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Beyond Organic: Learn How Biodynamic and Regenerative Farming Are Changing Sustainable Food Production

Interest in biodynamic and regenerative foods continues to rise. Here, we explore what these terms really mean—and how they measure up to organic products.

By **Bridget Shirvell** | Published on July 25, 2023

From peak summer tomatoes to crisp, dry apple ciders and juicy burgers, the ingredients we eat and drink have the potential to help save us from the worst effects of the climate crisis.

The agriculture sector, including the packaging, transportation, waste, and deforestation that go along with it, is responsible for a third of all global emissions, according to an environmental research letter published in IOP Science. Yet, according to the International Panel on Climate Change, the agriculture sector also has the ability to reduce greenhouse gas emissions and capture them through carbon sequestration. The key to that is sustainable farming practices, which include organic, biodynamic, and regenerative growing. But what do these terms really mean? Is one better than the other? And what should we look for when we shop?

"The right approach for us is a mix of all of them. I do not believe one is better than the other and essentially, they all have to work together for our personal grove management due to our sandy soil, which lack soil nutrients, organic matter and ground cover, and the constant threat of climate change affecting Greece now," says Diamantis Pierrakos a fourth-generation family farmer and the co-owner of Laconiko, which produces some of the most prized extra-virgin olive oil in the world. "We are practicing regenerative and biodynamic farming in order to receive our organic certification."

As the climate crisis intensifies and interest in food as a solution grows (something Whole Foods' annual trend report cites as a key area of interest in 2023), here's what you need to know about organic, biodynamic, and regenerative farming—including what these terms mean and if one is better than the other two. "In the simplest terms, the differences between biodynamic, organic, and regenerative farming practices lie in the depth and breadth of their approaches to nurturing the environment," says Tony O'Neil, a gardening expert and author.

Organic Farming and Food

For most of us, organic farming is the most familiar of these practices. A step up from conventional farming methods, it minimizes the use of pesticides, herbicides, and fertilizers, relying on natural processes and substances, such as compost, cover crops, and crop rotation, to maintain soil fertility and control pests. "Food labeled organic must be third-party certified to meet the USDA's criteria," says Olivia Roszkowski, a chef-instructor of Plant-Based Culinary Arts at the Institute of Culinary Education.

However, organic farming can still use some pesticides, and while the farming practice seeks to do no harm, it often doesn't go beyond that. That's where both biodynamic and regenerative farming come in.

Biodynamic Farming and Food

Biodynamic farming is a holistic approach that views the farm as a self-sustaining ecosystem. "Biodynamic farming, originating from Rudolf Steiner's philosophy, takes organic principles a step further by considering the farm as a living organism," O'Neil says. "This method eschews synthetic inputs and incorporates lunar cycles, soil amendments prepared in unique ways, and a holistic approach to maintaining the farm's health."

Biodynamic farmers emphasize the integration of livestock, crop rotation, and composting to enhance soil vitality and promote plant health.

Regenerative Farming and Food

Regenerative farming seeks to restore and enhance the health of agricultural ecosystems and their surrounding environments. It goes beyond organic practices by actively working towards building soil organic matter, increasing biodiversity, and fostering ecological resilience. "It's about not harming but contributing positively, enhancing soil health, sequestering carbon, and improving water cycles," O'Neill says. Regenerative practices can vary widely but might include rotational grazing, cover cropping, or no-till farming.

Organic vs. Regenerative vs. Biodynamic: Which Is Best?

Every approach has its strengths and unique benefits. "Choosing one method over another depends largely on one's personal philosophy and what they hope to achieve," O'Neill says. "Someone might choose organic for its widespread recognition and stricter regulations, biodynamic for its spiritual and holistic approach, or regenerative for its focus on proactive environmental restoration."

When it comes to what to shop for, availability and access are often the primary considerations. As biodynamic and regenerative food tends to be produced by small farmers that sell locally, it might only be available seasonally or not at all in certain parts of the country. The price for the consumer is also higher partially due to less government-sponsored subsidies available to promote these practices, explains Roszkowski.

Still, Roszkowski says: "All three options are great, but try to support regenerative and biodynamic practices whenever possible to further these initiatives."

How to Navigate Labels at the Grocery Store or Farmers' Market

Unfortunately, there's a lot of greenwashing in the agriculture industry, especially around food labels, but there are steps consumers can take when they want to shop for organic, biodynamic, and regenerative products.

Look for Certifications

Start by looking for the following trusted certifications:

- USDA Organic

- Demeter (biodynamic)

- Regenerative Organic Certified

Shop Heirloom Produce

From there, Roszkowski suggests looking for heirloom varieties, which regenerative farms often grow for their colors, nutritional quality, and rich history, and shop for locally grown produce.

Buy From Small, Local Farms

According to Roszkowski, small farms are more likely to use environmentally-sound farming practices because they have a bigger stake in the sustainability of their farm. "When purchasing food products in general, you should look to make sure you are purchasing as close as possible to the source and that the producer is making products in a responsible way," Pierrakos says. "What is their reputation or history?"

Ask Questions

Talk with farmers and sellers to understand their farming and buying practices. With farmers, you can ask about their soil management practices, pest control methods, and any certifications they hold; with buyers, you can ask what they prioritize when selecting items for their store. "Go beyond labels—engage with local farmers, ask about their practices, and even visit the farm if possible. A closer connection to our food system allows us to make more informed choices," O'Neill says.

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