

# 2022

## Future Hemp Trends Report:

How health, sustainability, innovation & economics are changing the prospects for hemp.



**Blue Sky**  
HEMP VENTURES



# In This Report

<b><u>Intro</u></b> .....	<b>2</b>
<b><u>Blue Sky Hemp Ventures' Whole Plant Approach</u></b> .....	<b>3</b>
<b><u>Why Hemp? Why Now?</u></b> .....	<b>4</b>
<b><u>Overall Hemp Food Trends &amp; Market Drivers</u></b> .....	<b>5</b>
Hemp for the Body and Whole Heart .....	<b>7</b>
Hemp For the Whole Planet .....	<b>8</b>
Hemp for the Bottom Line .....	<b>9</b>
<b><u>The Top Ten Future Hemp Food Trends</u></b> .....	<b>11</b>
1. The Continued Growth in "Free-from" Protein Beverages .....	<b>12</b>
2. The Pet Food Opportunity .....	<b>14</b>
3. Keto-ish: Low-Carb and Nutrient-Dense is Here to Stay .....	<b>16</b>
4. A Need for Plant-based Rather than Fish-based Omegas .....	<b>18</b>
5. Nut-free Spreads .....	<b>20</b>
6. Better for You, Better for the Planet Oils .....	<b>22</b>
7. Lower Carb Gluten-Free Flour: Hemp Flour .....	<b>24</b>
8. Adding Fibre for Gut and Digestive Health .....	<b>26</b>
9. Plant-based "Dairy": Hemp as a Dairy Replacement .....	<b>28</b>
10. Cleaner, More Natural Plant-based Meat Substitutes .....	<b>30</b>
<b><u>Blue Sky Thinking Applied to Hemp</u></b> .....	<b>32</b>

# Intro

According to Statistics Canada, the number of industrial hemp licenses, and thus acreages that grow hemp, has doubled since 2018. Blue Sky Hemp Ventures was one of the original niche crop growers, and we've seen the changes first hand. First, the improved genetics for an increased and more efficient yield. Then, to the former belief that the plant's stalk, stem, and leaves are wasted biomass; today, hemp is a multi-use crop, giving farmers more value from every acre planted.

Our research reveals that the compound annual growth rate (CAGR) for hemp from 2021 to 2026 is projected at 22.5%. Furthermore, the hemp-based food market growth will also increase from 2019 to 2024 by \$364.96 million, while the CAGR is expected to be 11.5% within the same timeframe. This means that key markets like North America will register the highest growth rate – 35% – among other regions.

Because of this growth, the potential for significant business opportunities is fully anticipated for vendors during this time. Opportunities with the USA, China, Germany, France, and the Republic of Korea are already expected to boom.



# Blue Sky Hemp Ventures' Whole Plant Approach.

The Blue Sky approach is 'whole plant utilization,' meaning we harness the full value of the grain for superfoods, flowers for CBD extraction, and the stalks for a wide variety of sustainable industrial products. Whole plant utilization means a lower cost to customers and the planet.

Thanks to our unique position inside the industry, we know the time is ripe for you to take your first steps into a rapidly growing market that shows exceptional potential. It's an exciting time for everyone involved, but we know you have many questions about the hemp food industry in Canada and around the world.

Our 2022 Hemp Food Trend Report is your guide to the "whats," the "whys," and, perhaps most importantly, the "why nows."

# Why Hemp?

## Why Now?

Why should you pay attention to hemp trends? Hemp is well on its way from a niche crop to potentially a billion-dollar industry. In Canada, Blue Sky, in particular, stands strong. Our strategy of whole plant utilization aims to derive three distinct value streams from the plant to make hemp more attractive not just for its nutritional profile but also for its sustainability and for lowering costs.

This report focuses on hemp foods without delving too deep into hemp-derived CBD. However, it is worth noting that CBD plays a significant role in the changing economics of hemp, driving even more value from each

planted acre. What's more, change is on the horizon in Canada. Health Canada is preparing to change how it treats CBD (non-psychoactive) versus THC (psychoactive), with the potential to create a new category of Cannabis Health Products (CHP). This shift will see CBD products move from the shelves of heavily regulated cannabis dispensaries and into a range of food, drinks, supplements and more on the shelves of your local grocer or drugstore.



# Macro trends making hemp more affordable, accessible and in demand.

Three overarching macro trends are primarily responsible, each working synergistically towards making hemp affordable, accessible, and in demand.



## Demand for Sustainable Products

Not only does hemp sequester ten times more CO<sub>2</sub> than trees, but it also cleans the soil, requires little to no water, herbicides, or pesticides to grow, and can become a sustainable alternative to plastics, fuels, building materials, textiles and more. As consumers and retailers look to products with planet-friendly credentials, we see demand for hemp surging.



## Food as Medicine

Both consumers and the industry increasingly recognize hemp seeds as the nutritional and versatile powerhouse that they are. With an ever-growing list of exciting applications, hemp checks the boxes as keto-friendly, gluten-free, non-GMO, and plant-based while packing a major protein punch and cocktail of healthy fats and other nutrients.



## Shifting Economics

While this report is focused on hemp foods, both CBD and industrial hemp applications play heavily into the economics of hemp as a food ingredient, offsetting the cost of production to make hemp more accessible and affordable.

# Overall Hemp Food Trends & Market Drivers



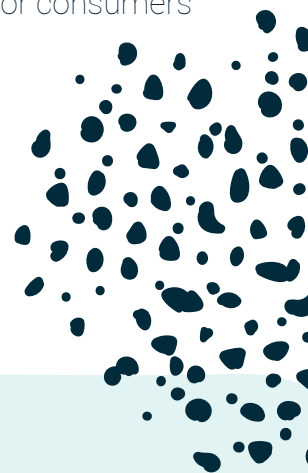
# Hemp for the Heart (and whole body for that matter):


We recognize that meat isn't going away. But, because it's the small changes that can have the biggest impact over time, even those who can't go a weekend without their bacon and eggs understand that hemp brings a lot to the table. Hemp's nutritional profile is top-notch, to say the least: for every 15 grams consumed, you get 4 grams of omega-6 and 1.5 grams of omega-3. Three tablespoons provide you with a whopping 10 grams of protein and almost 15% of your daily fibre intake.

But how does this heart-healthy seed compare to similar agricultural products on the market? Hemp is a complete protein, boasting all 9 essential amino acids for human nutrition. While flax, chia, and soy are also considered complete proteins, it's important to note that not all seeds are created equal.

For example, hemp has double the protein in a 3 tablespoon serving compared to flax and chia. It's also a high source of essential fatty acids. And, for those looking to nourish their bodies with a plant-based protein source, hemp comes out on top.

When we compare hemp to other super-protein suppliers, such as soy, there are some cautionary tales to consider. First, soy can be overly processed, particularly in pre-packaged form. Second, it is, unfortunately, a common allergen. Third, soy is challenging to cultivate in colder climates. Hemp is the clear choice for consumers and producers.



	 Hemp	 Flax	 Chia
<b>Protein</b>	10g	5g	5g
<b>Carbs</b>	3g	9g	13g
<b>Omegas</b>	10g	9g	7g
<b>Vitamins &amp; Minerals</b>	Vitamin B1, B2, D, E, chlorophyll, calcium, magnesium, sulphur, copper, potassium, phosphorus and enzymes	Vitamin B1, B6, magnesium, phosphorus, selenium, iron, potassium, copper and zinc	Vitamin B1, B6, magnesium, phosphorus, selenium, iron, potassium, copper and zinc Vitamin B, D, E, calcium, magnesium, iron, zinc, boron and niacin





# Hemp for the Planet:

New findings from the European Commission Joint Research Centre show that more than a third—34%—of all human-made greenhouse gas emissions are generated by food systems. They also show that food generates an average of 2 tons of carbon dioxide equivalent (CO<sub>2</sub>e) emissions per person annually. For farmers and environmentally-conscious consumers alike, the fact that hemp sequesters vast amounts of CO<sub>2</sub>, helping to ease the havoc other farming industries, such as cattle, cause to our planet, can help alleviate our eco-anxiety – the feeling we all have when we think about how our habits impact our environment.



Add to this the fact that hemp is easy to grow while using minimal water, herbicides, and fertilizers, and you've got a winning combination. It is a unique multi-use crop, produced not just for the food it provides but also for fibre and CBD by-products. Hemp is good for the soil and can be productive in various climates. It's drought-tolerant (particularly relevant for the 2021 growing season) and, considering Canada's unpredictable conditions of summer temperatures one day and winter frost the next, it is an ideal Canuck farmer's harvest. Simply put, it is a sustainable agricultural crop.



## Hemp for the Bottom Line:

The economics of hemp are shifting. Following the 2018 US Farm Bill, US farmers flocked to hemp primarily for CBD extraction – with little regard for the longer term, less sexy, but potentially larger opportunity of industrial hemp for food, fibre, and CBD. While there have been some winners and plenty of losers in this space, the market has consolidated, hemp genetics have improved, more sophisticated processing facilities have been created, and supply chains are joining up.

Other favourable factors include the practice of whole-plant utilization, which is helping to derive more value from every acre planted, and the drought tolerance of hemp, making it an attractive proposition for farmers living with the effects of climate change. These factors combined with growing demand make the economics of hemp much more tenable. The question is, will hemp remain a niche crop like walnuts and lavender, or is there potential for hemp to retake its former title as one of the biggest crops in the world?

Blue Sky has been in the hemp foods market since 2017, and even in that relatively short time, in this new, burgeoning, and quickly evolving industry, we've seen our fair share of trends. While we're cheerleaders for hemp in all its shapes and forms, we've highlighted our top 10 trends that we see sticking around and growing in the coming months and years.

Our 2022 Hemp Trend Report is intended to guide you to a better understanding of the hemp industry. It is essential that customers and would-be industry partners not only see the market potential but also recognize the need to find companies that are positioned to meet the growing demand for hemp food products and can deliver safe, high-quality, and sustainably sourced hemp ingredients.

---

“The next few years will see more advancements in hempseed food technology than the first 12,000. Solutions for the exploding plant-based foods segment will be revolutionary and novel, replacing soy and gluten.”

- Richard Rose - the Hemp Nut -  
TheRichardRoseReport.com



# The Top Ten Hemp Food Trends

1. The Continued Growth in “Free-from” Protein Beverages
2. The Pet Food Opportunity
3. Keto-ish: Low-Carb and Nutrient-Dense is Here to Stay
4. A Need for Plant-based Rather than Fish-based Omegas
5. Nut-Free Spreads
6. Better for You, Better for the Planet Oils
7. Lower Carb Gluten-Free Flour: Hemp Flour
8. Adding Fibre for Gut and Digestive Health
9. Plant-based “Dairy”: Hemp as a Dairy Replacement
10. Cleaner, More Natural Plant-based Meat Substitutes





# 1. The Continued Growth in “Free-from” Protein Beverages

North Americans expect their beverages to do more than just hydrate; they have become part of consumers’ daily nutritional routines. Functional beverages are expected to continue their strong growth, with the global market estimated to reach \$208 billion by 2024, with annual growth of close to 9%.\* All generations continue to be obsessed with getting enough protein in their diet, with 60% of consumers saying they are adding or increasing protein in their diet, up from 51% in 2013.\*\*

Our older demographic segments, who are a large part of the population, want to consume their muscle mass, and this trend will keep growing. In addition, with many of us continuing to work from home at least part of the time, protein smoothies are being consumed not only for breakfast but

\*Source: Research and Markets

\*\*Source: Hartman Group’s Health + Wellness 2019 Report.

also throughout the day as consumers look for a satisfying, healthy beverage.

## Consumers are increasingly specific about what they want – and what they DON'T want.

Fibre and prebiotics are among consumers' most sought-after benefits or fortifications when shopping for functional beverages, at 26% of consumers who shop in that category. That puts them ahead of those who shop for probiotics or digestive enzymes.\* Hemp offers the perfect solution to those who want to drink their protein, avoid dairy, gluten, nut, whey, and soy - all while doing their bit for the planet. For these reasons and more, we predict that protein beverages and dairy alternatives will be the next big thing for hemp.



Hemp protein powders and beverages have a cleaner, less processed ingredient deck, with a mild nutty flavour, packing a substantial 15 grams of protein per serving. In addition, as a "free-from" product, it's easier to digest for many people who have difficulties with whey protein, the main ingredient of many currently available protein powders. And as a plant-based protein, hemp is suitable for vegans while providing all nine essential nutrients, as well as omega-3s, something many vegans lack.



\*Source: Hartman Group's Functional Food & Beverage and Supplements Report



## 2. The Pet Food Opportunity:

The trends driving pet food are similar to those driving human food, including cleaner ingredient decks, higher-quality ingredients, and a smaller environmental “pawprint.” According to Mordor Intelligence’s: Pet Food Market in Canada Report, the Canadian pet food market is projected to register a CAGR of 4.3% during the forecast period (2021-2026), driven by a few macro trends. Pet Food has traditionally remained one of the categories most resistant to economic disruptions. The COVID-19 lockdown restrictions resulted in everyone (and their dog) getting a dog, leading to an increase in demand for a range of pet products and services. The latest data shows 35% of Canadian households own a dog.\* In addition, there has been an increase in a phenomenon described as “pet humanization,” wherein pets are treated with increased care and hygiene, driving new product categories, packaging, and resourcing of ethically viable products.

\*Source:Euromonitor May 2020

Supplements for pets have also seen a significant sales jump, especially those containing CBD, now up 22%.\* Younger generations of pet owners (Gen Z, X and Millennials) are aware of the benefits of CBD products for themselves; they will now look for products to deliver similar benefits for their pets. So, when an owner sees their dog is suffering from hip joint pain or seizures and none of the conventional methods seem to help, they will turn to a new and progressive way of thinking. It's worth noting here that osteoarthritis affects 20% of all dogs regardless of age\*\* – that is a lot of sore pups! In addition, as the world starts opening up again and people begin to return to their offices and work from home less often, those pandemic pups and kitties will suffer from separation anxiety due to the change in schedule. CBD and hemp oil for calm and relaxation and an alternative pain medicine will be key ingredients that will meet this growing need.

## The line between human and animal products is starting to blur

The potential for CBD in pet products is already being realized south of the border. For example, Martha Stewart has launched a line of CBD products for both humans and their pets. Not only is it one of the most effective natural therapies for dogs suffering from arthritis, anxiety, and many other conditions, it's also safe and has no side effects. Unfortunately, here in Canada, there are currently no approved CBD products for animals – so let's focus on what we can do.

Luckily, hemp seed oil alone (no CBD) has been shown to also help with everything from hip and joint ailments to immune and cognitive support, glossy coats, strong nails and healthy wet noses and even fresh breath. Products in this space include oil supplements, chews, sprays, drops, a topical gel, and more, with the most significant player in the category today being True Leaf. They currently offer a range of hemp oil-infused products from joint support to everyday omega immune and cognitive support. We look forward to seeing new players join this space and seeing happy, healthy pets everywhere rejoicing.



\*Source: US SPINS data 2021  
\*\*Source: VCA Animal Hospitals





### 3. Keto-ish: Low-Carb & Nutrient-Dense is Here to Stay

In 2020, "keto" was the most searched food-related topic globally, with 25.4 million searches. Like the grapefruit diet, some diet fads fade as fast as they come. However, the keto diet, focusing on high-fat, low-carb, nutrient-dense foods, appears to have staying power. And the keto diet is evolving into more of a 'keto-ish' way of living with more broad-stream adoption of keto-friendly products. Whether consumers follow the entire diet's rigorous regime or just dabble, food and beverage products that are keto or keto-inspired are rapidly growing.

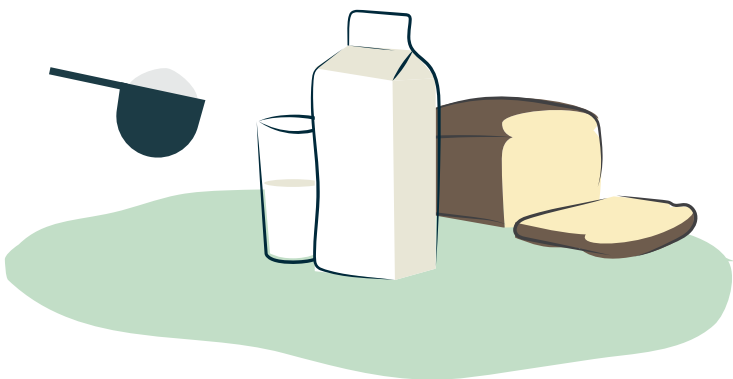
#### **Hemp's ability to stand in for non-keto-friendly ingredients looks strong**

Hemp foods are naturally keto-friendly. Hemp seeds are high in protein and fat while low in carbohydrates. And they provide fibre, which can be challenging to get enough of for those



following keto. Hemp seeds can be added to many foods, from smoothies to a topper for your favourite meals. They are also added to keto-friendly snacks such as energy bars and coconut clusters.

We're also seeing a lot of promise in a range of baking applications with hemp as a key ingredient. One key player in the baked-good space is Baking Innovations, who have developed Hemp'n Seed Keto bread mix that delivers just 4 net carbs per serving – and tastes good!



---

“Hemp is food, fuel and fibre, and when combined and balanced with other natural ingredients, it makes the best-tasting bread you have ever tried.”

- Richard Charpentier, CEO, Baking Innovations

Other emerging products include hemp-based pizza crusts, hemp tabouli, hemp cereals, hemp granola, and more. It's a cross-generational, cross-cultural, and cross-dietary requirement/preference trend.



## 4 A Need for Plant-based Rather than Fish-based Omegas

The COVID pandemic caused more consumers – 70% – to focus on health and enhance their diets with vitamins and supplements.\* As a result, the global omega-3 market size (including fish oil) generated \$19.7 billion in 2019 and is expected to reach \$49.7 billion by 2030.\*\* The most significant trend in the omega-3 market is the growth of veganism and the demand for plant-based supplements. As a result, the fish-free omega-3 market is projected to reach almost \$1.3 billion by 2029.\*\*\* Hemp seed oils, with their natural abundance of nutrients, may be the next step for those who want the benefit of omega-3 in their diet. But why choose hemp over fish oil capsules, for example?

\*Source: Caddle Nov/Dec 2020 surveys

\*\*Source: P&S intelligence

\*\*\*Source: Transparency Market Research

For starters, hemp seed oil lacks the much-maligned “fishy” taste while also being more sustainable. It’s suitable for a plant-based diet. Hemp seeds are also remarkably nutritious; not only do they contain perhaps the highest quality protein in quantities beyond most other food sources, but hemp seed also reigns supreme for polyunsaturated fatty acids, including omega-3 and -6. The body uses these special oils for detoxification, building brain cells, balancing hormones, and more.

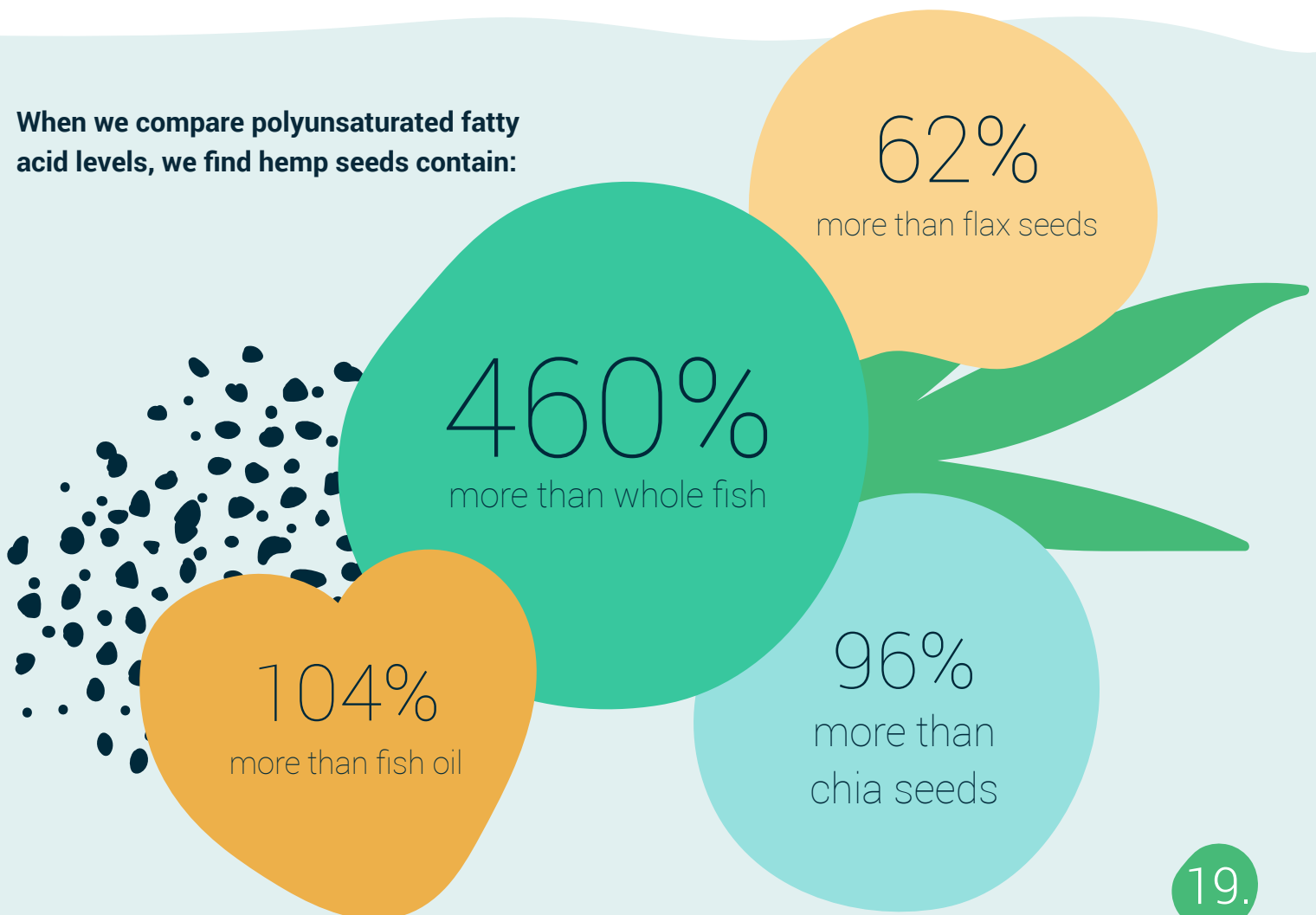
### By the numbers: hemp outperforms the competition

Let’s look at the facts in the table below.

Also did we mention hemp seed oil contains 0% fish? Some consumers want to avoid the potential for toxic metals, such as mercury, while others fear the possibility of polychlorinated biphenyls (PCBs) being in their fish capsules. And then there is also the growing market for vegans who avoid fish, even in oil form.

Current products such as Manitoba Harvest Hemp Oil soft gel capsules have shown promise to those who suffer from arthritis, anxiety, tremors, and joint pain. However, we see great potential for this product for more than those who want to gain their omega-3.

When we compare polyunsaturated fatty acid levels, we find hemp seeds contain:





## 5. Nut-free Spreads

The North American Nut-Based Spreads market was worth US\$2.25 billion in 2021 and is estimated to be growing at a CAGR of 7.5%. That puts it on track to reach US\$3.23 billion by 2026.\* This growth is driven by the return of the breakfast occasion and the shift from sugary jams to healthier protein-based spreads.

Peanut allergies are the most common food allergy in children, tripling in the past twenty years. As a result, there has been a decline in the peanut butter market, leading to increased consumption of other nut and seed-based spreads.

We envision hemp spread as the next big condiment, joining other seed and nut spreads on the market, including peanut butter, hazelnut, and pumpkin seed, to name a few. Besides its nine essential nutrients and high levels of protein and fibre, consumers will love it because it offers a new alternative for those with nut allergies.

\*Source: MarketData Forecast

## There's an open opportunity to Spread the Word about hemp

Currently, in Canada, this remains untapped potential. South of the border, we discovered Hemp Seed Butter by Wilderness Poets, with the promise of a similar flavour profile to that of pine nuts. We see great promise for consumers who suffer from migraines and are triggered by other kinds of nut butter and for parents looking for a simple, nutritious "nut-free" spread for school lunches.

And while currently, the above hemp seed nut butter is simply that, hemp seeds, there is the potential to create flavoured hemp seed spreads such as maple, a Canadian favourite, and nut-free alternatives to the leading chocolate spreads.





## 6. Better for You, Better for the Planet

In North America, olive oil dominates the pourable oil category, with a 37% market share.\* While olive oil may still have the biggest health halo and be the biggest seller on a dollar basis, alternative oils are on the rise and are a top food trend, according to Whole Foods in 2021. Consumers seek more alternative nut and seed oils to bring unique flavour and health properties to their food.

Cold-press hemp seed oil, when unrefined, creates a perfectly balanced oil with a 3:1 ratio of omega-6 and omega-3 fatty acids. It provides numerous vitamins and minerals, including Vitamin A and E, iron, magnesium, calcium, phosphorus, and helps your body fight chronic inflammation.

\*Source: Research and Markets



## Make way for a refined alternative to the usual food oils

While cold-pressed hemp seed oil is delicious and nutritious as a cold, edible oil, perfect for salad dressings, pestos and dips, where we see incredible potential is in refined hemp seed oil. Blue Sky currently produces one of the only refined hemp seed oils on the market. It boasts all of the goodness and wellness properties of cold-pressed hemp seed oil, but it's colourless, odourless, and has a smoke point of 205°F, making it stable for cooking with a similar nutritional profile as avocado oil.

Other refined oils, such as palm oil, which is in approximately 50% of packaged products we buy, are, sadly, significant contributors to the deforestation of some of the most biodiverse forests in the world. However, hemp can readily be farmed sustainably, especially when grown for whole-plant usage.

At the time of writing, there appear to be many hemp oils on the market, from Canada Hemp Foods Organic Hemp Seed Oil to Manitoba Harvest's Hemp Seed Oil. We are also finding hemp oils used in body care lotions to aromatherapy candles.

As more consumers discover the advantages of adding hemp oil into their diet, from sustainable harvest to fewer carbon emissions to added health benefits, the potential for hemp oil use in consumer products will continue to rise.



	Refined Hemp Seed Oil	Cold-Pressed Hemp Seed Oil	Extra Virgin Olive Oil	Avocado Oil	Fish Oil
<b>Benefits</b>	Rich in all omega Fatty Acids	Rich in all omega fatty acids, minerals & vitamins	Rich in antioxidants and oleic acid	Rich in antioxidants, oleic acid, and reduces cholesterol	Rich in omega fatty acids
<b>Good For</b>	Salads, protein shakes, cooking, frying, skincare	Salads, smoothies, sauces	Salads, cooking, frying	Salads, cooking, lubrication, cosmetics	Supplements, capsules
<b>Flavour</b>	Neutral	Nutty	Neutral	Buttery, Nutty	Fishy
<b>Type of oil</b>	Polyunsaturated	Polyunsaturated	Monounsaturated	Monounsaturated	Polyunsaturated
<b>Smoke Point</b>	<401°F (205°C)	<332°F (165°C)	<315°F (157°C)	<480°F (248°C)	_____





## 7. Lower Carb Gluten-Free Flour: Hemp Flour

Food allergies and intolerances are a growing and serious public health concern, increasing consumer demand for products that cater to specific dietary requirements. Gluten, a protein found in wheat, barley, and rye, has sparked considerable controversy in recent years. Most commonly associated with baked goods, gluten is found in a wide variety of food and drink products. Bakery items, including cookies and bread, lead Canada's gluten-free foods and beverages market. Gluten-sensitivities and celiac disease have made the need for gluten-free options a must, particularly when it comes to flour for cooking and baking.

The international gluten-free food market is expected to expand significantly between 2020 and 2025, from US\$5.6 billion to US\$8.3 billion.\* Similarly, the Canadian gluten-free foods & beverage market is projected to grow at a CAGR of 9.1% from 2020 to 2025.\*\* There are more than 20 different gluten-free flours within this

\*Source: Research and Markets  
\*\*Source: Mordor Intelligence



market from which to choose. However, not every flour is suitable for all consumers, and many have a higher glycemic index than whole wheat flour.

### **Hemp flour is poised to fill a void in the low-allergen space**

Those with nut allergies, for example, must avoid almond flour. While we would love to compare each flour, this would be overwhelming. So instead, let's focus on hemp flour and what it can provide for its customers.

Notably, hemp flour has twice as much protein in half a cup as its closest competitors, excluding soy. Plus, it comes in at three times more body-regulating fibre than whole wheat, once the darling of the flour market. Hemp flour can be used to make muffins, pancakes, cookies, and more. It tastes fantastic and keeps you feeling full for longer.

Ultimately, it is gluten-, nut-, and dairy-free, a potent combination. Hemp flour is relatively new, but brands exist, such as Hemp Seed Flour by Health Embassy and Hemp N' Nut by Baking Innovations. Those who want to steer clear of any allergies or intolerances will want to bake with hemp flour every day.





## 8. Adding Fibre for Gut and Digestive Health

The cereal aisle is undergoing a renovation as consumers opt for more healthful, nutrition-packed products to start the day right. Consumer health needs are more elevated in the morning compared to other dayparts. Many are looking for higher protein, higher fibre foods that are also gluten-free, grain-free, and GMO-free.

There is a huge fibre gap between the recommended daily amount consumers should get and the daily amount they actually get. Surveys indicate that only 5% of the population consumes the recommended amount, and this has been called "a public health concern."\* So, while getting enough fibre appears to be top of mind for consumers, they are failing to achieve that.

\*Source: National Center for Biotechnology Information

## A simple health-promoting solution that's daypart agnostic

Hemp seeds contain both soluble and insoluble fibre and are considered a prebiotic. Of course, no one is eating a bowl of hemp hearts straight up and topped with hemp milk. But, they make for a great addition to any cereal or cereal bar combination.

While most nutritious cereals often pack a combination of oats and other seeds, adding hemp seeds can bring the nutritional profile up an extra notch – without adding allergens, gluten, or added carbs. Instead, hemp adds heart-healthy omega-3 and omega-6 fatty acids, protein to keep your energy levels up, and fibre to keep you full for longer.

What we predict consumers will love is the versatility of this product. It can be added to yogurt and fruit and eaten as a snack on its own. It has a 12-month shelf life when stored in a cool, dry place and delivers an instant and potent dose of nutrition. Brands like Nature's Path, Manitoba Harvest, and Living Intentions all have a hemp-based cereal in the market. Meanwhile, we're seeing innovations like keto grain-free hemp heart porridge grace the health food blogosphere, which could be a hint of things to come in retail.

Hemp hearts can be used as a salad topper to increase fibre and protein—as well as crunch! Salad toppers are growing in popularity and provide added quick and easy nutritional value, flavour, and texture to salad greens. In addition, hemp hearts provide a heart-healthy, meatless, and gluten-free alternative to croutons or bacon bits. And shouldn't your salad topper be as healthy as your salad?





## 9. Plant-based “Dairy”: Hemp as a Dairy Replacement.

Plant-based dairy is growing and has expanded its consumer base beyond the lactose intolerant and vegan/vegetarian crowd. This segment now challenges traditional dairy, accounting for 14% of the overall “milk” category.\* Almond milk is the sales leader in the space, followed by newer entrant oat milk. However, almonds are not a sustainable crop, requiring more than 370 litres of water to produce one litre of almond milk, and most of the almonds used come from drought-ridden California. Oat milk, on the other hand, is more sustainable and allergy-friendly, but it doesn’t have much protein. With sales on the decline for years, soy milk has shown modest growth as consumers look for a dairy replacement with a similar protein level to cow milk that is a complete protein. Annual sales of almond milk are US\$1.5 billion, oat milk is at US\$213 million, and soy milk rings up at US\$202 million.\*\*

\*Source: Plant-Based Food Association US2019  
\*\*Source: US 52 weeks September 2020 SPINS data









Whatever your thoughts on it, plant-based dairy is here to stay and will expand beyond soy and almond. Oat milk came out of nowhere to lead the charge of plant-based milks, and it makes a case for other new ingredient entrants with higher protein content and more functional benefits.


### Don't have a cow – have hemp milk, instead

While hemp milk currently exists – Hemp Bliss and Pacific Foods make them, for example – hemp dairy alternatives are still widely lacking in the current market. For broader trends in dairy replacements, we need look no further than brands like Oatly, who have made plant-based milk a movement.

Hemp milk could quickly join Oatly's ranks with the right branding and messaging, especially when taking its nutrition profile and sustainability messaging to the market.

We're also seeing the potential for hemp in other traditional dairy products like cheeses, yogurts, and ice cream. While still highly niche, brands like Living Harvest Tempt hemp yogurt and Doozy Pot hemp and oat ice cream are building a following. We've yet to see any strong hemp-based brand contenders in the vegan cheese space, but homemade recipes suggest the market is ripe for hemp cheese.

	Hemp 	Oat 	Peanut 	Almond 	Soy 	Dairy 
<b>Price</b>	TBD	\$5.29	\$5.99*	\$4.29	\$4.29	\$2.17
<b>Calories</b>	90	120	150	40	127	103
<b>Protein</b>	7 grams	2 grams	6 grams	1 gram	10 grams	8 grams
<b>Fat</b>	3 grams	5 grams	11 grams	2.5 grams	4.7 grams	2.4 grams
<b>Sugar</b>	5 grams	7 grams	5 grams	0 grams	2 grams	13 grams



## 10. Cleaner, More Natural Plant-based Meat Substitutes

The next generation of meat analogues will have cleaner, shorter ingredient decks that leverage the functionality of naturally occurring ingredients like pulses and seeds. Perceived healthfulness is the number one reason consumers choose plant-based alternatives, with the most sought-after benefits being high quality/complete protein (43%), heart health (41%) and protein content (40%).\* However, not all plant-based meat substitutes can make these claims.

Instead of the highly processed faux meats such as Beyond Meat, Impossible, or Meatless Farms burgers and nuggets, this next generation of plant-based meat substitutes will tick both the Better for Me and Better for the Planet boxes. Twenty percent of worldwide consumers have adopted a flexitarian approach to their diet.\*\* As these products start to mainstream, they will also move towards a more inclusive allergy and intolerance audience. Soy and wheat are the

\*Source: IFIC US Survey August 2021  
\*\*Source: FMCGGurus



original plant-based protein sources, but both are allergens or intolerances for many.

As a result, we expect new protein sources to emerge in the plant protein space. As consumers clamour for healthier and allergen-free alternatives, hemp may become a popular source of protein for companies developing these products.

Can hemp make the leap into these meatless imitations and allow us to move away from overly processed soy and other heavy GMOs? We think so.

## Hemp could revolutionize the hot alt-meat market

Many meatless imitations require excessively high fat and salt content to hide the prominent vegetable flavour. With a hemp heart base, not only is the flavour neutral, it is light in colour. Furthermore, they can emulsify with other ingredients; this allows for a streamlined ingredient list overall. Lastly, they contain no major allergens, and probably most important, they are an in-demand superfood for conscientious consumers around the globe.

But what does this mean for market growth potential? First, we know that the Western diet includes large amounts of animal-origin products. This continued high consumption is taking its toll on our overall health. It's linked to an increased risk of many ailments, including cardiovascular disease, type 2 diabetes, and cancer.

We also know consuming meat harms the environment. Livestock production is responsible for approximately 15% of global greenhouse gas emissions. One possible solution is a shift to a more plant-based diet, not just for our planet but

also for our overall health.

As the number of consumers adopting the path of a vegan, vegetarian, or even a flexitarian lifestyle, one that encourages more plant-based foods, continues to grow, we see tremendous market growth in mock meat products.

The fear of missing out on essential amino acids, protein, and iron that one often finds in meat sources is a thing of the past. Neutral flavoured hemp provides all these and more. Good Seed, an American company, has a variety of hemp seed meat analogues, from burgers to beefy ground crumbles

This is a perfect example of how hemp seed can be used and how Canada is not far behind. While many plant-curious consumers want to try these meat analogue options, they also want to know that they can still enjoy that moist and juicy mouthful we all crave with our meat. We believe that hemp will be the hero that saves the barbeque.







**Blue Sky**  
HEMP VENTURES

# Blue Sky Thinking Applied to Hemp

Blue Sky Hemp Ventures is committed to helping food companies create better, healthier food options without sacrificing flavour. Foods that provide superior nutrition for consumers and have a zero-carbon footprint.

In 2017, Blue Sky introduced its innovative vision to become a world leader in whole hemp plant utilization. It's their triple bottom line philosophy that makes them stand above the rest – to provide value for the people, their partners, and the planet.

Now is the time to act. To invest in the health of our consumers. To invest in the health of our

planet. And to invest in the future of hemp-based foods with a company positioned to meet the growing demand for hemp products.

We at Blue Sky Hemp Ventures invite you to share this journey with us. To look at an innovative alternate path to producing food items for the current market. To consider how today's choices will impact our future. Are you ready to take that next step? We can hemp.

**[blueskyhempventures.com](https://blueskyhempventures.com)**  
**[cs@blueskyhempventures.com](mailto:cs@blueskyhempventures.com)**  
**1.306.986.3984**