



About Us

OKANAGAN SPECIALTY FRUITS INC. (OSF)

- Okanagan Specialty Fruits® is an agricultural biotechnology company specializing in the development of novel tree fruit varieties using bioengineering.
- OSF's flagship product is its Arctic® apple varieties, which stay orchard-fresh longer. In November 2017, Arctic® Golden became the first Arctic apple variety launched in select U.S. test markets.
- In 2019, Arctic apples' retail availability throughout the U.S. expanded and a new variety was introduced: Arctic® Granny. Both varieties were introduced to the U.S. foodservice industry that same year.
- Arctic® Fuji became commercially available after the 2022 harvest.

MISSION

- Developing and leveraging cutting edge technology to deliver the world's best fresh sliced apple that enables category growth, profitability, and sustainability.

COMPANY FACTS

- OSF was founded in 1996 by apple and cherry growers, Neal and Louisa Carter.
- OSF was acquired by Third Security, LLC in February 2020.
- OSF's headquarters is based in Summerland, B.C., Canada.
- OSF is a vertically integrated company that manages all aspects of Arctic apples, from the science to the consumer. All Arctic apples are grown in our orchards in Washington state.



Neal & Louisa Carter



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

2316RM
© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

media@okspecialtyfruits.com



Timeline

- 1996**
 - OSF founded by Neal and Louisa Carter
- 2002**
 - Arctic apple science proven
- 2003 - 2005**
 - Field trials planted in Washington and New York States
- 2010 - 2011**
 - Petitions requesting regulatory approval submitted in Canada and the U.S.
- 2012 - 2013**
 - Public comment periods held by USDA¹, APHIS² and CFIA³
- 2015**
 - Cleared regulatory obligations for Arctic® Golden and Arctic® Granny for USDA, FDA⁴, CFIA, and HC⁵
 - First commercial orchard of Arctic apples planted in Washington State
 - OSF acquired by Intrexon Corporation (NASDAQ: XON)
- 2016**
 - Arctic® Fuji received USDA approval
- 2017**
 - Arctic® Golden fresh slices became the first Arctic product for sale in select U.S. test markets
- 2018**
 - Arctic® Fuji received HC and CFIA approval
 - Arctic® Fuji trees planted in Washington State orchards
- 2019**
 - Arctic® Granny became commercially available
 - Arctic® Fuji received FDA approval
- 2020**
 - OSF acquired by Third Security, LLC
- 2021**
 - Arctic® Gala and Arctic® Honeycrisp varieties received USDA approval
- 2022**
 - First commercial harvest of Arctic® Fuji in October
 - Ground breaking on OSF processing facility in Moses Lake, Washington

1 USDA - United States Department of Agriculture
2 APHIS - Animal and Plant Health Inspection Service
3 CFIA - Canadian Food Inspection Agency
4 FDA - Federal Drug Administration
5 HC - Health Canada



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

2316RM

© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

media@okspecialtyfruits.com



Golden Delicious



Granny Smith



Fuji

ARCTIC APPLES:

Our Apples

Arctic apples are just like other apples — only they don't brown prematurely thanks to the help of bioengineering. We've used the apple's own genes to "turn off" the enzymes that make apples brown when they are bitten, sliced, or bruised.

Arctic apples keep their orchard-fresh taste longer, offering an unparalleled "just-picked" eating experience; and are still just as wholesome as their conventional counterparts.

Arctic apples are a convenient way for consumers to enjoy apples and increase apple consumption.

To learn more about the science behind Arctic apples, please visit **"OUR SCIENCE"** section in our Media Kit or online at www.okspecialtyfruits.com.

- Commercially, there are three Arctic® apple varieties available: Arctic® Golden, Arctic® Granny, and Arctic® Fuji. All three are available in fresh, ready-to-eat slices and dices.
- In retail, Arctic apple slices are available in contact-free, 2 oz. & 5 oz. Grab 'N Go bags.
- For foodservice applications, Arctic® apple slices are available in 20 oz. and 40 oz. packages in both sliced and diced options.

40 oz. (1134g)



20 oz. (567g)



5 oz. (142g)



2 oz. (56.7g)



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

2316RM

© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

media@okspecialtyfruits.com

ARCTIC APPLES:

Our Orchards

- All commercial Arctic apple trees are planted in Washington State.
- Arctic apple orchards employ state-of-the-art technology, optimizing the use of resources while delivering high-quality fruit.
- Approximately 1,250 acres of trees are currently planted.

AWARDS

2013 Biotech Canada Gold Leaf Award. Early Stage Company of the Year – Industrial and Agriculture

2014 Summerland Chamber of Commerce Business and Community Excellence Award – Technology and Innovation Excellence

2014-2015 Produce for Better Health Fruit & Veggies - More Matters Champion Award

2016-2018 Produce for Better Health Fruit & Veggies - More Matters Role Model Award

2019 Nominee Summerland Chamber of Commerce Business and Community Excellence Award – Agriculture and Agri Business Excellence

2019 Produce For Better Health – Industry Have A Plant™ Promoter Award

2020 Produce for Better Health – Industry Have a Plant™ Promoter Award



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

2316RM

© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

media@okspecialtyfruits.com

ARCTIC APPLES:

Supporting Sustainability

Arctic apples provide a sustainable solution to less food waste and improved apple consumption.

Consumers no longer have to worry about half-eaten apples. Arctic apples stay orchard-fresh longer; keeping their visual appeal and fresh taste longer than conventional apples.

Arctic apples are perfect for pre-made dishes, platters, or new applications where, at one time, you had to worry about the apples turning brown or the need to add preservatives that affect flavor. Fewer apples will be thrown away, reducing food waste and boosting overall apple consumption.

- **Extended Shelf Life:** Arctic fresh apple slices retain their orchard-freshness with a 28-day shelf life compared with the 18 – 21 day industry average; reducing waste at retail, foodservice establishments, and home.
- **Supply Chain:** The Arctic Advantage™ benefit means that less fruit is wasted during harvest, packing, processing, and shipping, so more high-quality apples reach consumers.
- **Retailers:** Arctic apple slices are the perfect option for consumers who increasingly seek healthy, ready-to-eat snacks. Our contact-free Grab 'N Go packaging makes it easier than ever to eat on the run, without sacrificing nutrition or taste.
- **Foodservice:** Arctic® apples offer “Less Waste, Less Labor, More Flavor.” Because Arctic apples stay orchard-fresh, they offer new menu opportunities for foodservice operators where apples are not generally used, such as in salads, charcuterie boards, or whatever else can be imagined!



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

2316RM

© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

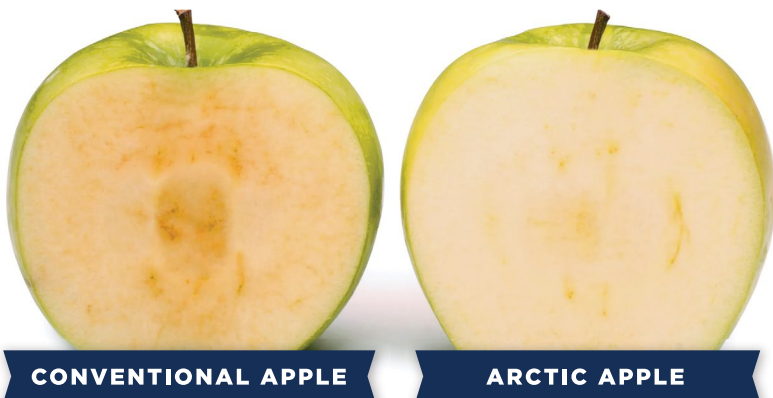
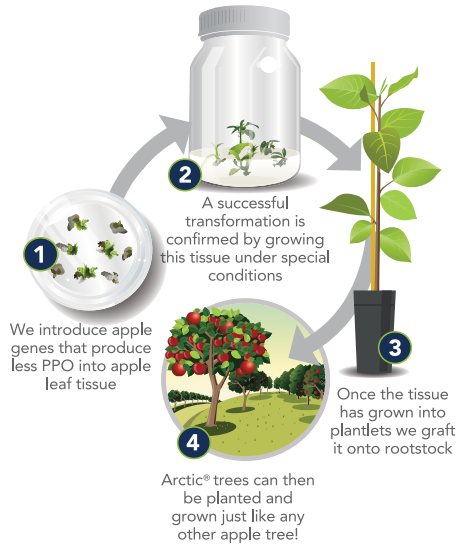
media@okspecialtyfruits.com

BEHIND ARCTIC APPLES:

The Science

Arctic apples are just like other apples — only they don't brown prematurely thanks to the help of bioengineering. The science behind Arctic apples involves enzymatic browning, which occurs when apple cells are damaged (e.g., through biting, slicing, and bruising).

- There is a key difference between browning caused by fungal/bacterial contamination (e.g., rotting) and enzymatic browning. Enzymatic browning is superficial browning that often leads to unnecessary food waste. Arctic apples do not mask or hide rot and actually make it easier to tell when an apple is still good to eat.
- When apple cells are damaged through biting, slicing, and bruising, the damage causes an enzyme called polyphenol oxidase (PPO) to react with the fruit's phenolic content. This results in a brown-toned melanin that stains the fruit and consumes the fruit's Vitamin C and antioxidant content.
- Arctic apples likely better retain their nutritional content of antioxidants and Vitamin C because enzymatic browning does not take place.
- Arctic apples use the apple's own genes to turn off the genes that produce PPO. This is accomplished through a process called RNA-interference (RNAi), a naturally occurring pathway frequently used in agricultural bioengineering.
- Multiple regulatory reviews and extensive field trials (and over 10 years of data and studies) have demonstrated that Arctic apple trees grow, respond to pests, flower, fruit and harvest just like any apple trees under the same growing conditions.



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

2316RM

© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

media@okspecialtyfruits.com

“

What inspires me most with OSF is our ability to truly make a difference with advancements in biotechnology. Biotech crops are already saving lives and they have the potential to save thousands more. I've been across the globe to over 50 countries and have witnessed firsthand poverty-stricken villages and the hardships they face in feeding their families. If we can all embrace the technology that will aid us to efficiently and sustainably produce the food we need to feed this planet we can make a powerful impact on the sustainability of both the environment and people across the world. It doesn't get much more motivating than that!

- NEAL CARTER

”

Management Team

OKANAGAN SPECIALTY FRUITS INC. (OSF)

NEAL CARTER

CO-FOUNDER & PRESIDENT

Neal Carter has over 30 years of experience working as both a bioresource engineer and orchardist. In his travels, he's experienced firsthand the value that biotechnology can offer across all manner of crops and improvements. In particular, in the mid-90s he came across research being done by CSIRO — an Australian federal government agency for scientific research — to enhance potatoes with a nonbrowning trait through biotechnology.

As an apple grower, Neal was very aware that apple consumption had been declining for decades while obesity rates had simultaneously been sharply rising. Neal and his wife Louisa felt that they could help boost apple consumption through a similar biotech approach with apples, as nonbrowning apples would be more appealing and convenient. Additionally, they felt this small genetic change could also significantly reduce food waste, as nearly half of all apples produced end up wasted, many due to superficial bruising.



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

2316RM

© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

media@okspecialtyfruits.com



DON WESTCOTT

SENIOR VICE PRESIDENT

Shortly after completing post-secondary programs in Marketing and Management at BCIT, Don began his career in the tree-fruit industry. Over the past 24 years, Don's passion has grown along with his expertise, gained through positions in grower services, production logistics and planning, and marketing management. Don joined the OSF team in 2017, where he is excited to play an integral role in the successful development and delivery of innovative and nutritious fruits.



MUHAMMAD TAHIR

DIRECTOR

Research & Regulatory Affairs

After earning a PhD in Plant Breeding and Genetics at Washington State University, Tahir established an impressive career with leading agricultural science companies as well as teaching and research in areas related to genetics, functional genomics, biotechnology, and crop breeding. Tahir joined OSF in 2020.



BOB WILKINSON

DIRECTOR

Sales

Born and raised in Illinois, Bob studied at Chicago State University and has worked in sales management for top food brokers and produce suppliers in the industry. He joined OSF in the summer of 2020 as the Director of Sales.



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

2316RM

© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

media@okspecialtyfruits.com



MARCY KEEHN

DIRECTOR

Human Resources, Finance, & Administration

Marcy's career started as a counselor, where she worked with people with disabilities, children, and youth, and then transitioned into employment counseling. She also has extensive experience as an operations manager for a provincial program where she was responsible for managing staff, subcontractors, client management systems, and contracts. Her education includes an undergrad in Child and Youth Counselling and a Master's Degree in Conflict Analysis and Management. Marcy joined the OSF team in Summerland, BC in April of 2019.



REBECCA CATLETT

DIRECTOR

Marketing & Communications

Rebecca earned a Bachelor of Science in Management of Business and Information Systems from George Fox University and has an extensive background in agriculture. Working on communications and marketing strategies with global teams has given Rebecca insight into multiple aspects of the supply chain from seed to table. She joined OSF in 2019 as Director of Marketing & Communications.



SHEENA GROSS

DIRECTOR

Supply Chain

Sheena completed courses at BCIT in Accounting, Management, Communications, and APICS. With 20 years of supply chain experience, Sheena is a valuable addition to the OSF team. Sheena started with OSF in 2019 and has coordinated many major initiatives, along with the management of the Logistics Department.



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

2316RM

© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

media@okspecialtyfruits.com

What's Next

- OSF's Moses Lake Arctic apple processing facility will open. It will be one of the largest facilities, at over 10,000 square feet, plus room for expansion.
- Arctic® Gala and Arctic® Honeycrisp trees will begin producing in limited quantities by 2024.
- OSF will seek commercial approval from U.S. and Canada for the newest variety Arctic® Pink.
- New trees take several years to reach peak fruit production, so availability will increase gradually each year for the foreseeable future.



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

2316RM

© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

media@okspecialtyfruits.com

A collection of several sliced Arctic apples, showing their pale yellow, crisp flesh, arranged in a scattered pattern against a dark blue background.

Follow Us

There is a lot happening with Arctic apples. Don't miss out on any of the exciting news. Follow us for regular updates.



@arcticapples



arctic_apples



@ArcticApples



arcticapples



ArcticApples



okanagan-specialty-fruits-inc



Interested in covering Arctic apples? We are happy to facilitate requests such as interviews, fact-checking, images for use, and samples.

23.16RM

© 2023 Okanagan Specialty Fruits Inc. All rights reserved. All trademarks are under application with the United States and Canada.

Please send all inquiries to:

1.855.404.0101

arcticapples.com

media@okspecialtyfruits.com