



SEPAZAN



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**PROBIOTICS, PREBIOTICS AND FORMULATIONS OF SYNBIOTICS,
BASED ON CAMEL MILK**



PROBIOTICS, PREBIOTICS AND SYNBIOTICS

WHAT ARE THEY?

HIPOCRATES: “Let food be thy medicine and medicine be thy food”

Eli Metchnikoff, the Russian Nobel prize winner was the first one to recognize the beneficial role of select bacteria on gastrointestinal tract of humans.

Subsequently the “Theory of Longevity” by Metchnikoff was correlated with prolonged youth and a healthy old age, observed largely in Balkan peasants of those times, who used cultured milks in their diet.

Probiotics provide all sorts of powerful benefits for the human health, as:

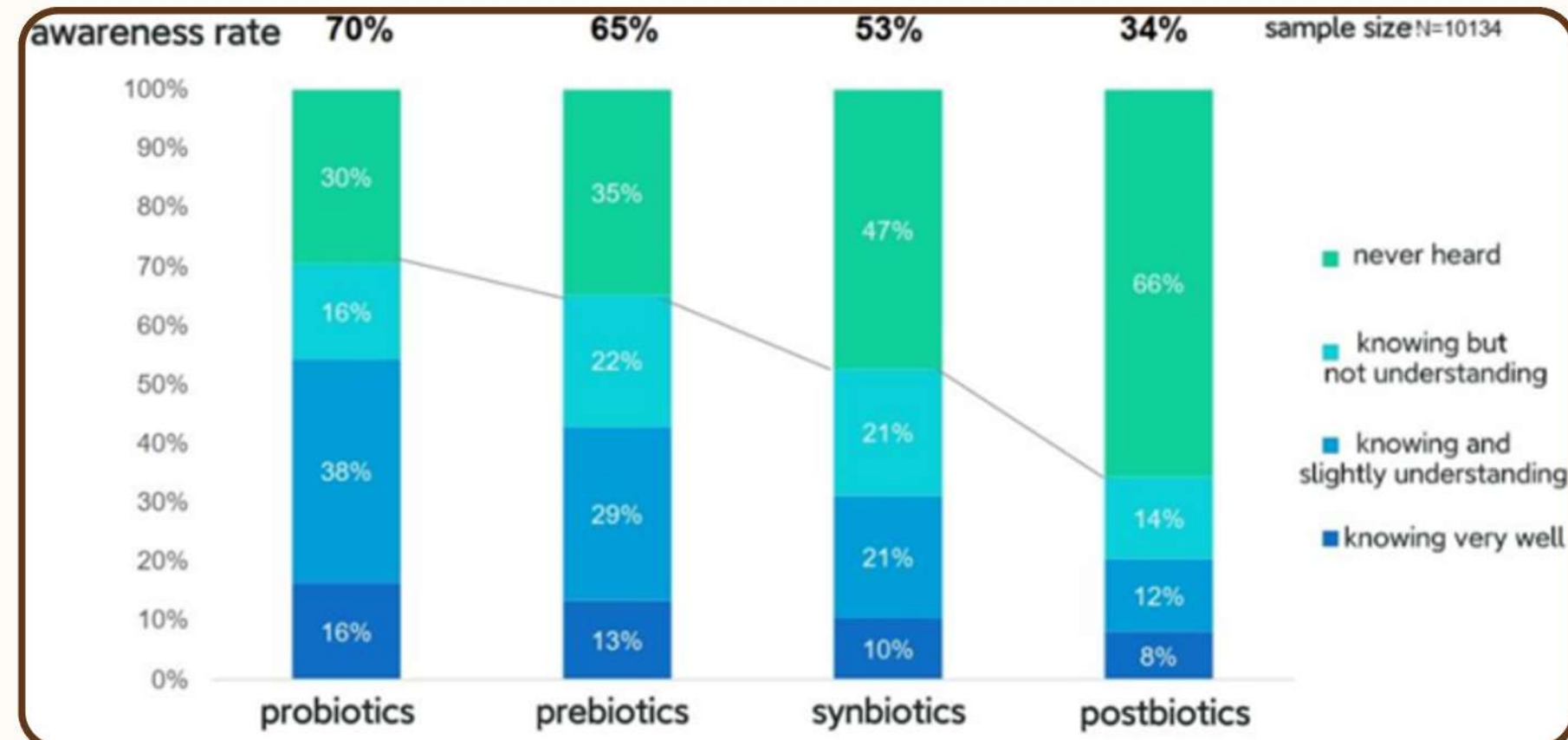
- Improve digestive
- Boost immunity
- Reduce risk of diabetes
- Reduce blood pressure and risk of health disease
- Reduced risk of breast cancer
- Suitable for those with lactose
- Reduce inflammation
- Reduce depression
- Supports healthy bones
- Reduced risk of colon cancer
- Mitigate the inflammatory response associated with allergies
- Protect against bacterial infection
- Improve weight management

PROBIOTICS, PREBIOTICS AND SYNBIOTICS

WHAT ARE THEY?

THEY ARE THE LIVING MICROORGANISMS THAT HAVE BENEFITS FOR HUMANS
WHEN INGESTED IN SUFFICIENT QUANTITIES

But what do these terms actually mean?



PROBIOTICS - WHAT ARE THEY?

**“PROBIOTICS” MEANS
TO BE LIVING MICROORGANISMS AND MUST BE SAFE FOR HUMANS**

FOODS WITH PROVEN PROBIOTIC PROPERTIES ARE:

1. Yogurt

Health benefits:

- Improve bone, heart and gastrointestinal health
- Reduced risk of diabetes
- Reduced risk of breast and colon cancer
- Improve weight management



2. Kefir

Health benefits:

- Protect against bacterial infection
- Reduce the risk of heart disease
- Mitigate the lactose intolerance
- Supports healthy bones
- Reduce inflammation
- Mitigate the inflammatory response

3. Sauerkraut

Health benefits

- | | |
|----------------------|-------------|
| • Sodium | • Folate |
| • Vitamins C, K1, B6 | • Copper |
| • Iron | • Potassium |
| • Manganese | |



PROBIOTICS - WHAT ARE THEY?

TO BE LIVING MICROORGANISMS AND MUST BE SAFE FOR HUMANS

4. Tempeh

Health benefits:

- Plant-source protein
- Help manage weight
- Source of phyto-oestrogens
- Support gut health
- Support bone health
- Help manage cholesterol levels

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5. Kimchi

Health benefits:

- Vitamin B6, C, K,
- Niacin
- Riboflavin
- Folate

- Vitamin B6, C, K,
- Niacin
- Riboflavin
- Folate



6. Miso

Health benefits:

- Plant-source protein
- Source of protective antioxidants
- Support gut health
- Support brain health
- Mitigate menopausal symptoms
- Support cholesterol balance
- Promote vitamin levels
- Help in the fight against cancer
- Support immune function

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7. Kombucha

Health benefits:

- Liver health
- Kill harmful bacteria
- Reduce heart disease risk
- Help manage type 2 diabetes

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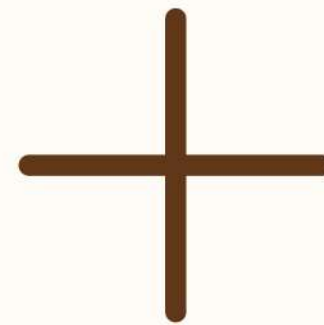
SYNBIOTICS - WHAT ARE THEY?

SYNBIOTICS REFERS TO SUPPLEMENT THAT CONTAIN A BLEND OF BOTH PROBIOTICS AND PREBIOTICS, AND THEY ARE A RELATIVELY NEW CONCEPT

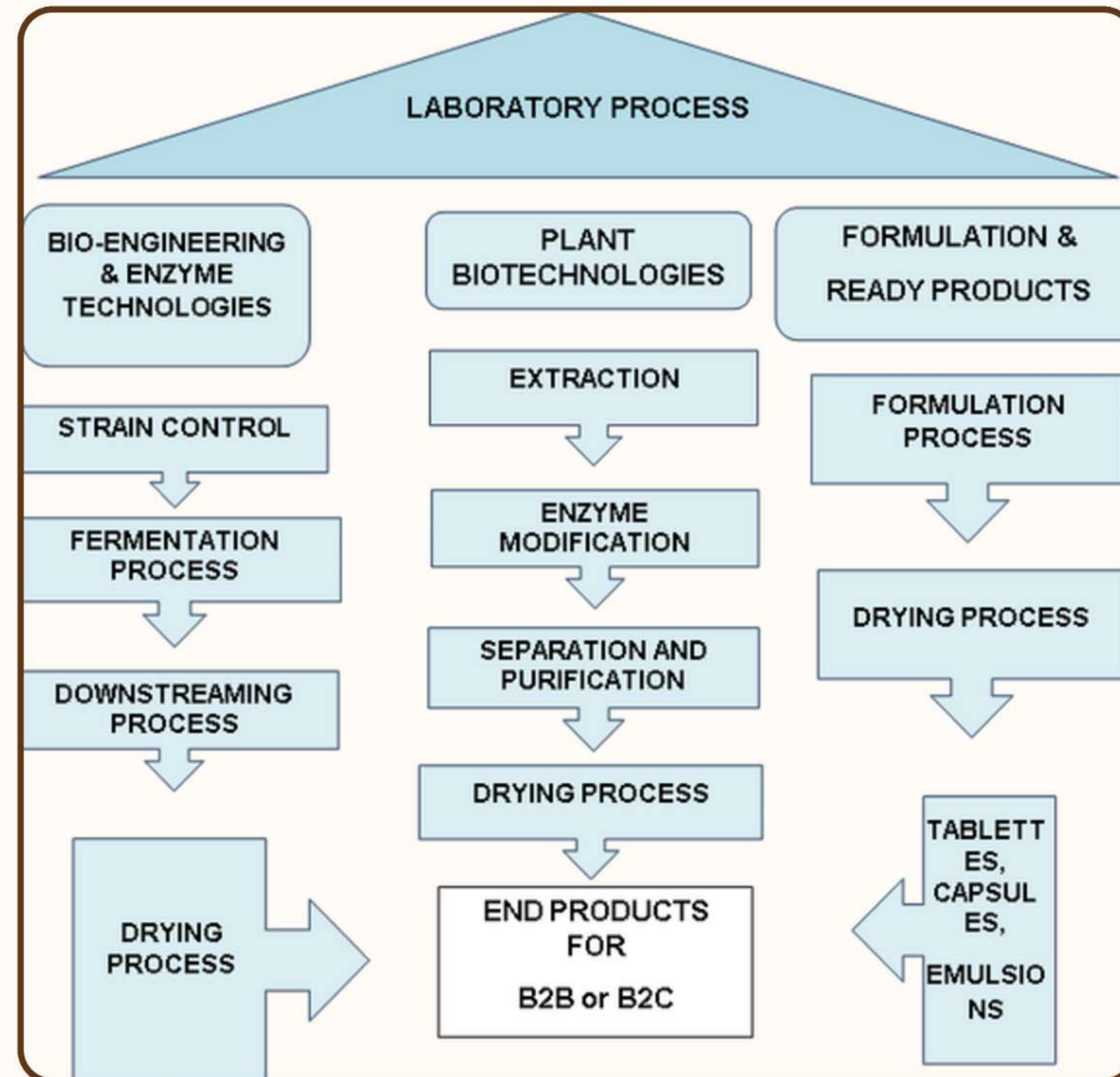
They are identified as synergistic or complementary synbiotics.

Complementary contain both pre- and probiotics chosen independently for their overall positive impact on health.

In contrast, **synergic synbiotics** typically choose certain prebiotics to complement the specific probiotics in a supplement.



SYNBIOTICS - SEPAZAN'S APPROACH





SYNBIOTIC

BASED ON BIOTECHNOLOGICAL PROCESS WITH CAMEL MILK

Know-how area: in the field of biotechnology of probiotics cultivated in a camel milk environment

THE BASIC COMPOSITION IS:

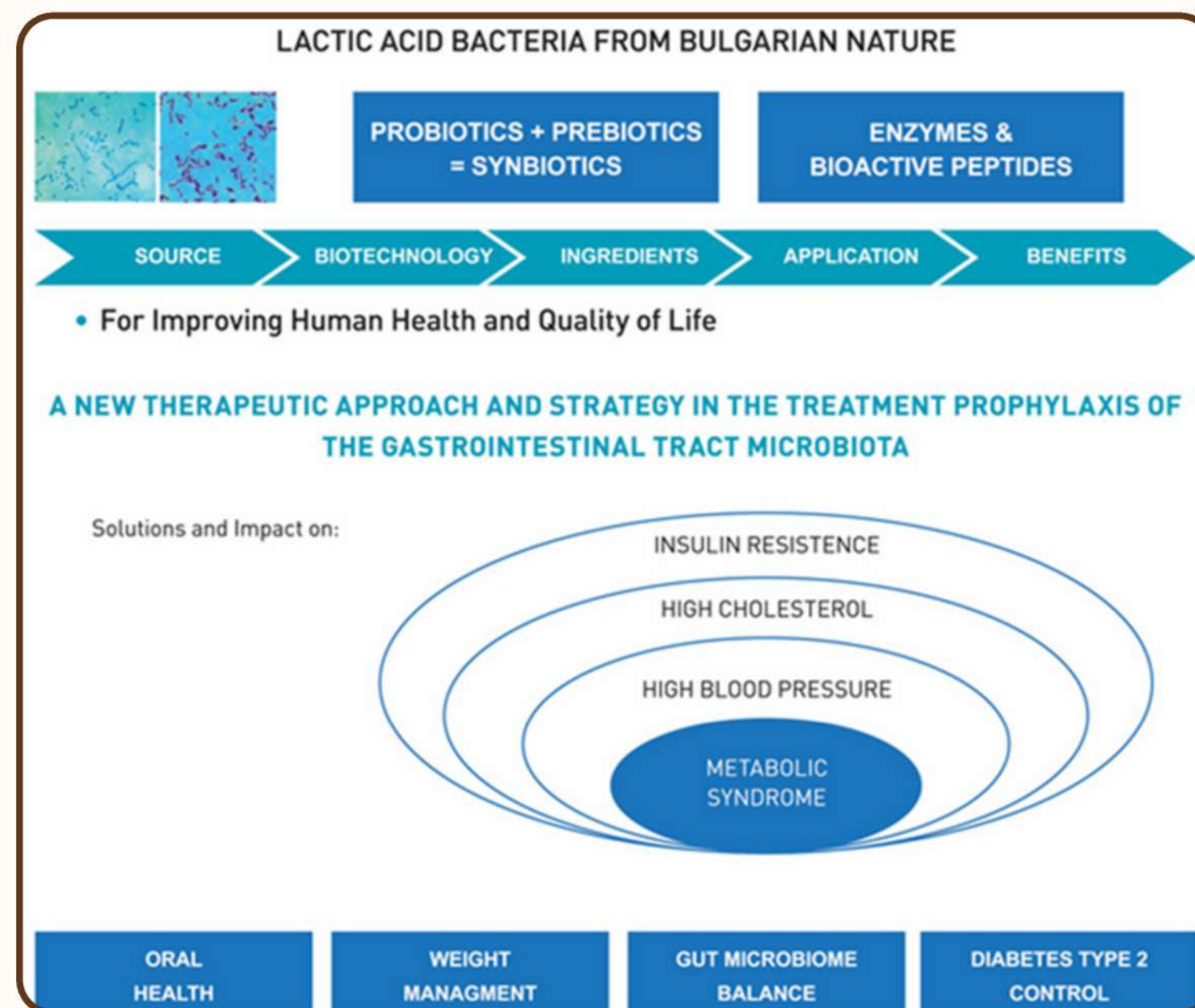
- Combination of probiotic strains in the presence of prebiotic oligosaccharides, polysaccharides and natural biologically active substances
- Probiotic strains of lactic acid bacteria specially selected by indicator - digestibility of prebiotic oligosaccharides and plant fibers

The strains based on camel milk are selected to produce lactic acid and acetic acid in quantities sufficient to:

- Acidify fermented camel milk to the planned acidity;
- Degrade the lactose present in camel milk to the planned concentration;
- Have the ability to hydrolyze the proteins in camel milk to low molecular weight peptides;
- Be resistant to the acidity of gastric juice;
- Be resistant to bile salts in gastric juice;

SEPAZAN'S APPROACH

**PROPOSED BIOTECHNOLOGY INTEGRATED
APPROACH FOR THE EXPERIMENTAL PRODUCTION
OF A NEW GENERATION OF PROBIOTICS, PREBIOTICS,
SYNBIOTICS AND POSTBIOTICS USING CAMEL MILK.**





SEPAZAN

**DAIRY PRODUCTS,
BASED ON CAMEL MILK**

Vision and Value Proposition



SEPAZAN Ltd.

Innovating dairy nutrition
through camel milk-based products



Mission

**To support a system for
healthy & efficient nutrition**
ensure high-quality, safe food



Value Proposition

**Leveraging scientific expertise
and innovative technology**
introduce functional dairy products
with superior health benefits

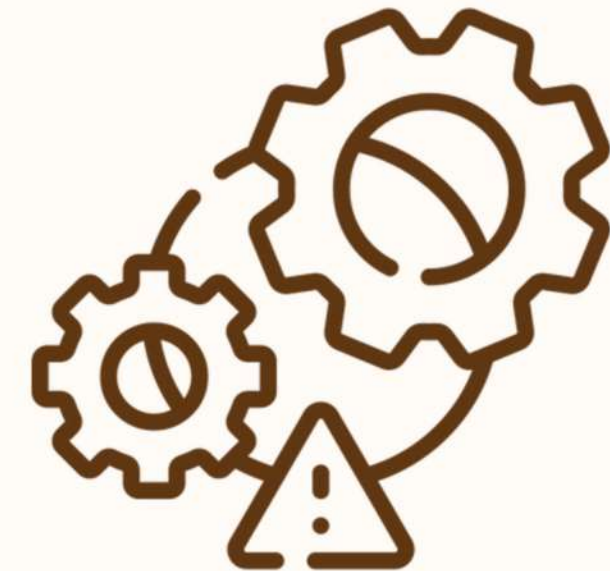
The Problem



Growing global demand
for functional, probiotic-rich dairy
products



Rising lactose intolerance
and dietary restrictions limiting
traditional dairy consumption



Traditional processing methods
ineffective for camel milk due to
unique composition

Target Market and Opportunity



Market Trends

- **Increasing awareness** of alternative dairy sources
- **Rising preference** for bioactive and probiotic dairy products



Market Size

- **Global camel milk market** projected to reach \$15 billion by 2028
- **Significant demand** in Middle Eastern, North African, and Asian markets



Target Audience

- **Health-conscious consumers**, diabetics, lactose-intolerant individuals
- **Dairy industry partners** seeking innovation

The Solution

SEPAZAN's Breakthrough

Successfully developed 6 camel milk-based dairy products

Yogurt

Cheese

No-structured

Cheese

Structured
Bulgarian-type
Brined white



Labne

milk product

Mascarpone

type milk product

Crema

creamy cheese

Innovative Processing Technology



Overcomes

camel milk's unique structural challenges



Enhance

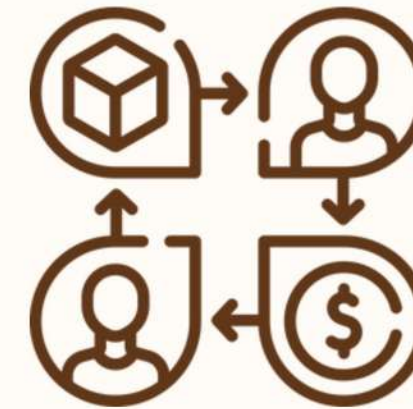
probiotic properties, defined by ISAPP
(International Scientific Association for
Probiotics and Prebiotics)

Revenue / Business Model



Revenue Streams

- **Direct sales** of camel milk-based dairy products
- **Licensing** of processing technology
- **Strategic partnerships** with dairy producers and biotech companies



Business Model

- **B2B:** Supplying to dairy manufacturers and retailers
- **B2C:** Premium health-focused dairy products for consumers

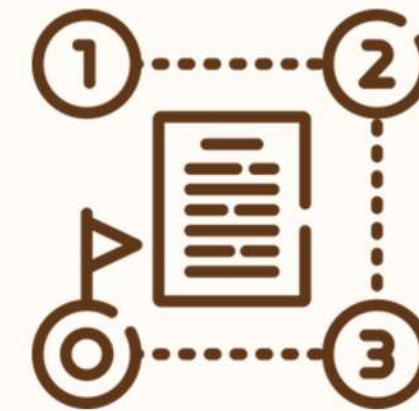
Roadmap

Achievements:



- Developed 6 industrially applicable camel milk products
- Scientifically validated probiotic properties
- Defined as probiotics by ISAPP (International Scientific Association for Probiotics and Prebiotics)

Next Steps:



- Expansion of product line (18+ new camel milk-based products)
- Industrial trials for large-scale production
- Customization for global market preferences

Marketing and Sales Strategy



Marketing Entry Strategy

- **Partnering** with dairy producers and distributors
- **Targeted branding** and health-focused marketing



Sales Channels

- **Retail** (health food stores, supermarkets)
- **Online** direct-to-consumer sales
- **Export** to high-demand regions (Middle East, North Africa, Asia)



Brand Differentiation

- **Scientific validation** of health benefits
- **Unique product line** with high bioactive content

Founding Team



Eng. Angel Semerdzhiev
CEO

57 years experience in
Business management



Ivan Semerdzhiev
CFO

28 years experience in
Financial management



DSc.Slav Semerdzhiev
CSO

14 years research
experience in Nanobiotics



Prof. Ivan Paraskevov
CTO

78 years in experience
in Dairy technology



Eng. Lyuben Zaneshev
Senior researcher

47 years experience in
Dairy technology

Key Team Members



Prof. **Iliya Iliev**



Prof. **Rumen Popov**



Prof. **Todor Zhurkov** Dipl. Eng., PhD



Prof. **Dimo Penkov**



Prof. **Zhivko Krastanov**



Mariana Petkova, PhD



MSc. Zoo Eng. **Lyudmil Shopov**, Dr. Vet.



Miroslav Simeonov, PhD



Velichka Tringova

- 3 scientific institutes & 12 renowned scientists in biotechnology & microbiology
- 5 patent holders of highly effective bacterial strains

- 6 large ruminant farms (cows, sheep, buffaloes, goats)
- 4 major dairy producers & exporters

Prime Partner

BULGARIAN LIVESTOCK INVESTMENT COMPANY Ltd.

Company overview

- Specializes in the production and trade of microbiological products for livestock farming
- Provides innovative solutions for improving feed quality and animal nutrition

Core Offerings

- Inoculand – Enhances seed quality (alfalfa, green fodder) and silage production (corn)
- Young Ruminant Nutrition – Specialized feed for calves, camel calves, lambs, and kids in the milk-feeding period
- Poultry Farming – Nutrition solutions for layer hens and broiler chickens
- Dairy Processing – Expertise in milk processing for all ruminants, including camels
- Micro Dairies & Slaughterhouses – Supporting small-scale dairies and slaughterhouses for diverse ruminants



Strategic Importance

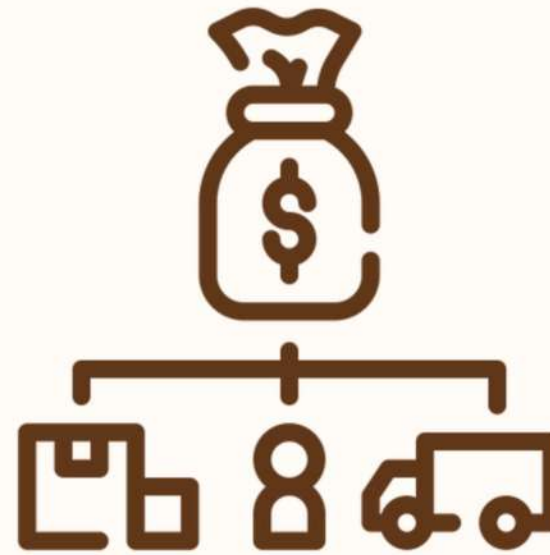
- Vital partner in enhancing livestock nutrition and scaling camel milk-based production
- Key contributor to ensuring quality control and sustainable agricultural development

Financials



Projected Revenue Growth

- Year 1: \$2M
- Year 2: \$5M
- Year 3: \$10M+



Cost Structure

- R&D and technology development
- Production and distribution
- Marketing and sales



Profitability Timeline

Break-even expected in Year 3

Competition

Current Competitors:



- **Traditional dairy producers**
focused on bovine milk
- **Niche camel milk suppliers**
limited to raw milk

Competitive Advantage:



- Scientifically-backed probiotic formulations
- Patented processing technology
- Scalable and globally adaptable product portfolio

Investments and Use of Funds



Investment Goal

Seeking strategic partnerships & funding for

- Industrial trials for large-scale production
- Market entry & global distribution
- Expansion of product portfolio and IP development



Use of Funds

- 40% – Production scale-up
- 30% – Marketing and sales expansion
- 20% – R&D and new product development (upscaling and upgrading)
- 10% – Operational and team growth (including educational initiatives)



SEPAZAN's Proposal

- It is worth mentioning that the level and scope of the activities we have reached at the moment require securing a partnership with financially sound partners outside our country.
- This is of vital importance in order to conduct more extensive R&D activity and industrial experiments for the introduction of large-scale production of dairy products based on camel milk.
- There are various schemes in an optimal economic formula and it is possible to be discussed with interested investors and entrepreneurs around the world. In this regard, we are ready to transfer, in a mutually agreed manner, all our existing know-how and use it as a basis for joint development of many others.
- In our opinion, new products developed on the basis of camel milk may exceed 32 in the course of a 3-year period. In addition to dairy products, this number includes various Probiotics, Prebiotics, Synbiotics, Postbiotics and Parabiotics.
- Finally, we believe that the participation of some local higher education institutions is of particular importance, which would contribute to the preparation of the young generation as a highly qualified potential for the future of its homeland.



Contact us

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