From Producer to the World™

AGT FOODS

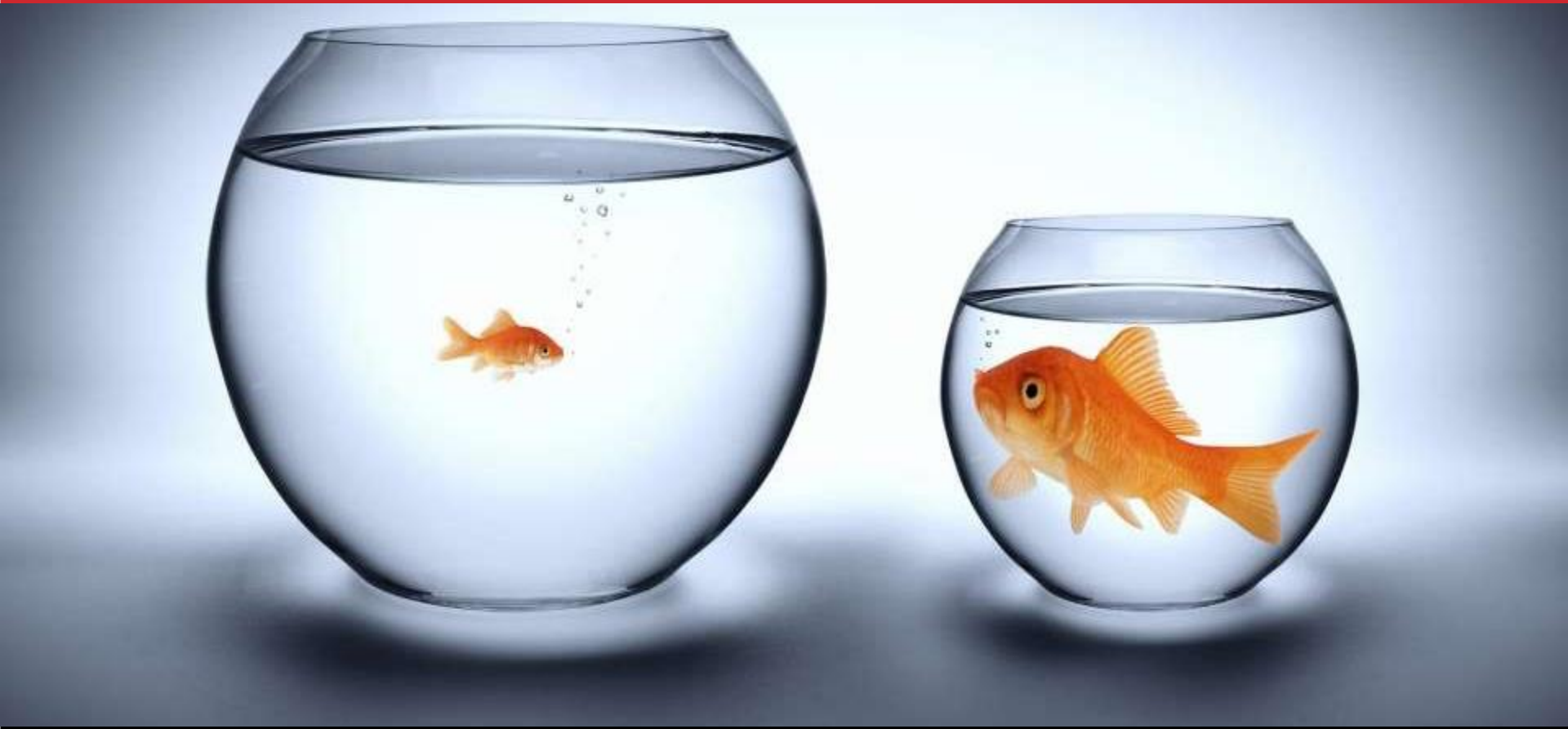
Murad Al-Katib: AGT Food and Ingredients Inc.

The Changing of Agriculture – Meeting the Demands of the Socially Conscious Consumer of the Future


Canada
Hudson Bay
Davidson, SK
United States
North Atlantic Ocean
Norway
United Kingdom
Ireland
Denmark
Poland
Belarus
Germany
Ukraine
Austria
France
Romania
Italy
İstanbul
Spain
Greece
Portugal
Tunisia
Syria
Iraq
Morocco
Algeria
Libya
Egypt
Western Sahara
Saudi
Mauritania
Mali
Niger
Chad
Sudan
Burkina Faso
Guinea
Nigeria
Cuba
Puerto Rico
Caribbean Sea
İstanbul, Turkey
Davidson, SK
Sorry, we could not calculate walking directions from "İstanbul, Turkey" to "Davidson, SK"

EDWARDS
SCHOOL OF BUSINESS
UNIVERSITY OF SASKATCHEWAN

THUNDERBIRD
SCHOOL OF GLOBAL MANAGEMENT



AGT FOODS

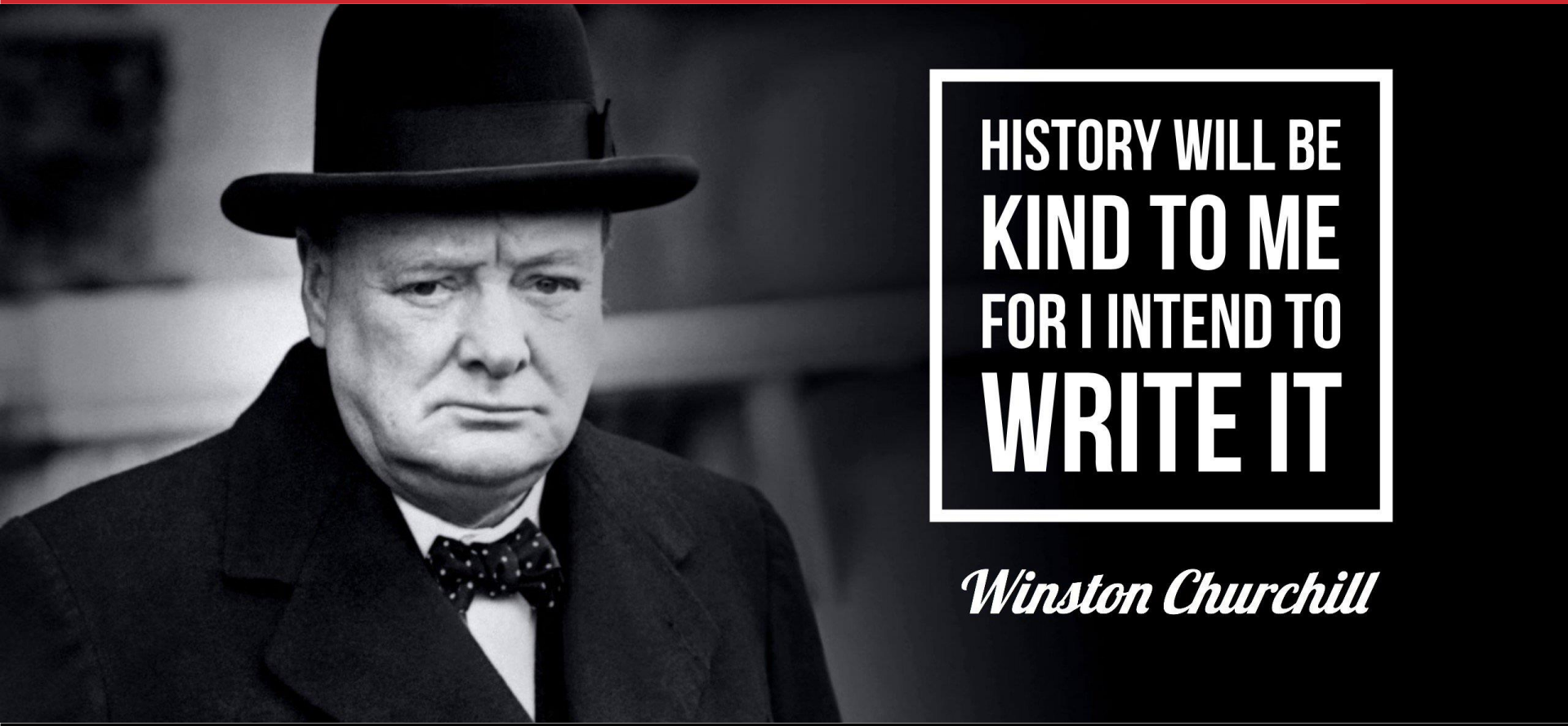
Reminder:
Keep growing
more lentils

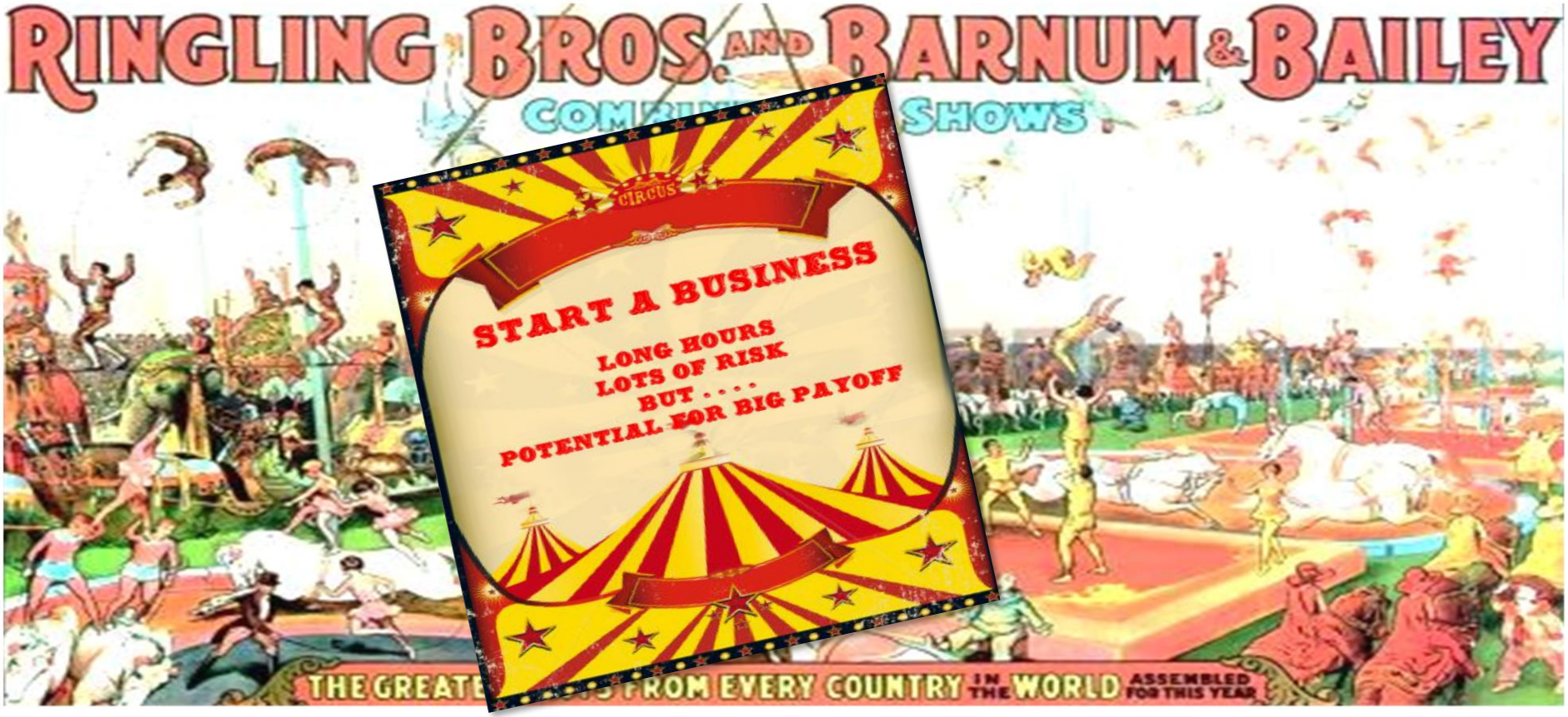
5,000,000
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

FAIRFAX
FINANCIAL HOLDINGS LIMITED


Saskatchewan
Canada
= Saskcan


HISTORY WILL BE
KIND TO ME
FOR I INTEND TO
WRITE IT
Winston Churchill


RINGLING BROS. AND BARNUM & BAILEY
SHOWS
CIRCUS
START A BUSINESS
LONG HOURS
LOTS OF RISK
BUT . . . .
POTENTIAL FOR BIG PAYOFF
FROM EVERY COUNTRY IN THE WORLD ASSEMBLED FOR THIS YEAR

AGT Foods Company Highlights

AGT Company Overview

- AGT Food and Ingredients Inc. ("**AGT Foods**") is a global leader in pulse, grains, staple food and food ingredient processing and distribution, with merchandising offices and value-added processing facilities in Canada, the U.S. Turkey, Australia, China and South Africa; India and European sales offices, Russian origination office and a global customer base
- Exports to 120 countries
- Approximately 2,400 employees globally
- 2019 - Majority investment in AGT by Fairfax Financial Holdings and OMERS.
- Founders/Management retains a large ownership share.

Global Company

Fairfax Company & Brands



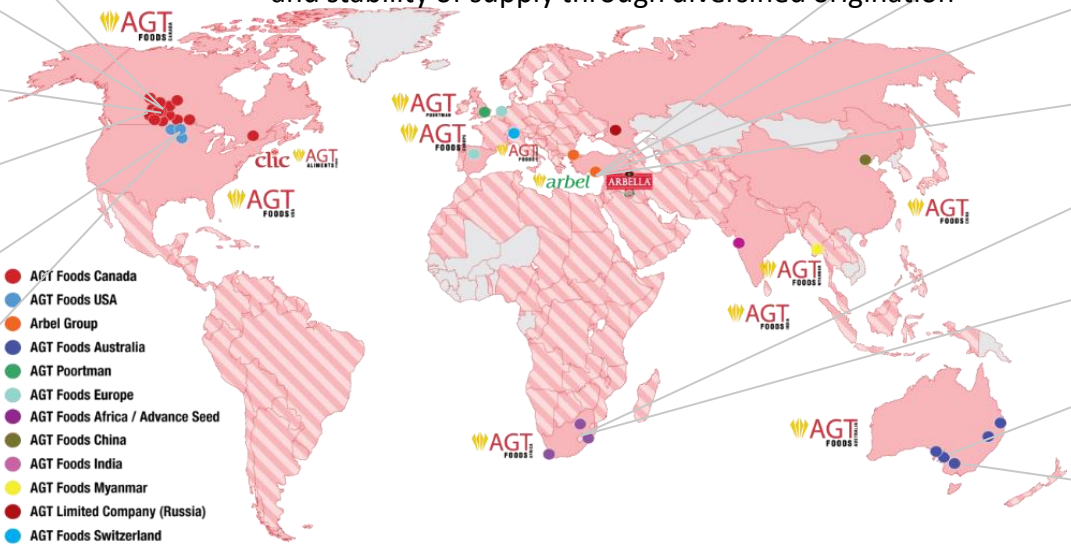

Global Facilities & Offices

- Canada head office and over 45 facilities in 6 key agricultural production origins on
  5 continents with sales, merchandising, origination and administration offices located around the globe
- Provides significant cost savings, superior market intelligence and stability of supply through diversified origination

AGT Foods Canada Regina Main
Regina, SK, Canada

Big Sky Rail / Last Mountain
Railway, Saskatchewan, Canada

AGT Foods USA Minot
Minot, ND, USA



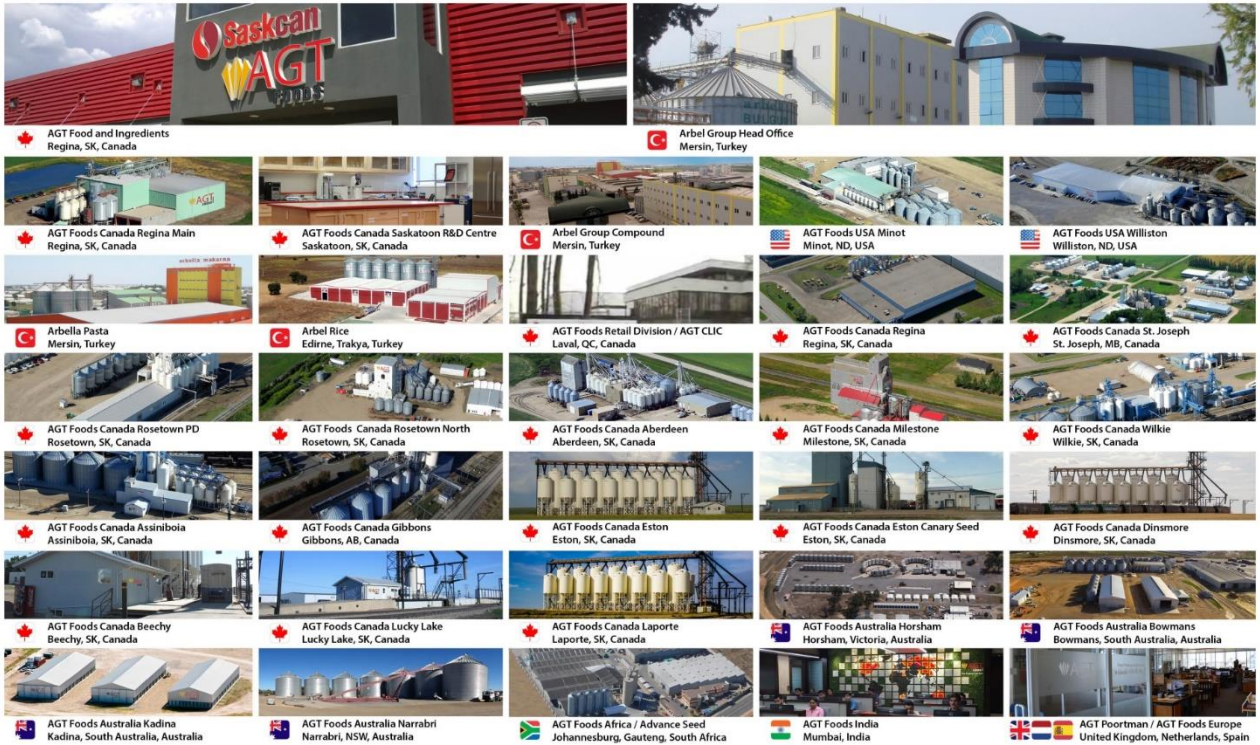
Arbel Group
Mersin, Turkey

Arbella Pasta
Mersin, Turkey

AGT Foods South Africa /
Advance Seed, Johannesburg,
Gauteng, South Africa

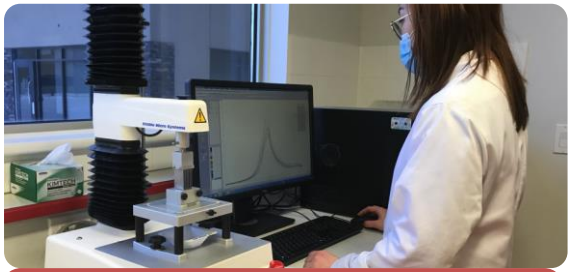
AGT Foods Australia,
Horsham, Victoria, Australia

Global Facilities & Offices



Global Commodity and Retail Food Business

AGT Foods: *From Producer to the World . . .*



We are the **leaders in innovation** in the **pulses sector**

We create **R&D-led**, **customized solutions** for your food products

We offer **finished food products** ready for the marketplace

We are **scalable** and **vertically integrated** to match demand

We hold internationally-recognized certifications, including **FSSC 2000**

We deliver **high quality**, **good taste** and **clean ingredients**

Food Production Targets

We need to produce

in the next **40 years**

the equivalent of

all of the food

produced in the

last 10,000 years

Source: UN FAO

Agri-Foods Market Dynamics

Traditional Markets for Agri-Food

Growth Driver: Population & Global Demand for Food

Markets: S. and E. Asia Pacific, MENA, Central/South America, Africa

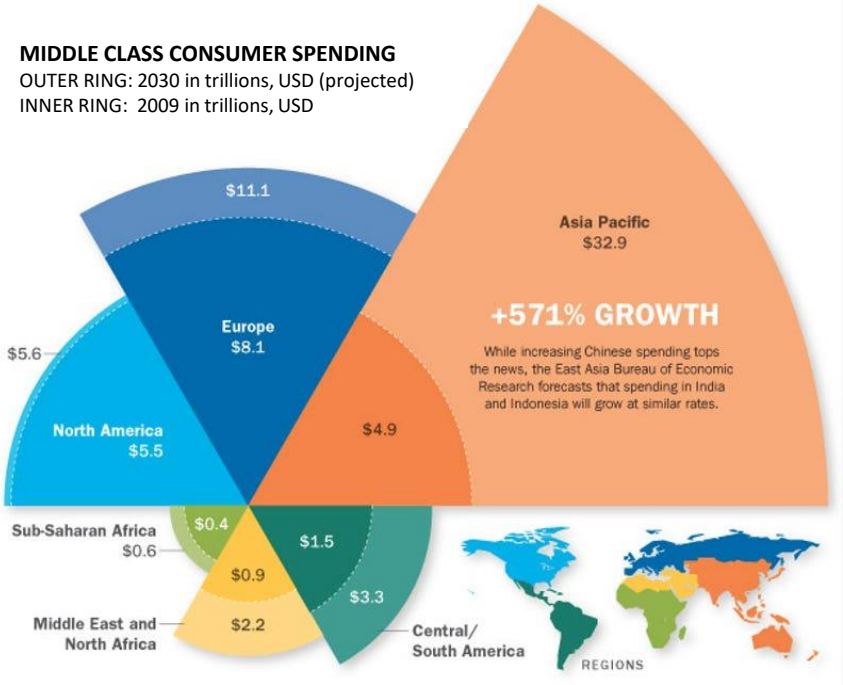
- 2050 - Global population expected to rise 30% to over 9 Billion
- Global food output will have to grow by 70% to feed the world with growing middle class
- Pulses, grains are a sustainable source of vegetable protein, a key nutrient for large numbers of the world's populations

New Markets for Pulses driven by:

Growth Driver: Health, Nutrition and Sustainability

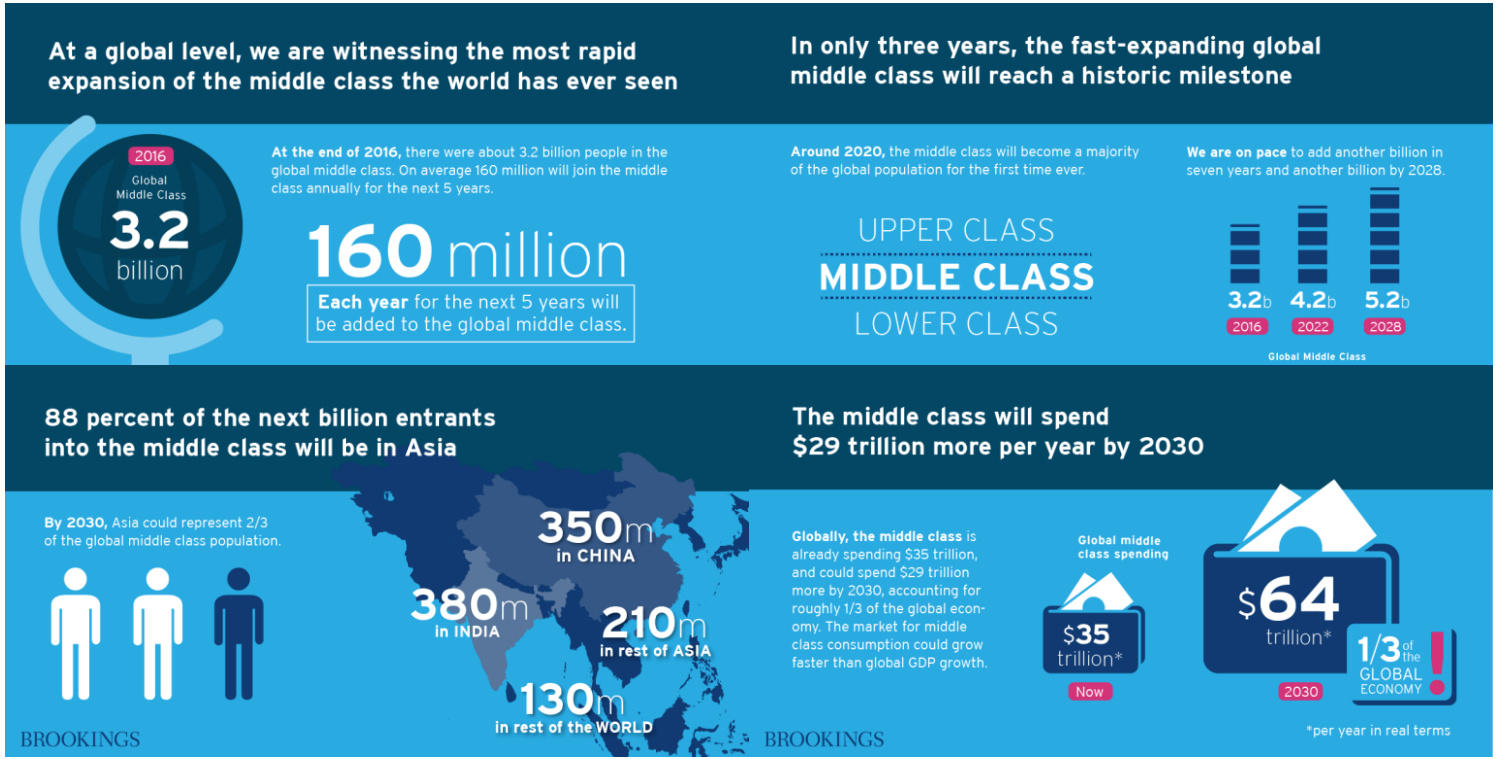
Markets: Europe, North America, China

- Health, nutrition, changes in diet choices
- High Protein and Fibre, Nutrient Dense, Low Fat, Gluten Free, non-GMO, Low Allergenicity
- Lower Energy Use, Reduce Greenhouse Gas Emissions, Improve Soil Health through Rotational Cropping, Increase Water Use Efficiency



Source: OECD; UN

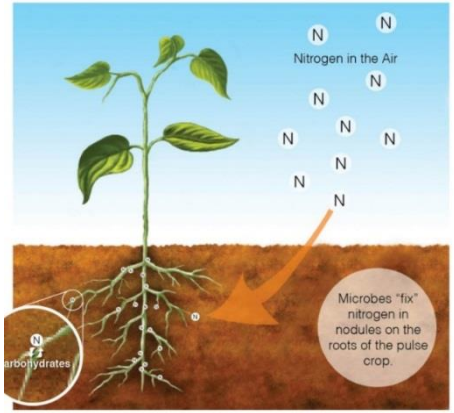
Rapid Expansion of the Global Middle Class



Sustainable Agriculture in Canada

Plant Fixing Nitrogen

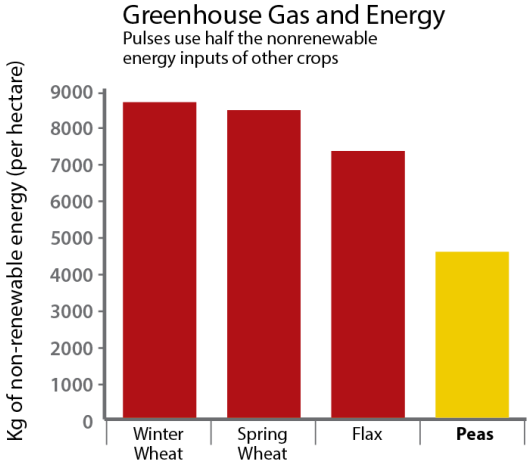
- 3 crop rotation – cereal, oilseed and pulses
- Pulses produce their own fertilizer by utilizing nitrogen fixing soil bacteria that live inside their root systems.
- Pulses improve fertility of soil for other cereals and oilseeds grown in rotation.



Pulse crop with root nodules

Lower Energy Requirement

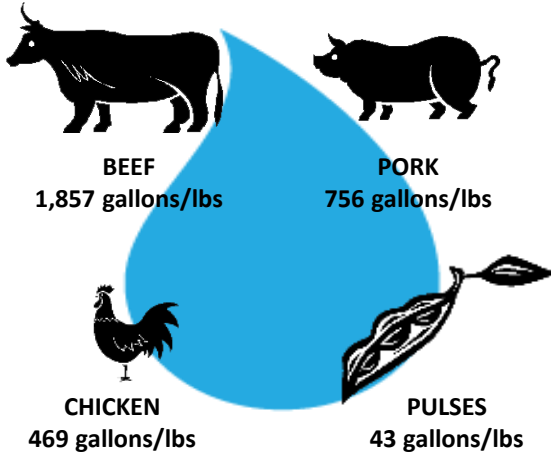
- Pulses use less non-renewable energy relative to other crops.
- 70% of the non-renewable energy used in cropping systems in western Canada is attributable to fertilizers.



Source: (Zentner et al. 2004)

Increased Water Use Efficiency

- ***43 gallons*** of water required to produce one pound of pulses.
- ***1,857 gallons*** of water required to produce one pound of beef.



Source: Hoekstra and Chapagain, *Globalization of Water*, U. of Twente, Waterfootprint.org National Geographic, April 2010

Canada – The Global Agri-Food Partner

- **Abundant natural resources** (e.g. freshwater, long coastlines suited to aquaculture, least densely occupied arable land in the world)
- **Strong network** of R&D facilities universities
- Sop**histicated, ethnically diverse consumer base** that stimulates product development
- **Early adopters** of technology
- **Reliable access to capital and inputs** (e.g., fertilizers, feed, seeds)
- **Lowest use** of pesticides per-hectare
- **Political stability and goodwill** that encourage foreign investment
- **Strong primary and secondary processing** sector

Source: Advisory Council on Economic Growth;

Canada – First Stop on Protein Highway

- In emerging economies, demand for protein is growing rapidly due to urbanization and rising incomes.
- Canadian ingredients and food have a reputation of safety, quality and trustworthiness.
- Canada's food brand is enhanced by the country's natural advantage, - producing food that is among the best in the world
- Pulses, Cereals, Meat & Poultry, Dairy, Eggs
- Canada's ag-food sector could become the trusted global leader in safe, nutritious and sustainable food for the 21st century.

Source: McKinsey & Co; UN FAO

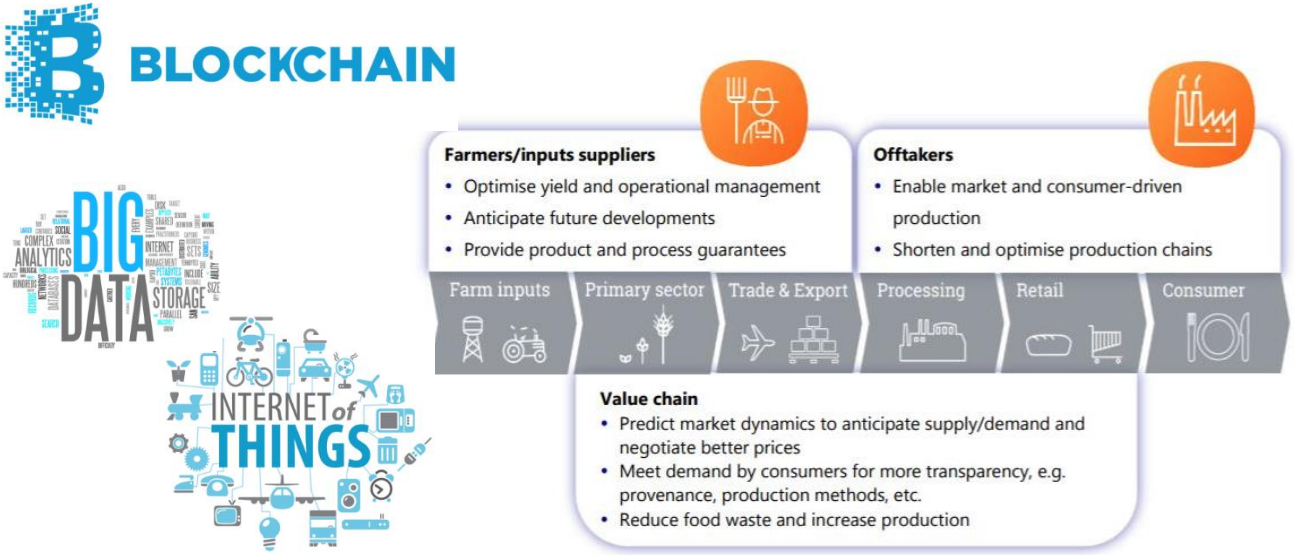
Plant-Based Foods, Fuels and Biomass

Canada Leads the World in Ag Production

Source: AAFC

Technology and Innovation

How will technology affect the face of ag exports over the next 20 years as Canada positions itself to be the key global supplier to the growing middle class in the world?



Source: Rabobank 2017

Why ESG Matters to AGT

- AGT believes ESG will have a defining impact over the long-term for all businesses and institutions.
- As one of the world's global leaders in plant-based foods, we believe we are part of the solution to creating a healthier, more sustainable world, for example:
  - AGT is a world leader in closing the protein deficit in global diets in sustainable ways.
  - AGT's customers look to us to provide high quality, healthy, plant-based ingredients and sustainable, planet friendly packaged foods
  - AGT believe plants and biomass can provide the base material for sustainable, food, fuel and feed and has active projects and programs underway to actualize this.
- Financial results are only part of the story. Outcomes that make a material difference to a healthier population and a sustainable planet are equally important in how we measure success.
- Access to larger investor, partner and lending base in North America, EU and Globally

Plant-based Foods and Food Trends

Consumer Trends

- Protein has a positive image with consumers
- Vegetarian diets growing with vegetable proteins replacing proteins derived from other sources.
- Rise in allergy to certain foods and ingredients
- Consumers demanding more proteins for a variety of reasons: diet, sports
- Nutrition, muscle, satiety, weight loss, etc.

Food Company Trends

- Non-GMO, Gluten-Free, Vegetarian and Sustainably sourced ingredients continue to gain traction.
- High proteins claims are now common on food products.
- Ingredients derived from plant-based/vegetables grew by 103% from 2010-2014
- Protein derived from plant-based/vegetables grew by 61% from 2010-2014.

urce: Ingredion Inc.

“Plant-Based” Versus “Vegan”

- **Plant-based** is a term associated with **positive** dietary choices – can fit into a wide variety of diets
- **Vegan** refers to a specific lifestyle that is often associated with dietary restrictions that require commitment on behalf of consumers
- The global plant-based food market value is estimated to grow from USD $12 billion in 2019 to USD $28 billion by 2025, with a compound annual growth rate of 15% (Markets and Markets)

“Although health and environmental consciousness drive consumers toward increased plant-based food consumption, **good taste and texture** are the biggest influence in purchasing decisions.” – Euromonitor, 2018

Source: https://www.foodnavigator-usa.com/Article/2018/09/12/GOOD-FOOD-CONFERENCE-Biochemistry-is-really-transforming-the-plant-based-meat-industry?utm_source=newsletter_daily&utm_medium=email&utm_campaign=12-Sep-2018&c=crvuw4gKgQzhFLFLVypw0ohuKP20nkom&p2=
https://www.plantbasednews.org/lifestyle/plant-based-meat-worth-27-billion

Expectations of Socially Conscious Consumers

The "conscious shoppers" of 2022 want to choose products and support brands that are good for them, good for their neighbors, and good for the planet. Which means it's time for manufacturers and retailers to update their definitions of product transparency.

Health, wellness, and sustainability are synonymous	Confluence of wellness trends	Clear the path for conscious shoppers
Sustainability is a growing concern for the majority of U.S. shoppers.	"Mindful consumption" is a consumer mindset defined by specific, complementary product attributes.	79% of all CPG buyers now make purchases both online and in-store. Browsing online gives shoppers the ability to research a product's ingredients, materials, and reviews, and compare items across different brands and retailers.
60% of U.S. consumers said they have been making more environmentally friendly, sustainable, or ethical purchases since the start of the pandemic.	Customers might look for snacks with plant-based ingredients, supplements that cater to well-being, and beauty products that are plastic-free, all in the same shopping trip.	Brands and retailers can take advantage of the inherent benefits of online shopping and omnichannel shopping experiences by explicitly stating health and sustainability-related claims on packaging, websites, and social media.
66% agreed that environmental issues are having an adverse impact on their current and future health.	Manufacturers usually consider these characteristics to be distinct from one another and related to different products, but consumers don't see it that way.	Consumers also want an elevated buying experience when they choose to shop in-store, and they want it to be simple to find products that align with their personal values from brands that they trust.
Scope of "health and wellness" continues to grow, consumers will have higher expectations for manufacturers and retailers when it comes to product transparency	Food brands in particular are taking note of these overlapping characteristics introducing high-protein, low-calorie, and low-sugar products that primarily uses sustainably, ethically sourced organic ingredients.	Young Gen Z and Millennial consumers are the main drivers of the sustainability movement and they're doing it primarily online.

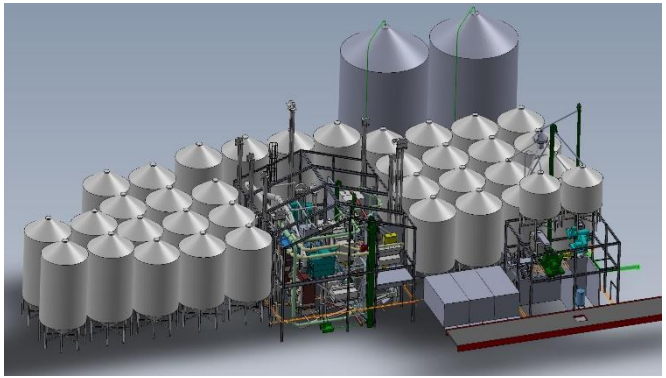
Source: Nielsen IQ

AGT Investment in Oat Processing

AGT converting Aberdeen facility to process oats – in the middle of key oat growing region in SK

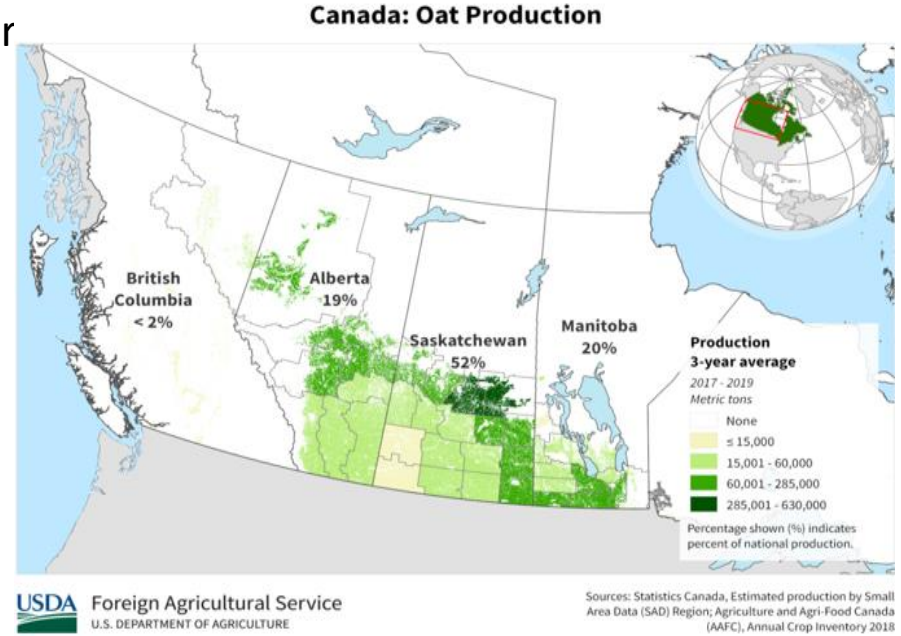
Oat Groats Processing:

- **Groats: Gluten free & sustainable story like pulses.**
  - Oat Groats (for rolled, flakes, flour, feed, horses)
  - Rolled / Flakes for oatmeal, granola bars & quick cooking applications
  - Flour for baking, oat milk etc.
- **Oat Hulls:** Animal feed, baking applications & cellulose base in AGT's Micronutrient Biomass fertilizer project shows that pulses and oat fibre are natural biomass to deliver micronutrients to crops, fruits and veggie production.
- **Other Uses:** Oat groats to AGT's Minot for fine milling & blends (Complete protein)
- Plant Based beverages the second largest dairy alternative following almond milk. Plant-based milk accounts for 15% of all dollar sales for retail milk, according to market research from the Good Food Institute. Big opportunity in extrusion.



Canadian Oat Production – Prairies Key Region

- Canada is the second largest oat producer in the world at approx. 3mmt per year
- Global production approx. 25mmt
- 2021 Production:
  - 1.56m mt in SK
  - 600,000 mt in MB
  - 570,000 mt in AB
  - 270,000 mt East Coast/BC
- Historical production breakdown in Prairie Provinces:
  - 50% in SK
  - 20% each AB and MB



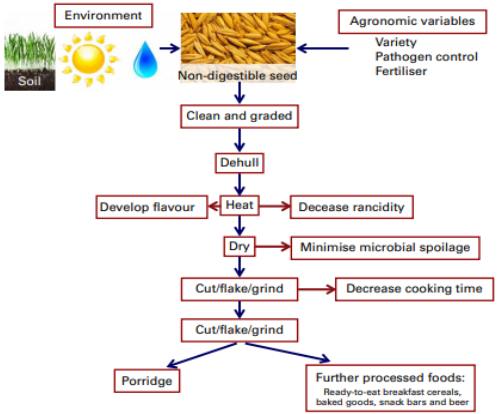
Source: USDA; AAFC

Oat Production and Process Flow

Oat Groats

- Just oat with hull removed.
- High in protein and soluble fibre, iron, zinc, B vitamins.
  - Very digestible for pets and people,
  - very palatable and good source of energy
  - Healthiest way to eat oats
- Healthy carbs, high in beta glucan – good for immune systems, best used in porridges and stews. Cereal germ, bran, endosperm
- Naturally gluten free (volunteer wheat is problem, barley is worse as harder to clean out)

Processing of Oats

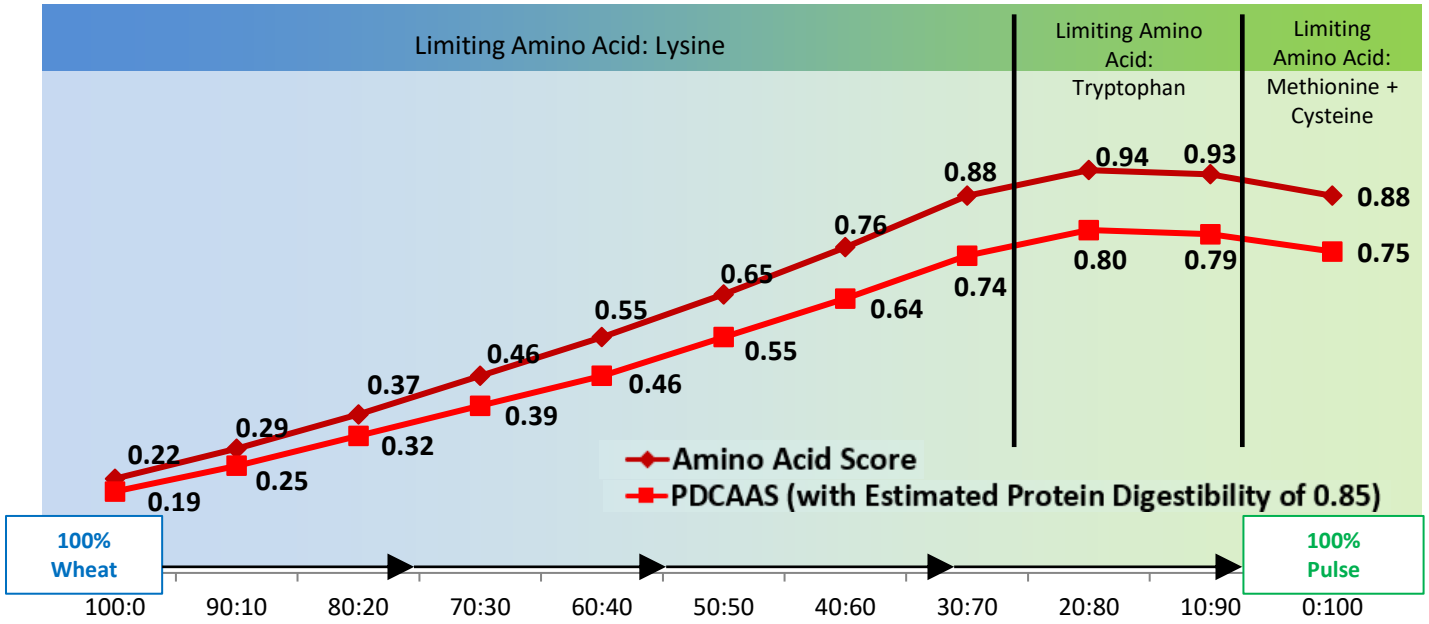


- First stage processing oats to groats by impact dehulling.
- Oats contain a higher fat content, kilning (heat & steam) then drying is required to stabilize the enzymes for shelf life within 72 hours of the hull being removed.
- With the hull removed the bulk density goes up 75% for freight savings.

Source: Processing of oats and the impact of processing operations on nutrition and health benefits (unl.edu)
https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1028&context=nutritionfacpub

Cereals & Pulses (Power of Blending)

PDCAAS of Wheat and Pulse Proteins Blends (with Estimated Protein Digestibility of 0.85)



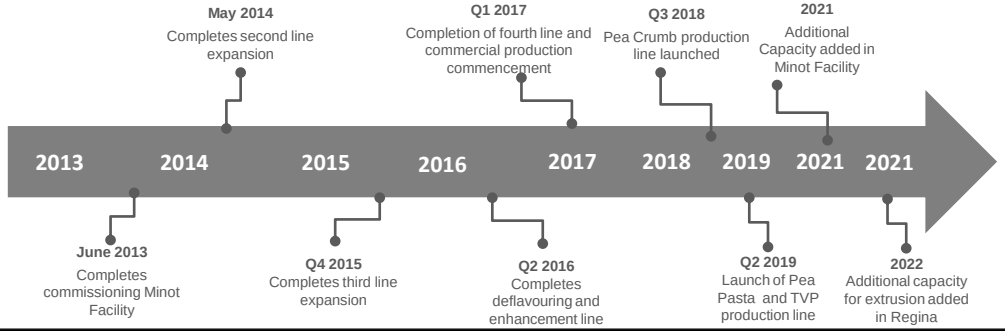
Cereal and Pulse Blend Ratio (Wheat Ingredient: Pulse Ingredient)

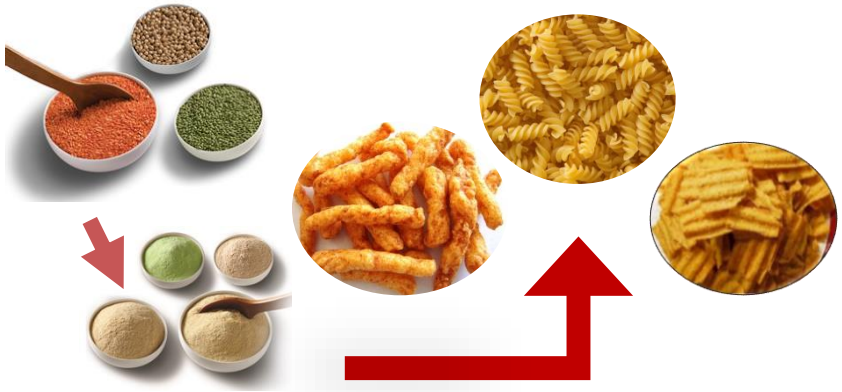
Source: Based on USDA data; Internal Research Data

Example of AGT Investment: Pulse Ingredients

Minot ND Production Facility

- First commissioned: June 2013 with four lines currently operational and enhancement processes
- Expansions completed to bring value-added production and modification processes including deflavoring, pre-cooking lines, and sterilization lines
  - *Veggicrumb* line launched fall of 2018
  - *Veggipasta* line and TVP line commissioned fall of 2019
  - Additional Production added in Regina 2022





Where Plant-based Ingredients Are Being Used?

Snack Foods	Meat Analogues	Batters and Breadings	Pasta
			

Dairy Replacements	Pet Food
	

Innovative CPG and Food Ingredient Offerings

Retail Packaged Foods | **Pulse Proteins/Flours/Starches** | **Products from Pulse Ingredients**

General Mills, Kellogg's, Post, Nestlé, DANONE, SMUCKER'S, MAPLE LEAF

ripple, Frito Lay, PEPSICO, MARS, HERSHEY, Loblaws, Barilla

BEYOND MEAT, FIELD ROAST, gardein, Morning Star FARMS, Tyson, BEANITOS, Peatos

Texturized Pulse Protein as Meat Alternative

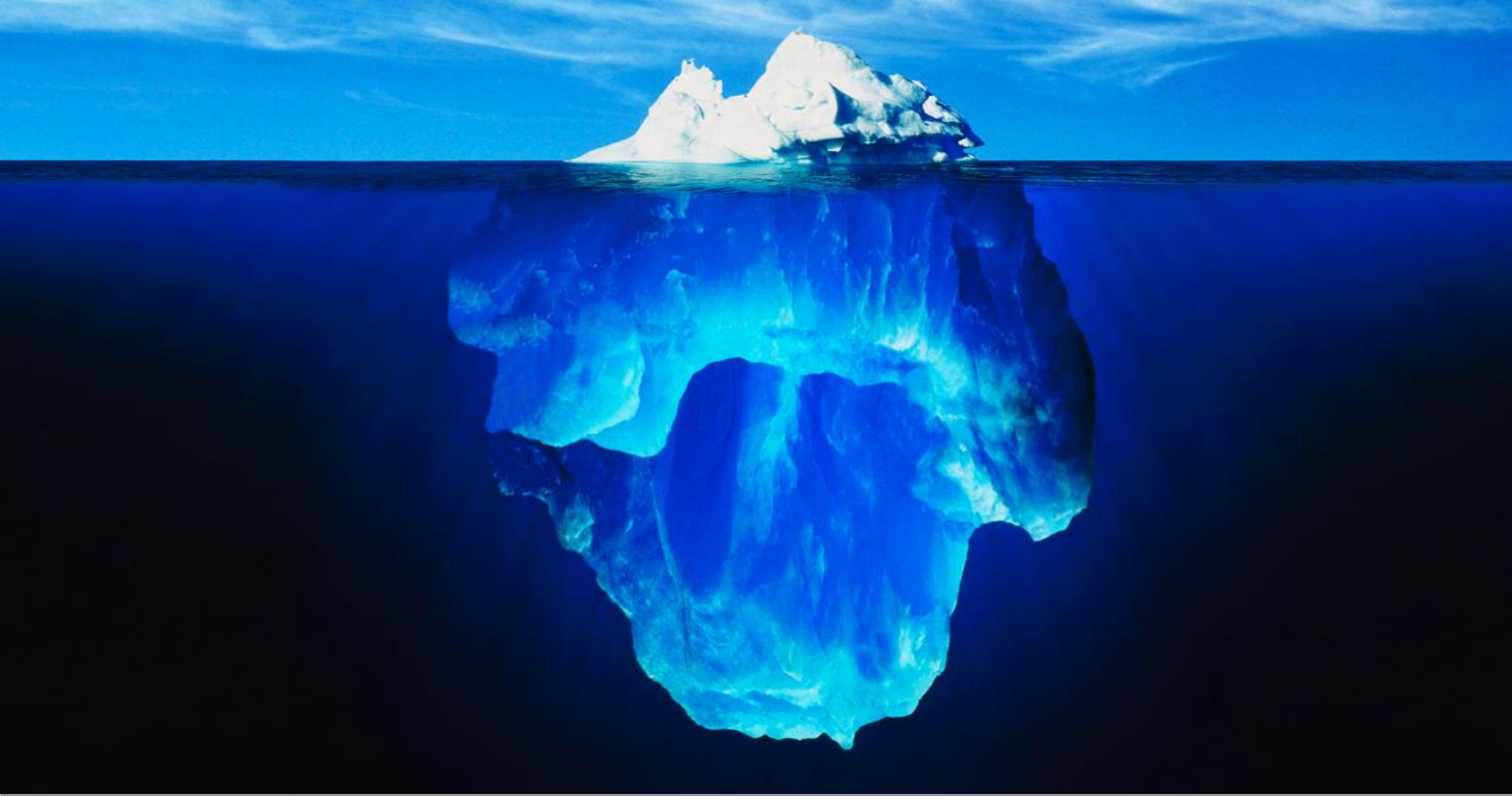
Plant-Based Chili

Chick'n Nuggets

"Pork" Strip Stir-Fry

Plant-Based Burger

Introducing ……*Veggipasta* and *Veggicrumb*



AGT Foods – A Key Supply Partner

- **AGT Foods** has strength in worldwide grain sourcing, ingredient processing, distribution and logistics and a diversified business including:
  - Grain Origination, Merchandising and Trading
  - Bulk Grain Handling and Logistics
  - Pulse and Food Ingredient Production and Distribution
  - Retail Packaged Foods
- Global plant-based foods innovation race with the goal to feed a growing population
- Fundamental demand growth through population and income growth
- Innovation/scaling food processing critical
- North America is the first stop on the Protein Innovation Highway
- Value creation in companies who play in multiple links in the global value chain :

Origination → Handling → Processing Innovation → Transportation and Logistics → Food Processing → Distribution