



CHSNAC GACPs

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Canadian Herb, Spice and Natural Health Product Coalition (CHSNAC) Good Agriculture and Collection Practices (GACP): Safety, Quality Assurance and Traceability for the Canadian Herb, Spice, Natural Health Products Industry, Wild Collected Products and Hemp.

The CHSNAC is a coalition of industry representatives across the country working together to address overarching issues of common concern such as accessing markets, safety of products and people and the sustainability of the resources. . A select team from the coalition worked together over several years to develop the GACP program. They were strongly supported by industry through the pilots for this project. These pilots were located across Canada from Newfoundland/Labrador to British Columbia. The pilots included First Nations and other wildcrafters, spice growers/processors, culinary herb growers, medicinal herb growers/processors / collectors and a hemp grower. This is an industry program built by and for the industry.

CHSNAC GACP PROGRAM

For wild harvesters, farmers and processors alike, day-to-day busyness (i.e., getting the work done) is usually what fills each day. Even though producing a high quality, safe product is their top priority, making sure they can prove they have done so is not always that easy. This does not mean they are not doing a good job, but it is hard to show others the evidence of their good work. CHSNAC GACPs are a tool that can help.

What exactly are CHSNAC GACPs?

CHSNAC GACPs are **voluntary** practices developed by industry, for industry, as a tool to help you grow, collect, handle, and (or) process a variety of botanical products sustainably, ethically and safely.

How were they built?

CHSNAC GACPs were developed, trialed and tested by those in the industry. Pilot studies were done across the country with those actually wild collecting, farming and processing. This program was built with many hours of voluntary support from the industry and various government departments (including Health Canada) and financial support from Agriculture and Agri-food Canada (under their food safety and quality program). It was, and

continues to be, evaluated by the Canadian Food Inspection Agency (CFIA). Food Safety experts from both the CFIA and the provinces/territories helped evaluate and provide input to the program as it was being developed. The CHSNC GACPs passed this process (Technical Review Part One) and every 18 months CHSNC submits the program to CFIA with any changes that have been made for re- verification.

The CHSNC GACPs Risk Assessment module was developed under the HACCP (Hazard Analysis Critical Control Points) based program through the federal Canadian On – Farm Food Safety program¹.

What do the GACPs include?

The first module is the ***Risk Assessment module*** that includes tools to ensure that producers, wildcrafters and processors evaluate, address, prove and know what the risks under food safety, ethical sustainability and quality are and show that they have measures in place to deal with them as issues or as problems arise.

These tools walk participants through understanding how to do risk assessment in their operation, how to say what they do, do what they say and prove it. They do this by outlining outcomes participants need to achieve and supplies them with many optional samples of records that can be used to achieve these outcomes. After completing the required training participants will have the skills to understand what important steps of their operations need documents to prove what they have been doing right.

The second module is ***Simple Effective Traceability Tools (SETT)*** to help industry (particularly micro and small businesses) to develop and implement a traceability program that fits their particular business. This segment of the GACP program is called ***SETT-TO-GO***.

The Risk Assessment Module does include traceability under the one up, one down traceability methodology. Within this methodology participants are responsible for tracking all products coming into their operation and all products leaving. Everyone in the chain is required to do so in order to ensure full chain responsibility. SETT-TO-GO helps companies develop a more comprehensive traceability program that is past the one up one down methodology that fits their business.

WHY should people enroll in the GACP program

For many if not most wild harvesters, growers and processors, sustainability, following ethical and environmental practices and safety already form a good foundation for their day to day practices. But, can they prove they do it? Can they separate themselves and distinguish their products from those that do not practice the same due diligence? Can they readily identify where improvements can save dollars and time and reduce their risk? **Can they keep small problems small? Can they prove this without burying themselves in paper?**

Examples of risk evaluation

Site assessment

What is in the area I am wildcrafting in – is there anything here that may have affected the plants I collected?
What was growing previously in the field I am planting in – is there anything left behind that could cause problems?

Containers

What containers am I picking into? Will anything from the container transfer to my product? Are the containers new? If not, what was in the container before?

Identification

Are you sure the plant or product is what you intended to pick/grow or process? Do you have the correct botanical name? Do you know how to identify this plant? What other plants in the area look similar to this one and can you safely identify and separate the correct plant from the wrong ones?

If you are transforming the product or manufacturing a product can you ensure that your process does not cross contaminate the product with others that you handle?

So are the GACPs truly voluntary?

The short answer is yes. This is a tool to be used where and when needed. It is not government regulation. Will there be cases where you may have to use it? Yes. Several companies insist that the products they sell are 'wrapped in the *security blanket* of food safety'. If you want to sell to them, your choices are to a) use their program that they developed knowing little about your industry or b) use the CHSNC GACPs that were developed by your industry. Their program may be very good for manufacturing plants but not very practical to use in the forest or the field or for processing in micro and small companies.

Most manufacturers/wholesalers will insist that CHSNC GACPs or an equivalent system are in place for the raw materials they purchase. Growers/collectors who provide raw materials for the manufacturing industry therefore play a fundamental role in ensuring safety, quality and traceability (where did the material come from and could it have been damaged, spoiled or contaminated en route?).

Why are GACPs needed?

The majority of safety, quality and traceability issues that arise from raw materials are due to a failure to ensure or to prove that existing practices are safe, produce a consistent quality product and that this is done ethically.

One of the top concerns is correct identity and/or product purity. For plants and plant products, 'botanical identity' includes ensuring correct species, correct variety or chemotype, correct plant part and correct harvesting and processing. In other words, correct identity alone is not enough. Growers/collectors must ensure the raw material is not contaminated with other unintended or toxic botanicals (e.g. burdock, comfrey, or nettle contaminated with *Atropa belladonna* - deadly nightshade; plantain contaminated with foxglove; fresh fenugreek (*Trigonella foenum-graecum*) contaminated with groundsel (*Senecio vulgaris*)²). It is also important to ensure the purity of raw materials. Product purity can be at risk from contamination with micro-organisms, heavy metals, pesticide residues, environmental toxins or adulterants.

The CHSNC GACPs are based on Hazard Analysis Critical Control Points (HACCP) principles. HACCP forms the foundation of food safety programs around the world. CHSNC GACPs are really about 'saying what you do', 'doing what you say you do' and 'verifying that you did what you said you were going to do'. Although CHSNC GACPs do require the development of consistent ways of doing things for your farm, wild collection or processing venture

(and yes, this does include some formal record keeping), the real benefits for growers/collectors/processors are risk reduction, traceability and safety assurances. Should a manufactured product be recalled, CHSNC GACPs provide growers/collectors with a recognized method of verifying whether or not their raw materials were part of the problem. The SETT-TO-GO module will help operations build a traceability program that will assist them with tracing back and recalls in the unlikely event they would be required.

Putting CHSNC GACPs into practice

Although many growers/collectors are using CHSNC GACPs, not everyone has formalized their system and records. The CHSNC Growers GACP Workbook will make it fairly simple to formalize a plan for individual operations to ensure food safety, quality and traceability and keep records for verification. For certified organic growers/collectors, many of the records required will already be in place, however, they should assess what is missing to achieve the outcomes desired. A certified organic system, although very comprehensive, may need additional records such as those required to prove Plant Identification or the completion of personnel training.

The Good Agricultural and Collection Practices Workbook includes three Risk Assessment Sheets to help you define your individual risks:

1. People Risk Assessment
2. Plant Risk Assessment
3. Places Risk Assessment

Once you have assessed your risk you can use the following practices/tools to help you address the risks, identify the ones vital to your operation, and show you have measures in place to deal with problems that may develop. Not all practices apply to every operation. Sample records are included for use but participants may develop their own to achieve their outcomes.

1. Plant/Product identification (including the Good Practices for Plant Identification³)
2. Pest Control Products – Assessing how pest control products (products used to control insects, weeds or disease) affect what you are growing or harvesting. You may not use pesticides in your operation but still need a plan in place to deal with potential drift from adjacent areas.
3. Purchasing - What do you use day to day in your operation? Is it adding risk?
4. Production – Where are you harvesting or collecting? What do your production methods include? Are you adding risk?
5. Post- harvest processing - What happens to your product after you harvest it? Where are the products stored? What are they stored in? What if you are processing? Are you adding risk?
6. Personnel training - Does everyone understand what you want them to do? Are they adding risk? Do you know how to teach your staff or family?

7. Preventative maintenance - Are you able to clean your tools and equipment to the point that it is not adding risk to your product?
8. Record Keeping - Can you prove that you have done any of the above? ***Can you keep small problems small?***

Growers/collectors who participate in the voluntary CHSNC HACCP based Good Agriculture and Collection Practices Program will benefit greatly by reducing risks on their operations, ensuring food safety and improving traceability throughout the entire value chain. Many buyers are already asking to purchase raw materials produced under a GACP system. Where problems arise, growers/collectors/processors that have a GACP system in place will be in a better position to prove the safety, quality and ethical practices of their products. As raw material suppliers, growers/collectors/processors play a key role and are the foundation of safe, ethically collected/grown and processed quality products.

In summary

The CHSNC GACPs will ensure a strong value chain of traceability, safety, quality and ethical assurances tightly linked with existing good manufacturing practices in both the culinary and medicinal worlds. Developing Good Agriculture/Collection Practices that connect with Good Manufacturing Practices up the chain strengthens the chain, boosts consumer confidence, and develops strong business relationships.

The developers of the GACPs recognize that we cannot compete if we burden ourselves with systems that are too costly in time and money. The CHSNC GACP program has been developed to help participants build programs that work with a minimum of record keeping but the right records to help you say what you do, do what you say and prove it. Canada should be the country of choice for botanical products. This tool can help make that happen.

To assure an effective program, the CHSNC GACP program is only delivered with 'in-person' training. CHSNC will be holding training and information workshops (one to two day workshops) for growers/collectors across Canada.

This program would not have been possible without the collaboration of many individuals. In addition to the hardworking technical team from the Coalition and the wide range of working pilots, the GACP program had direct input and support from Health Canada's Natural Health Products Directorate (special thank you to Raymond Tsang), the World Health Organization (special thank you to Yukiko Maruyama/ Japan) , the IUCN-SSC Medicinal Plant Specialist Group (special thanks to Danna J Leaman), the American Herbal Products Association, the Canadian Spice Association, and the American Spice Trade Association. The GACP program has been recently cited in WHO/IUCN/WWF/TRAFFIC Guidelines on the Conservation of Medicinal Plants.

In addition the program would not be available without the financial support of AAFC through the Food Safety and Quality Division⁴ and the review process from Canadian Food Inspection Agency's On Farm Food Safety Recognition program⁵.

More information about CHSNC can be found at www.nationalherbspice.com/

¹Canadian On – Farm Food Safety program - <http://www.onfarmfoodsafety.ca/>

²fresh fenugreek (*Trigonella foenum-graecum*) with groundsel (*Senecio vulgaris*). - <http://www.inspection.gc.ca/english/corpaffr/reclarapp/2012/20120211e.shtml>

³Good Practices for Plant Identification -

<http://www.saskherbspice.org/graphics/Good%20Practices%20for%20plant%20identification.pdf>

⁴AAFC through the Food Safety and Quality Division - Funding for On farm food safety portion of the GACP program has been provided by Agriculture and Agri-Food Canada through the Canadian Integrated Food Safety Initiative under Growing Forward."

⁵Canadian Food Inspection Agency's On Farm Food Safety Recognition program. -

<http://www.inspection.gc.ca/food/fsep-haccp/on-farm-food-safety/eng/1299860970026/1299861042890>