganic grains fraudulently labeled as organic, and this kind of fraud has severe repercussions for American organic farmers who already struggle to stay competitive. The same applies to the grass fed industry.

The Need for Regenerative Agriculture Has Never Been Greater

Chemical-based agriculture has resulted in the destruction of rural economies, water and air pollution, depletion of aquifers, destruction of pollinators and biodiversity, soil erosion and loss of soil fertility, climate destabilization, food contamination, nutrient degradation and the deterioration of public health. The U.S. now spends \$3.5 trillion a year on health care, more than any other nation on Earth, yet public health just keeps getting worse.

It's quite clear why. We live in an increasingly toxic environment and eat cheap junk-filled foods. Even the government admits about half of all American adults now live with one or more chronic diseases, "many of which are related to poor quality eating patterns."⁹

Approximately 85% of Americans do not consume the U.S. Food and Drug Administration's recommended intakes of the most important vitamins and minerals necessary for health;¹⁰ 87% don't eat the recommended 1.5 to 2 cups of fruit per day; 91% don't get the recommended 2 to 3 cups of vegetables per day.

What's worse, what little fruit and vegetables are actually consumed are sorely lacking in nutrients, as today's conventionally grown produce contain far less nutrition than their counterparts 50 years ago. Factory farmed, **GMO** grain-fed meat, eggs and dairy also typically contain lower levels of omega-3s, vitamin E, beta-carotene, antioxidants and conjugated linoleic acid than 100% grass fed and organic pastured products.

Research¹¹ consistently shows that organic foods contain significantly higher amounts of antioxidants, especially in no-till regenerative systems,¹² and an antioxidant-rich diet

is associated reduced risks for chronic diseases, including heart and brain disease and certain cancers. So, to improve health we need to improve nutrition, and to do that we really have to address food at its literal roots.

Healthy microbe-rich soil associated with regenerative, soil-centered, organic practices produces crops with higher levels of nutrients, without which maintaining health is difficult if not impossible.

The Way Forward

As it stands today, organic certification is really the bare minimum when it comes to food quality, nutrition and environmental health. What we need to move toward is biodynamic farming on a much larger scale. You can help shape the future of our food system by being mindful of your own choices. Be sure to look and ask for biodynamic certified produce and AGA certified grass fed animal products.

In most cases, your best bet will be to buy directly from your local farmer once you've asked questions and received answers to your satisfaction about how the food is grown and raised. For resources that can help you locate organic and regenerative farms in your area, see the end of this article. In addition to that, consider:

- **Boycotting GMOs, including every nonorganic packaged food product that displays a QR code** — The easiest way to avoid GMOs is to buy organic, or look for the "Non-GMO Project" seal on food products. Keep in mind, however, that many "Non-GMO Project" labeled foods (unless they are also labeled organic) are produced using pesticides and chemical fertilizers.
- **Boycotting factory-farmed meat, dairy and poultry (i.e., anything that isn't labeled or marketed as organic or 100% grass fed or pastured)** — Factory farm production is characterized by GMO- and pesticide-tainted animal feeds, labor exploitation, false advertising, corporate corruption of government, and the use of massive amounts of dangerous pesticides, chemical fertilizers, antibiotics, hormones and growth promoters.

Factory-farmed meat, dairy, poultry and fish are the No. 1 cause of water pollution, soil degradation, food system greenhouse gas emissions and human diet-related diseases such as cancer, heart disease, diabetes and obesity. We will never get rid of GMOs, chemical-intensive monocrops, antibiotic resistance, animal cruelty and agriculturally derived greenhouse gas emissions until we eliminate factory farms.

Sources and References

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