



Here's what food manufacturers need to know about chicory root fiber's clean label appeal

Now more than ever, consumers want to connect with their food and understand ingredient lists on food labels. Chicory root fiber (inulin) has benefits beyond simple fiber fortification; it has a tradition-filled story that will resonate with mainstream America.

Chicory is also a familiar ingredient. Europeans have been growing chicory in their vegetable gardens for generations. It's even enjoyed as a slightly nutty flavored botanical liqueur. Here in the U.S., the roasted root is blended into New Orleans' popular chicory coffee.

Whether it is used to support sugar, fat, or calorie reduction; or to support gut and bone health, chicory root fiber is a naturally sourced, label-friendly choice.

Chicory root harvests require proximity, careful timing and gentle handling

Chicory is grown primarily in The Netherlands, Belgium and northern France. "At harvest time, chicory farmers carefully load their crops into trucks and rush them to their local processor," explains Taylor Halstead, specialty carbohydrates product line manager, Cargill, who witnessed this year's bustling harvest of chicories with Cosucra Groupe in Warcoing, Belgium. (Cargill is the exclusive distributor of Cosucra's chicory root fiber in North America).

"The processor must quickly wash, cut and mill the root to maximize the chicory root fiber harvest. Only gentle processing techniques are used during this extraction process, because solvents and high heat can damage these precious, naturally occurring molecules. At every step, food safety is a primary concern."

The chicory root is graded while it's still on the trucks. "These farmers buy the seeds from the processor, Cosucra, which has an R&D department devoted to chicory seeds. Each year Cosucra's scientists seek to improve crops using traditional agricultural practices, knowing that the farmers' livelihoods tie back to their crops' success."

He adds that, "Every crop year is unique. Even different lots have varying spectrums of chain lengths of carbohydrates. As the processors receive the chicory, they are looking at these natural variances in chain lengths. They blend the chicories throughout the process, depending on the characteristics to be obtained. It's not just the quantity of inulin fiber, but also a balance of fiber. For some uses, you want fiber that can form gels. For other uses, you want fiber that is extremely soluble."

Farm to fork: Clean label, sugar reduction, enhanced calcium absorption and prebiotic fiber

Chicory root fiber was first cultivated in Europe for food ingredient purposes in the 1980s as a healthier alternative to sugar beets. "It was initially grown as a source of fructose," Halstead explains. "The industry soon realized the additional values of chicory's naturally occurring fructans. And the chicory root fiber industry was born."

Chicory root fiber is now acknowledged as a reliable, multi-functional ingredient. It can do a lot of jobs while still enabling you to maintain a clean label. These include, but are not limited to, modifying texture, potentially lowering overall calorie count, increasing fiber, enhancing calcium absorption, supporting gut health, reducing fat, adding bulk and increasing sweetness.

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The food industry can capitalize on chicory root fiber for numerous clean label applications, such as:

- **Sugar reduction.** Chicory root fiber is a naturally sourced way to reduce sugar by 20 to 25 percent, per serving, in a typical food application.
- **Enhances Calcium Absorption.** Many clinical studies have shown that chicory root fiber may improve mineral absorption and support maintaining bone health.
- **Prebiotic fiber.** Chicory root fiber (aka inulin) is one of the best researched and best positioned prebiotic fibers for healthy gut bacteria. It is valued for its fermentation in the body.
- **Viscosity modification.** Longer chain inulin mimics the creamy texture of fats, improving the mouthfeel of products such as ice cream and spoonable yogurt. While shorter chain inulin is more soluble and it reacts like sugar, making it ideal for baking.

Front-of-package claims

Halstead points out that chicory root fiber simplifies brand messaging and improves brand perception. It is a recognizable ingredient that makes a positive impression on shoppers.

Front-label claims naming chicory root fiber can better position your brands with respect to your competition. “This re-positioning of inulin is top of mind among our customers. Many food manufacturers are approaching Cargill to inquire about using label-friendly, nature-derived chicory root fiber to develop products with cleaner labels, and to improve their brand perception while maintaining quality, functionality, health benefits of dietary fiber, and cost competitiveness,” Halstead confirms.