





# Fruit-ful Innovation: Adding Value to Non-traditional Crops

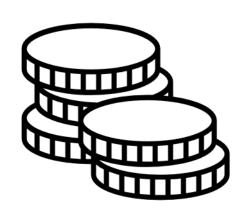
Evan Elford, OMAFA New Crop Development Specialist 2024 NEVFC, Manchester, New Hampshire, USA

#### Overview

- What adds value to farm products?
- Examples from Ontario Farms
- Considerations for supplying large-scale processor(s)



# What adds value to farm products?



Points adapted and modified from "Adding Value to Farm Products", Fruit & Vegetable Magazine, March 2008.

Janice McGregor, Alberta Agriculture, Food and Rural Development.

#### Species & Variety Selection

#### Species (e.g., Fuzzy kiwi vs. Kiwiberries):

 Peeling, cutting, scooping, clean up, etc. vs. no preparation, kid friendly, easy to take along, no clean up, flavour!

Variety (e.g., Haskap)

• Flavour, firmness/shelf life



Species & Variety Selection

2 Cleaning Cooling Cooking Grinding Churning







# PLAID SHIRT Farms

HASKAP



Home / Shop

#### Frozen Haskaps

\$9.00



Sku: 7020

We are unable to deliver frozen products
Pick up by appointment at farm only
Click "Contact Us"

Contact Us

Choose Pkg Size

50g 2kg

10kg

Species & Variety Selection

2 Cleaning Cooling Cooking Grinding Churning

**3** Combining Culturing Extracting





Species & Variety Selection

2 Cleaning Cooling Cooking Grinding Churning

**3** Combining Culturing Extracting

4 Handcrafting Packaging Distributing





## Packaging



#### Distribution



https://wholesale.100kmfoods.com/







Species & Variety Selection Cleaning Cooling Cooking Grinding Churning 2 Combining Culturing Extracting 4 Handcrafting **Packaging** Distributing 5 Certification Information **Education** Entertainment



#### Information & Education

Recipes, signs around the farm, and labelling (nutritional, regional, UPC production system (e.g. organic)











https://ginsengontario.com/



### Entertainment: Farm beautification for festivals



#### Entertainment:

Sunflower festival, corn maze, other events with timed ticketing



### Example: Haskap

Functional Food: fresh & frozen berries, juice, wine, preserves









https://borealfamilyfarm.ca/berries/









https://plaidshirtfarms.com/shop/



### Example: Sea Buckthorn

#### **Functional food**











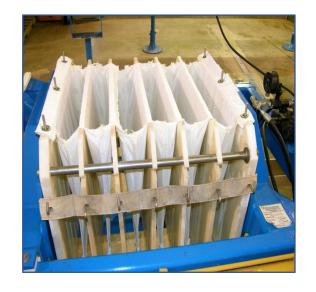




100 mL

## EVERSPRING F A R M S











https://www.blisterpackag.com/food-blister-packaging/

#### IQF and freeze-dried products







### Example: Elderberry





#### Example: Hops

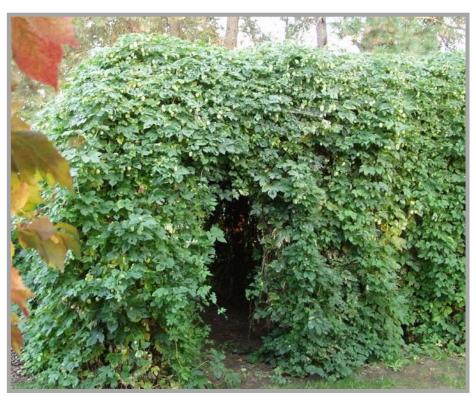
Culinary: brewing (beer, hard cider), non-alcoholic beverages (hop waters), hop asparagus, flavourings







# Ornamentals: e.g., potted plants sold for home gardens, dried hop garlands







Medicinal: e.g., sleep aids (pillows, tea, capsules)

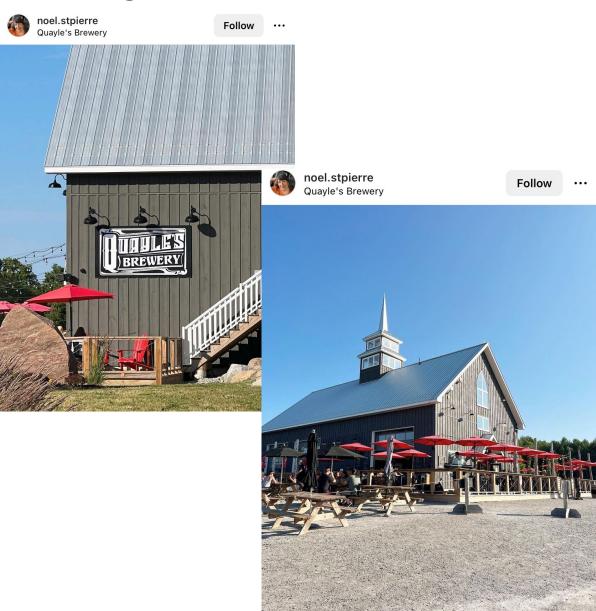
Cosmeceuticals: e.g., hand creams







## Entertainment/agritourism/events: On-farm breweries, weddings, etc.





#### Adding Value: Foods for Health

- A functional food is similar in appearance to, or may be, a conventional food, is consumed as part of a usual diet, and is demonstrated to have physiological benefits and/or reduce the risk of chronic disease beyond basic nutritional functions.
- A *nutraceutical* is a product <u>isolated or purified</u> <u>from foods</u> that is generally sold in medicinal forms not usually associated with food. A nutraceutical is demonstrated to have a physiological benefit or provide protection against chronic disease.
- A Natural Health Product (NHP) includes: Probiotics, herbal remedies, vitamins and minerals, homeopathic medicines, traditional medicines such as traditional Chinese medicines, other products like amino acids and essential fatty acids



# Considerations for Nutraceuticals and Natural Health Products

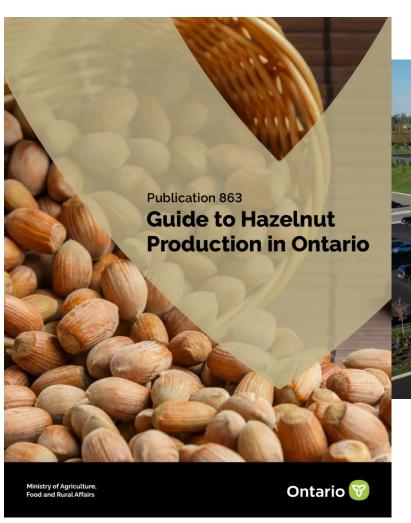
- 1. Market need
- 2. Can you grow the crop?
  - Climate, Agronomics, Farm Resources/Infrastructure, Regulations
- 3. Processing & Packaging
  - Specialized equipment, potable water (and water disposal), licensed/inspected facilities, (typically, the more processed the product, the higher the investment costs)
- 4. Sales & Distribution
  - Labelling and claims (e.g., monograph), pricing (high value crop, unique product), farm market regulations (sales), liability (products/farm market/agritourism), equipment (refrigerated trucks).







### Adapting to Markets: Hazelnuts











Chai Hazelnuts \$12.00



www.jewelsunderthekilt.com/



# Considerations for Supplying Large-scale Value-added Processors

- Need large supply and usually do not deal directly with multiple individual growers (need an aggregator, etc.)
- Typically require further processed ingredients (ie. not the raw/fresh or frozen fruit) (e.g., powder, oil, etc.)
- These further processed ingredients need to be standardized to meet certain vitamin/mineral/nutraceutical contents
- Food safety and traceability certification/documentation is required



#### Selling to a Value-added Processor

- Create a portfolio of products marketed towards processing.
  - E.g., sell sheets, white papers, and exposure through food ingredient magazines, websites, or even ingredient trade shows.
- Guaranteed market, but usually lower price point
- Don't invest heavily without a contract or back up plan
- Time developing the industry (years) and legwork by individual personnel (liaison).
- May need multiple levels of government, academia, and industry involved to develop a large-scale supply chain
- May need one producer who is willing to take the lead on investment for aggregation, processing, certification, and delivery to the processor.



#### But remember:

 Established industry can scale up but is difficult for non-traditional crops with a steep learning curve for growing and with no/limited aggregation or supply network.

- In event of crop failure, you may be stuck trying to meet a contract that you can't supply.
- The market may disappear without your control (international pressures/unforeseen circumstances).



### Summary (1)

Value-adding alternative crops:

- Immature marketing systems
- May have high labour requirements
- Difficult to obtain financing
- Limited access to information
- Lack of consumer knowledge

But...



#### Summary (2)

Opportunities exist!

Do your background research first and think outside the box!

- Find and understand market niche/gaps
- Many opportunities but no silver bullet
- Objectives and fit for the farm (crop type & market)
- Non-traditional crops are typically higher value/can be grown on smaller acreage
- Lend themselves to value-adding





#### Thank you!

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