NuBean™ NUTRITION
Ingredients for Healthy Living

NSF AGTECH ENGINE IN NORTH DAKOTA | START-UP SEED FUND, STEP 2

We all forgot the perfect food, simply because it was never convenient

NuBean Nutrition makes North Dakota beans convenient for the brands reformulating today's food

Gordon Gregory, Founder | Fargo, North Dakota | November 2026

EXECUTIVE SUMMARY

$50,000 moves a proven bean process from the pilot plant to contracted North Dakota acres

A shrinking crop with no value-added home

North Dakota planted 450,000 acres of dry beans in 2026, down from 730,000 in 2024. Growers sell into cans and poly bags, so they plant without a contract

A powder that works like a gum and feeds like a bean

Cooked whole-bean powder with soluble starch replaces xanthan, guar and modified starch while adding protein, fiber and minerals. Proven in 44 pilot trials; PCT patent filed July 2026

A co-manufacturer signed and a seed round forming

Letter of intent with a Midwest spray-drying co-manufacturer. $1.5M to $3M seed round in discussion to fund the dryer and raw beans

THE ASK

$50,000

Non-dilutive seed funding to be manufacturing-ready by February 28, 2027

FOR NORTH DAKOTA

A contracted ingredient market for its largest specialty crop, starting with pilot production in Q2 2027

THE NEED

Beans can work for farmers, brands and consumers at the same time

What farmers need

- Maintain stewardship and sustainability
- Hedge financial risk through contracts
- Rotate crops to manage pests and weeds
- Use less water and return nitrogen

Brands and private label need

- Functional, nutritious reformulation options
- U.S. origin with just-in-time delivery
- Non-GMO, gluten-free, allergen-free
- Conventional and organic supply

Consumers want

- Clean labels with fewer ingredients
- Food made with food they recognize
- Protein and fiber together
- Essential vitamins and minerals
- Taste and mouthfeel, sweet or savory

NORTH DAKOTA RELEVANCE

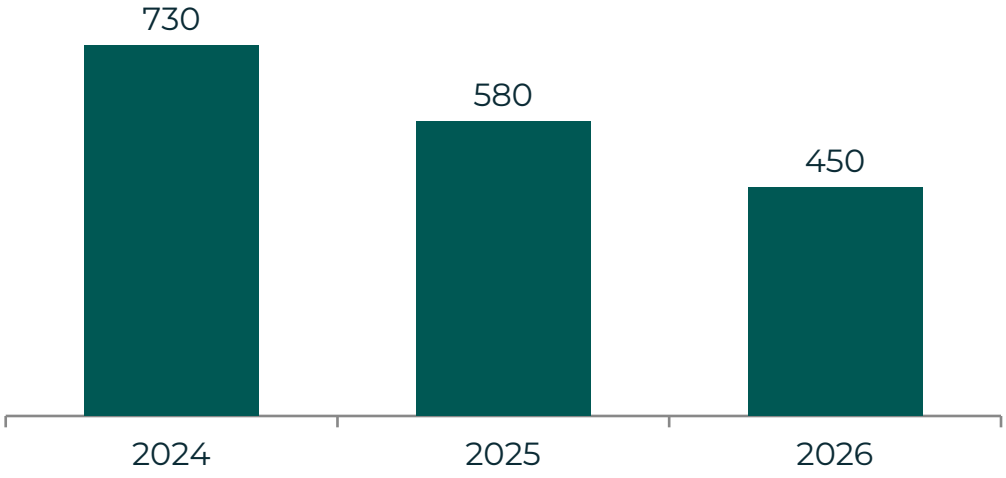
North Dakota grows 42% of U.S. dry beans and has lost 280,000 planted acres in two years

42%

of U.S. dry bean production came from North Dakota in 2024, the No. 1 state by a wide margin

Growers plant on speculation because the only outlets today are cans and poly bags

North Dakota dry bean area planted, thousand acres



Source: USDA NASS North Dakota Rank 2025; USDA NASS Crop Production Aug 2026; USDA NASS ND Crop Summary Jan 2025

GAP 1 OF 2: PRODUCTION TO CONSUMPTION

NuBean closes the gap between what farms grow and what people eat

PRODUCTION

Agriculture

- Breeding and seed
- Commodity crops
- Post-harvest handling
- Processing and freight

THE GAP

A convenient whole-bean ingredient that food companies can actually run on a line

Beans had the nutrition but never the industrial form, so they stayed in the can and the poly bag

CONSUMPTION

Nutrition

- Nutrients and bioactives people need
- Obesity
- Malnutrition
- Diet-linked disease and gut health

U.S.-origin bean powder replaces imported gums in a $37 billion pulse ingredient market

TODAY: IMPORTED GUMS

- Guar, locust bean gum, xanthan, carrageenan
- Tapioca and modified starch, maltodextrin, gelatin
- Sourced mainly from Asia, Africa and the Middle East
- Ocean freight, tariffs and container timing
- No nutritional value

TOMORROW: ND BEANS

- Same thickening and binding function
- Plus protein, fiber and eight essential vitamins and minerals
- U.S. origin, truck freight, just-in-time supply
- No tariff or ocean exposure
- A label consumers can read: “navy bean”

GLOBAL PULSE INGREDIENTS

$36.7B

forecast market value in 2032, up from $26.7B today

Beyond packaged food: shelf-stable bean powder can reach food deserts and relief sites, prepared with water alone

Note: ingredient list from NuBean’s Step 1 application. Source: Research and Markets, Pulse Ingredients Market to 2032

THE PRODUCT

One cooked whole-bean powder does the job of a gum and delivers the nutrition of the bean



WHAT IT IS

- The whole bean, cooked and spray-dried
- Two non-GMO enzymes make the starch soluble; heat finishes the cook
- Not an isolate, concentrate, modified or fermented ingredient
- Non-GMO, gluten-free, allergen-free, glyphosate non-detect
- Replaces xanthan, guar, locust bean gum, carrageenan, gelatin and modified starch

NAVY BEAN, PER 100 G

21.2 g Protein	**27.9 g** Total dietary fiber
1,553 mg Potassium	**187 mg** Magnesium
6.6 mg Iron	**145 mg** Calcium

Source: NuBean Nutrition Nutritional & Technical Profile, Medallion / NPAL results, October 2026 edition

APPLICATIONS

The powder slips into foods people already buy, from gummies to pet food



Bakery and gluten-free

Brownies, cakes, pancakes, breads, tortillas, croutons, pasta

Beverages

RTD nutrition drinks, smoothies, creamers, plant-based milks

Snacks and cereals

Extruded and sheeted snacks, crackers, flaked cereals, bars

Soups, sauces, dressings

Replaces xanthan, modified starch, guar and inulin

Dips, spreads, yogurt

Sweet or savory dips, non-dairy spreads, prevents syneresis

Gummies and dysphagia

Replaces gelatin and wheat starch for people who cannot chew

Infant and senior nutrition

Cereals and porridges from 12 months, mashed potatoes

Pet foods and treats

Grain-free and meat-based formulas, wet or dry

Note: application list from NuBean's Step 1 application; prototypes validated with Thinking Forks (former Mars and Unilever scientists)

TECHNICAL VIABILITY

44 pilot trials, independent labs and a PCT filing take the process past proof of concept

01

Proof of concept

Bean-ingredient concept built inside ADM's edible bean business, with interest from major CPG companies

02

Pilot scale

44 trials at South Dakota State University's Davis Dairy Pilot Plant on a 100-liter spray dryer

03

Independent labs

Composition at Medallion Labs and Nestlé Purina; microbiology at Silliker, Medallion and Nestlé; prototypes with Thinking Forks

04

Patent filings

Provisional patent August 2025; international PCT filed July 2, 2026; Nixon Peabody counsel on FTO, prior art and trademarks

Scale path: the 100-liter pilot unit maps directly to commercial dryers that evaporate 1,000 to 5,000 lb of water per hour, and the process is commercially scalable today

Note: trial, laboratory and patent details from NuBean's Step 1 application and Nutritional & Technical Profile, October 2026

COMMERCIALIZATION PATHWAY

A Midwest co-manufacturer has signed a letter of intent to spray-dry NuBean's powder

GROW

North Dakota and Minnesota growers

- Contracted acres before spring planting
- Navy, black and pinto beans
- Rotation crop that uses less water and fixes nitrogen

DRY

Wisconsin spray-drying partner

- Letter of intent signed
- Existing dryer capacity plus a new dryer under construction
- Has offered to co-invest in the NuBean facility

SELL

Food, beverage and pet-food brands

- Midwest CPG corridor within a day's truck
- Ingredient distributors and formulation houses in active talks
- NuBean's own key-account experience from ADM

Note: proposed supply path. Sales and formulation partnerships are in discussion and not yet contracted

MILESTONES AND USE OF FUNDS

$50,000 makes NuBean manufacturing-ready by February 28, 2027

USE OF FUNDS

$25,000	**Materials and equipment**	RO water and culinary steam installed at the co-manufacturer
$10,000	**Testing and validation**	Food concepts using NuBean powders across target applications
$15,000	**Other direct costs**	PCT patent progression and seed-round funding materials
$50,000	**Total, fully spent by Feb 28, 2027**	

MILESTONES

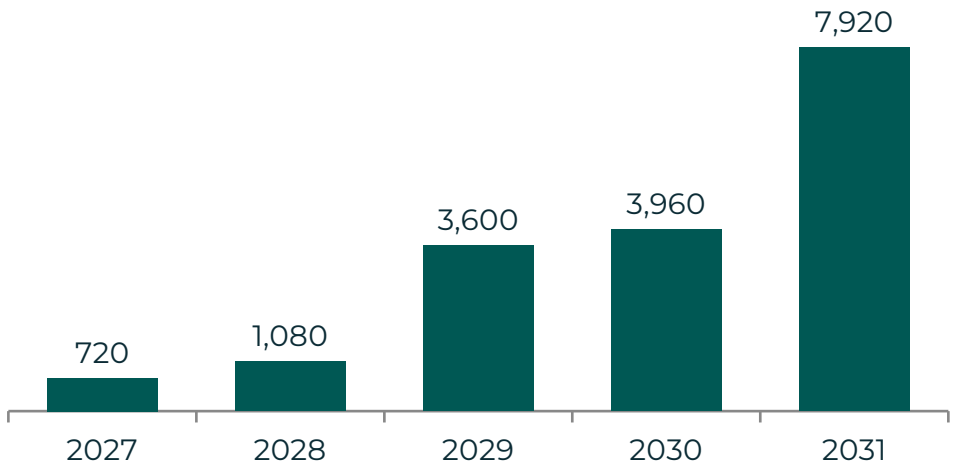
Nov 2026	Award; co-manufacturer start-up engineering begins
Dec 30, 2026	RO water and culinary steam installed at the co-manufacturer
Jan 29, 2027	Application concepts delivered to prospect brands
Feb 27, 2027	Manufacturing-ready: pilot samples available, shelf-life study complete
Q2 2027	Pilot production for first customers
Oct 2027	SQF certification complete; full-scale production viable

Note: budget allocation and deliverables as submitted in NuBean's Step 1 application; SQF is Safe Quality Food certification

FOLLOW-ON IMPACT

Seed capital of $1.5M to $3M turns readiness into contracted North Dakota acres

Dry bean acres NuBean's production plan requires



$1.5M to $3M

Seed round funds dryer equipment and working capital for raw bean purchases

120 to 330 days

Production days per year, scaling from 450 lb/hr in 2027 to 1,800 lb/hr in 2031

Contract first

Growers get a buyer before spring planting, with a rotation crop that uses less water

Note: NuBean Financial Outlook, Oct 2026, 90% powder yield; 2,000 lb per acre is the 2025 ND yield per USDA ERS Pulses Outlook, Dec 2025

TEAM

Three ADM veterans who have built bean ingredient businesses before are ready to execute

Gordon Gregory

Founder and CEO

- 18 years as VP and GM of ADM Edible Bean Specialties, a $350M division
- Contracted 130,000 to 175,000 acres a year with growers in ND, MN, MI and five other states
- Led the ADM and Bush Brothers alliance; built bean-ingredient markets in snacks, pet food, bakery and beverage

Joe Richardson

Chief Scientific Officer

- 34 years at The Coca-Cola Company and ADM in beverage, soy protein and edible bean processing
- Named on ADM's 2016 patent, Improved Processing of Pulse and Products Therefrom
- Developed pulse beverages with CJ Foods in South Korea; M.S. Food Science, University of Florida

Charles Abbas, Ph.D.

Food Safety and Microbiology

- Former Director of Yeast and Renewables Research at ADM
- Adjunct professor, Food Science and Human Nutrition, University of Illinois; U.S. DOE Biomass Advisory Committee
- Selected the non-GMO enzymes and dosing behind NuBean's process

Note: Nixon Peabody (Chicago) is IP counsel; Thinking Forks supports product development; an industry advisory board is being formed

NuBean™
NUTRITION
Ingredients for Healthy Living

The secret of success is to be ready when the time comes

NuBean is ready. $50,000 completes the last step before pilot production, and North Dakota growers gain a contracted market for a crop they already know how to grow.

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