

4. Growing for the Food Industry

Food Safety, Traceability & Meeting Specifications

Introduction

Industrial hemp continues to gain interest within the food and nutrition sector both in New Zealand and internationally, because it contains a lot of nutritious protein and oil.

Hemp seed food ingredients include: hemp hearts, hemp oil, protein powders, flour, nutritional supplements, milks and drinks all of which are in great demand from the growing functional food market.

As hemp food products develop and become mainstream the demand will increase and growers, supplying to the food industry will need to understand, food safety expectations, traceability, product quality requirements, and good agricultural practices (GAP)

This guide provides a basic introduction to growing industrial hemp for food-related markets.

Professional standards and great quality products become increasingly important to customers as the hemp food sector grows.

Please note whole seeds cannot be retailed to humans in New Zealand (1)

There is enforceable guidance on Hemp Food Products

- MPI Food, guidance for limits THC and CBD in the [Food Code](#) and advertising and [labelling](#)
- Animal food and feed – Is banned by MPI (ACVM) no iHemp can be feed to production and companion animals. Due to a perceived trade risk <https://www.mpi.govt.nz/dmsdocument/52390-ACVM-Alert-Notification-22-001-Industrial-Hemp-as-Agricultural-Compounds-and-FAQ>
- Biosecurity for Imports and exports of hempseed have to comply with the Import Health Standards for processing or sowing hemp seed Seeds for Sowing 155.02.05 14/3/2025
<https://www.mpi.govt.nz/dmsdocument/1151/direct>
Grain and Seeds for Consumption, Feed or Processing GCFP.IHS 11 June 2024
<https://www.mpi.govt.nz/dmsdocument/1661/direct>

(1) Unless used for sowing, whole hemp seeds could be considered a Class C Drug, under the Misuse of Drugs Act (1975) (Moda) Only processed hemp seeds are in the Food Code, so “hemp” seeds are controlled under MODA, which includes “cannabis” seeds

Understanding Food-Grade Production

Growing hemp for food markets requires higher standards than general agricultural production.

All commercial food producers (including farmers producing human food) need to be registered with MPI. Depending on your activities and risk category you may need to register a full Food Control Plan or be registered under a National Program 1-3. NP1 is required for farmers commercial supplying food. You are exempt if you sell your raw unprocessed produce direct to customers, i.e. a roadside stall or farmers market.

Food supply chains may require, traceability, contamination control, storage management, product consistency, and professional handling practices

Buyers may expect growers to demonstrate, reliable production methods, crop records, and responsible agricultural practices.

Growers will need to meet the specification of the buyer as per their contract or offtake agreement, this will cover moisture content, chemical analysis (pesticides etc) and microbiological analysis (E. coli, mould etc) More advanced testing such as THC/CBD may also be required.

To access some overseas markets, growers may need to be compliant with Good Agricultural Practices (GAP) as these help support food safety, traceability, quality assurance, and market confidence.

Growers and processors should understand the food safety, labelling requirements and applicable food regulations their market is subject to

Growers and businesses are encouraged to review current food safety guidance and applicable regulations before supplying food markets.

Traceability

Traceability is increasingly important to consumers and is being built into the food supply chains.

Growers are encouraged to keep records relating to, seed source, planting dates, paddock locations, crop inputs, harvest timing, drying, storage and handling practices.

Good traceability supports, food safety, buyer confidence, professionalism, and future market opportunities.

Growers should be aware of their land, pollen drift spray history, neighboring activities, heavy metal risks, water quality and other possible contamination sources.

Post-Harvest Handling and Market Expectations

Heat, light, and air are considered the main enemies of hemp seed quality (particularly oil). You need to beat the birds and get the moisture out of the seeds immediately after harvest.

Careful handling during harvest and storage helps maintain freshness, nutritional quality and shelf life, for your food buyer.

Equipment used should be clean, well maintained, and free from contamination. Poor handling and moisture control may increase the risk of mould, spoilage, contamination, or product degradation

Packaging for hemp seed oil should ideally be, dark, opaque, or UV protective, rather than clear. Nitrogen flush is the industry norm to remove air from packaging.

Different food buyers may require different specifications relating to moisture levels, contamination (pesticides, cannabinoids), microbiological levels, traceability, testing, and storage quality

Growers should understand buyer expectations before planting and harvesting crops intended for food markets.

Industry Responsibility

As the hemp food industry develops, growers are encouraged to operate professionally, follow best practice, maintain good records, and support responsible industry development.

High standards help strengthen market confidence, industry credibility, and long-term growth opportunities.

Important Reminder

Industrial hemp cultivation and food production remain the responsibility of the grower and processor.

Growers remain responsible for:

- understanding applicable laws
- food safety obligations
- THC, CBD compliance (if any)
- traceability
- testing requirements
- and market suitability

NZHIA provides general educational guidance only.

And does not provide legal, agronomic, food-safety, medicinal-cannabis or commercial certification.

NZHIA encourages growers to support a professional, traceable, and high-quality hemp food industry across New Zealand

Continue Your Learning

The remaining publications in the [NZHIA Knowledge Series](#) build progressively on this introduction:

- **Publication 1 – Introduction to Growing Industrial Hemp:** Planning, site selection and crop establishment.
- **Publication 2 – Harvesting and Storage:** Maintaining crop quality after harvest.
- **Publication 3 – Seed Integrity, genetics and pollen management,** cross pollination risk
- **Publication 4 – Growing for Food Markets:** Producing high-quality food-grade hemp seed.
- **Publication 5 – Growing for Medicinal Supply:** Understanding regulated medicinal cannabis supply chains.

Together, these publications provide a practical guide for small scale growers, NZHIA Seed Project participants and anyone interested in understanding and contributing to New Zealand's industrial hemp industry.

Disclaimer

This publication has been prepared by the New Zealand Hemp Industries Association (NZHIA) as general educational information for home growers, participants in the NZHIA Seed Project and members of the industrial hemp industry.

The information is intended to support good growing and harvesting practices but should not be relied upon as legal, regulatory, agronomic, food safety, medicinal cannabis or commercial advice. Requirements may vary depending on the intended end use of the crop, applicable legislation and processor specifications.

Growers remain responsible for complying with all relevant legislation, licence conditions and contractual obligations. Readers should consult the [Ministry of Police](#), [Ministry for Primary Industries](#) (MPI), the [Ministry of Health](#) and other relevant authorities for current regulatory guidance.

NZHIA encourages all participants to contribute to a professional, innovative and trusted industrial hemp industry that delivers lasting economic, environmental, health and social benefits for Aotearoa New Zealand.