NHP Ingredient and Product Characterization, QA and QC

Aquatic and Crop Resource Development

NRC.CNRC

Customized Analytical Solutions

The Natural Health Products (NHP) Program offers customized solutions for ingredient and product characterization, quality assurance (QA) and quality control (QC). These customized solutions can help you develop new products, ensure product quality and differentiate your NHP or functional ingredient in the marketplace for greater consumer adoption.





Technical Capabilities

- Qualitative and quantitative analysis of raw materials, extracts, or formulated products
 - Chemical profiling of components using HPLC, TLC, LC-MS/MS, GC-MS and NMR (active ingredients, impurities and degradation products)
- NMR and LC/GC-MS based fingerprint profiling and comparison
- Ingredient characterization (Bioassay-guided fractionation, isolation and structure elucidation)
- QA/QC method development and validation for ingredient specifications, active ingredients and known or unknown contaminates

- Quality assurance and quality control (ingredients and finished products)
- Reference material development and standardization
- Value-added ingredients from biomass waste
- Lab scale extraction methods: ASE, Soxhlet and Super Critical CO₂

Analytical Tools

- 500 MHz and 700 MHz customized NMR spectroscopy solutions
- Customized mass spectroscopy solutions including: HRMS and MS/ MS capabilities
- HPLC, UPLC, and GC separation with a full range of detection options



National Research Council Canada Conseil national de recherches Canada



Aquatic and Crop Resource Development



Specific Areas of Expertise

- Integrated platform for custom fractionation, characterization, quantification, biological efficacy and safety testing of bioactives (in vitro and in vivo models)
- Testing and comparison of polyphenolics from berries and seaweeds
- Marine and plant based lipid analysis and quantitation
- Carotenoids from plants and algae
- Proteins and polysaccharides

Get started today

Have our Client Relationship Leader meet with your scientific and management teams to match NRC capabilities to your needs.



Contact

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