

Freedom To Create. Spirit To Achieve.

Hemp & Flax Grain Opportunities Seed & Components



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Why Consider Hemp & Flax?

Increased demand for grain and fibre products from hemp and flax

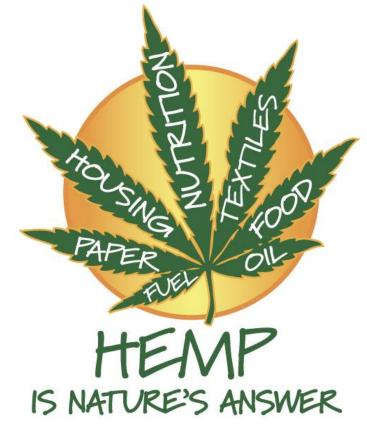
	F	Present	New		
Markets	Present	Market penetration	Product development		
	New	Market development	Diversification		

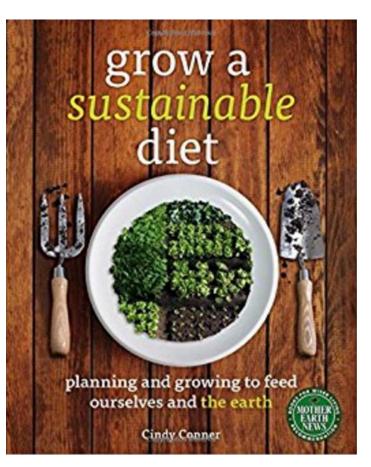
Products

This offers producers options for crop rotations with excellent diversification opportunities if they are able to profitably meet the market requirements



Why Hemp & Flax Now?







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HUFFPOST LIVING

CANADA

3 Seeds That Pack A Nutritional Punch

Posted: 03/08/2017 1:37 pm EST | Updated: 03/08/2017 1:37 pm EST



Flax Seeds vs. Chia Seeds vs. Hemp Seeds

http://www.huffingtonpost.ca/lifetime-daily/seeds-nutritional-punch_b_15210690.html



Lifestyle Trends:







Quality based on:

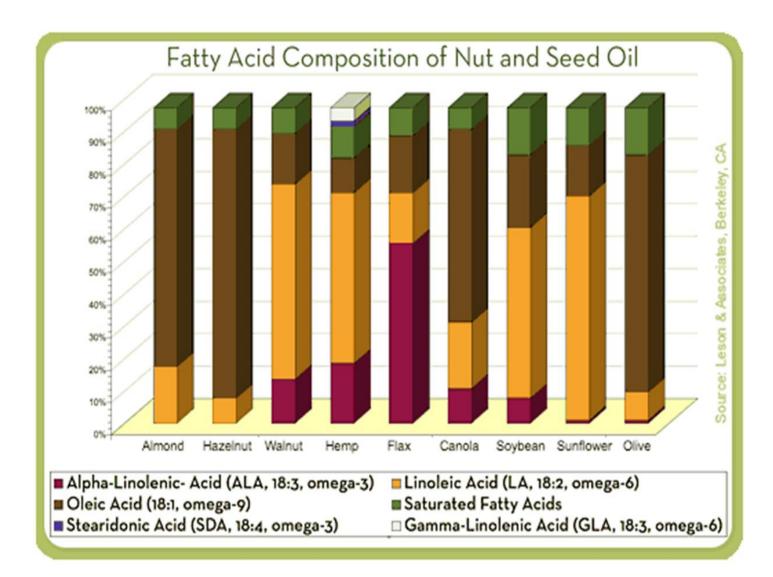
- Flax:
 - Iodine value
 - Oil content
 - Protein content
 - Free fatty acids
- Hemp:
 - Not under the authority of the Canada Grains Act







Hemp & Flax Comparison

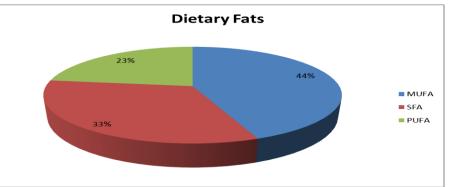




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The 3, 6 Omega's – Role of PUFA's

Modern Western diets tend to contain a higher proportion (10-30X) of ω -6 vs. ω -3 fatty acids



- This imbalance is causally linked to a growing number of metabolic medical conditions e.g. cardiovascular disease, diabetes, arthritis
- Nutritionists recommend a 2:1 4:1 ω -3: ω 6 consumption ratio found in hemp and flax seeds



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Hemp & Flax Nutritional Comparison

Per 30g/ 3 tbsp.	Omega-3 (ALA)	SDA	Omega-6	GLA	Protein	Fibre
Flaxseed	4.5 - 7.5 g	NA	2.1 g	NA	5.7 g	8.4 g
Hemp Hearts	2.5 g	128 mg	8.0 g	384 mg	11 g	3 g

Flax seeds must be cracked or milled prior to consuming

Hemp seeds can be eaten whole and are readily digestible



Gluten Free

- So Gluten is a protein complex found in wheat, barley, rye, triticale
- Both flax and hemp are gluten free and are therefore suitable for celiac's and those with an intolerance to gluten
- Flax and hemp may be added to gluten-free products to add protein and fiber





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Flax Seed Applications







Pumpkin Flax Granola USDA (FREAL - NET WT 115 07 (3)5 r









SUNFLOWER FLAX SEED GRANOLA GRANOLA DE TOURNESOL & GRAINE DE LIN



Hemp Seed Applications

















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Hemp: Emerging Products



- So CBD are non psychoactive cannabinoids found in hemp leaves
- Act on the endocannabinoid system and thought to exert an affect on the brain and immune systems to trigger healing and pain killing effects
- CBD-enriched health foods, tinctures and oils <u>may</u> become the next revolution in food and medicine
- p> Requires significant research to establish safety and efficacy
- Recent call on Health Canada to acknowledge the potential benefits of CBDs



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Hemp – Regulatory Requirements

Industrial Hemp Regulations

no enabled under the Controlled Drug and Substances Act

Regulations apply to:

- so Importation, exportation and possession
- Production, sale, provision, transport, sending or delivering of industrial hemp and it's derivatives (products)
- Doesn't apply to retail



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Hemp – Regulatory Requirements

- Licensing applies to:
 - plant breeders, producers and processors
- Growers must be licensed and can only grow approved cultivars for their region
 - Viable grain can not produce a plant with > 0.3% THC w/w in its leaves and flowering heads
 - **50** Testing requirements for IH to verify THC levels
- Seed or viable grain must be transported and stored in sealed tamper evident containers/packaging



Flax



Flax growers try to flush Triffid from system

Posted Jan. 11th, 2013 by Brian Cross

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http://www.producer.com/2013/01/flax-growers-try-to-flush-triffid-from-system%E2%80%A9/



Product & Process Certifications









Certified Gluten-Free





ISO 22000:2005 FOOD SAFETY

Government of Alberta



OU Kosher Certification



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Hemp & Flax Opportunities

'Many of the difficulties with industry development stem from the fact that supply chain relationships are not yet fully developed ...'



Demand for the end product is obviously the key to the development and success of the market.'



Meeting Customer Requirements

Are you a processor or producer entering a new market?

Not sure if you can meet your customer or regulatory requirements?

Use this free online resource to help you get on your way.

agriculture.alberta.ca/customer-requirements

Growing Forward 2

Aberta Government

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Government of Alberta **=** Meeting Customer Requirements is a free online resource that Alberta Agriculture and Forestry will launch in spring 2017. It will be announced on Call of the Land/Agri-News when it is available. For information on the E resource contact Kellie Jackson at <u>kellie.Jackson@gov.ab.ca</u> or 403 948 8538.



If you have questions ...

Please contact:

Krista Kotylak 17507 Fort Road Edmonton, Alberta T5Y 6H3 Phone: 780-643-0702 e-mail: krista.kotylak@gov.ab.ca