

# AVENA FYI REGENERATIVE AGRICULTURE FROM THE GROUND UP

**Food production is responsible for up to one-quarter of the world's greenhouse gas emissions with emissions coming primarily from agricultural practices. However, agriculture also offers a potential solution, by pulling carbon out of the atmosphere and sequestering it in soil. Dry milling also has a role to play in minimizing greenhouse gas emissions.**

**T**hough rising out of organic farming, the process of regenerative agriculture is now embraced by both conventional and organic farmers. The focus is on regenerating and revitalizing the soil and, by extension, the environment.

Regenerative agriculture is anchored in continuous innovation and improvement of three pillars: environmental (planet), social (people) and economic (profit).

This dovetails with Avena's approach to sustainability, where we collaborate with farmers, employees and customers to identify and promote practices that recharge and rejuvenate the planet, people and profits.



## ENVIRONMENTAL BENEFITS

### AT THE GROUND LEVEL

Avena mills oats and pulses (peas, beans, chickpeas, and lentils) grown locally on the Canadian Prairies. All oat and pulse seeds are non-GMO.

#### Oats and pulses are intrinsically good:

- Require low moisture and therefore no irrigation
- Leave more water in the soil - pulses extract water from a shallow depth leaving more for other future crops
- Act as a natural herbicide - developing early, dense cover that crowds out weeds
- Reduce need for chemical pesticides by producing naturally occurring soil organisms that nourish soil microbes, help to fight disease-causing bacteria and fungi, and create a more diverse microbiome
- Pulses build soil organic matter and reduce fertilizer requirements for the following year through nitrogen fixing - pulling nutrients from the air into root nodes which are left in the soil for the next year's crop

#### Typical farm management practices on the Canadian Prairies are part and parcel of regenerative techniques:

- Three-, four- or even five-year crop rotations
- Conservation tillage, the practice of minimal or no till seeding
- Resource management - precision agriculture tools are used to manage resources, including water usage and inputs (i.e., fertilizer).

### IN MANUFACTURING

- Avena dry-mills whole grains. This method uses significantly less energy and water than other forms of milling.
- Whether splitting peas, cleaning whole pulses or processing oat ingredients and pulse flours and fibers - milling processes are minimal- or zero-waste. By-products are upcycled into food ingredients or sold into animal feed.
- The energy supply for Avena's Manitoba facility is 99% renewable from hydroelectric and wind power. Our two Saskatchewan facilities are powered by a combination of natural gas and coal.



The focal point of Avena's sustainability commitment is Avena Purity Protocol. This 'start clean, stay clean' system was

developed by pedigreed seed growers in order to supply people who have celiac disease or gluten intolerance with pure, uncontaminated gluten-free oats. Avena Purity Protocol not only guarantees the highest quality gluten-free oat ingredients, it also requires sustainable farming practices. These include conservation tillage and multi-year crop rotations which encourage carbon sequestration and the regeneration of the soil.

Long-term partnerships with farmers, who will go the extra distance, are key to meeting the exacting standards of Avena Purity Protocols. In return, Avena Purity Protocol farmers are paid a premium price for their crops.



## PROFIT THROUGHOUT THE VALUE CHAIN

- Incorporating whole oat and pulse ingredients into food and beverages has the potential to improve the health of consumers, resulting in lower healthcare costs.
- Avena's certifications enable messaging on both social media and packaging, helping to spread awareness of environmental benefits while boosting sales and, ultimately, generating profit across the value chain.
- Avena Purity Protocol farmers are paid a premium price for their crops.
- Avena's employees receive fair above market wages, enhanced health, dental, vision and disability benefits, paid sick and parental leave. Avena operates an annual bonus program for all employees, based on the financial performance of the company.

## AVENA SUSTAINABILITY INITIATIVES 2021 AND BEYOND

Avena has joined Field to Market Canada and is working together with our pulse and oat farmers to gain a better understanding of agricultural practices on energy use, land use, greenhouse gas emissions and soil conservation. These three-year projects are outcome-based, providing quantitative field-scale data and non-prescriptive information with the potential to track progress over time.

True to the spirit of regenerative agriculture, Avena is constantly striving to identify actions that will reduce the negative environmental, social and economic impacts of our business, both for our stakeholders and in the communities where we operate. By doing so, we are helping to protect healthy ecosystems for today, as well as working to ensure that future generations will be able to meet their needs. Avena ... 'for safe, healthy diets and a sustainable world'.



## COMMITTED TO THE WELLBEING OF PEOPLE

- Customers rely on our exemplary food safety and quality management programs, and the technical and product development support we provide.
- Avena's work environment fosters employee retention with on-going training, regular town hall updates and service awards.
- Farmers are provided with continuous agronomy support, and an annual 'Grower School'.



Avena is SEDEX registered and audited for responsible business practices around labor standards, health and safety, the environment and business ethics.

### AVENA CERTIFICATIONS ACROSS OUR FACILITIES



Avena partners with farmers, facilitating sustainable cropping systems incorporating rotations of oats and pulses. This, coupled with superior food safety and quality management systems, fulfills the promise of Avena Purity Protocol 'start safe, stay safe' gluten-free oats and our offering of Avena Best Food pulse ingredients. Product ranges are non-GMO, gluten-free and available conventional or certified-organic. 'For safe, healthy diets and a sustainable world.'