Maine Medicinals Meets Health-Conscious Consumer Demand with MEP Assistance

New manufacturing process increases production 12-fold while reducing processing time by 80 percent

Dresden, Maine: Maine Medicinals debuted its first nutraceuticals product at the 2009 Maine Organic Farmers and Gardeners Association Common Ground Fair. Known as anthoimmune™, the product delivers therapeutic levels of antioxidants to enhance overall immune system functions. It combines organic elderberries, which are traditionally used to fight cold and flu-like symptoms, with organic elderflowers and organic wild blueberries.

“The natural benefits of elderberries have been lauded for centuries. Hippocrates, the father of modern medicine, touted the health-giving properties of elderberries back in the 5th century BC. Our goal is to work closely with farmers and scientists, to produce the highest quality plant-based medicines from organic, sustainable and natural resources,” said Edie Johnston, president of Maine Medicinals.

Within months of its debut, anthoimmune™ became a top seller in local natural food stores. Its popularity attracted the attention of a local distributor and before long won shelf space in the Whole Foods Market in Portland. By September 2010, Whole Foods took the product region-wide, making it available in 27 Whole Foods Markets in the North Atlantic region. Less than a year later, strong sales prompted Whole Foods to launch the product throughout the Northeast region.

To keep pace with annual sales growth of 250 percent, Maine Medicinals turned to the Maine Manufacturing Extension Partnership (Maine MEP) for assistance in redesigning its production process to scale up its capacity and lean its operation.

“Maine Medicinals attracted very strong consumer interest almost from the start; but the challenge of transitioning a start-up company like ours from product prototypes to commercial markets can be daunting. We turned to Maine MEP for help in reviewing technology options and designing a new process that could cost-effectively ramp up our production to meet consumer demand,” said Johnston.

The project team, led by Maine MEP Project Manager Bill Whittier, began by reviewing the existing manufacturing process capability and then determined production targets in terms of throughput and quality controls. Whittier next reviewed available equipment options to be included in the new process technology design.

The company’s director of operations, Geoffrey Johnston, successfully completed a Maine MEP workshop on the principles of lean manufacturing, which was followed by more detailed training and consultation with the management team that focused on process flow and work cell design.

To transition the company from its current manual batch processes to a continuous flow process, the project team designed a new manufacturing process technology. Utilizing lean manufacturing principles, the new manufacturing technology produced a balanced end-to-end process that allowed the company to meet production volume.

A pilot test was conducted to validate the new approach and ensure that it removed packaging bottlenecks so that the new front-end capacity could be efficiently utilized. The new process not only
succeeded in meeting production targets but did so while reducing costs by more than the targeted goals.

“The project with Maine MEP achieved significant results,” said President Edie Johnston. “We increased production capacity 12-fold, while reducing processing time by 80 percent. This resulted in a projected savings of $72,000 annually, representing a 20-fold return on investment. Moreover, it enabled us to delay capital expenditures for a facility expansion by three years.”

Johnston noted several additional benefits of partnering on the project with Maine MEP.

“In implementing lean manufacturing principles, Maine MEP’s support and guidance immediately increased our production efficiency, allowing time for our management to expand and diversify our product line. The company broadened its focus on innovation, including our horticultural and nutraceutical research, currently supported by USDA/NIFA Phase I and Phase II SBIR grants. As we continue to grow, Maine MEP will remain alongside us, helping ensure that our business continues to profitably support organic agriculture and manufacturing initiatives in rural Maine,” stated Johnston.

About Maine Medicinals

Based in Dresden, Maine Medicinals is a certified organic processor and manufacturer of standardized nutraceuticals and herbal supplements. Working closely with farmers and scientists, Maine Medicinals produces the highest quality plant-based medicines from organic, sustainable and natural resources.

About Maine MEP

The Maine MEP is an affiliate of the National Institute of Standards and Technology (NIST) under the U.S. Department of Commerce. The national MEP system is a network of manufacturing extension centers that provide business and technical assistance to smaller manufacturers in all 50 states, the District of Columbia and Puerto Rico. Through MEP, manufacturers have access to more than 2,000 manufacturing and business “coaches” whose job is to help firms make changes that lead to greater productivity, increased profits and enhanced global competitiveness. For information on the Maine MEP program, please visit www.mainemep.org, or phone 1-800-MEP-4MFG.