



Introducing our Milk Protein Powders (MPC/MPI)



Bonafarm[®]
CSOPORT

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About Bonafarm Group and its Best-Known Dairy Company, Sole-Mizo

Sole-Mizo, a member of Bonafarm Group, is Hungary's largest milk producer and the largest MPC producer in our region.

About Our Company Group

Bonafarm Group is a coordinated and controlled **vertical integration**.

- It is a vertical integration of **producers**, ensuring that our products meet the consumers' expectations of the modern food industry.
- All of our activities, from arable crop production to food processing, are performed within a **coordinated and controlled system**.
- The Group consists of **5 agricultural and 5 food industry companies** (strategic partners included).



We generated an annual revenue of **EUR 1.5 billion** in 2024.



We provide jobs and income for **thousands of families**

About Our Best-Known Dairy Company

- Mizo is the best-known and **most widely purchased dairy product brand** in Hungary
- For Mizo, the **consumer comes first**. This is why we have a separate product portfolio for lactose intolerant consumers, children and those who prefer sugar-free products.
- Mizo is the **main supplier** of dairy products to the largest retailers in Hungary and a significant supplier to neighbouring countries.

Mizo

Sole-Mizo is the largest MPC producer in Central and Eastern Europe, employing the most modern technology (investment completed in 2021)



400m litres of milk processed / year



€ 356 million in revenues



4 production plants across the country



ca. 1,200 employees



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Roots of Our Professionalism

Sole-Mizo produces **Milk Protein Concentrate (MPC)** based on **40-year-old traditions and know-how**, in its very modern and newly built plant.



Traditions and know-how

1974

The Csorna **milk powder plant** was established for producing milk powder in order to utilise the surplus milk from the local farms.

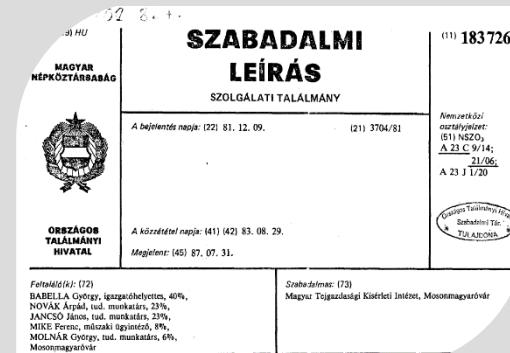
The **Hungarian patent** was announced: 70-90% protein content and improved quality characteristics of the milk protein concentrate.

1981

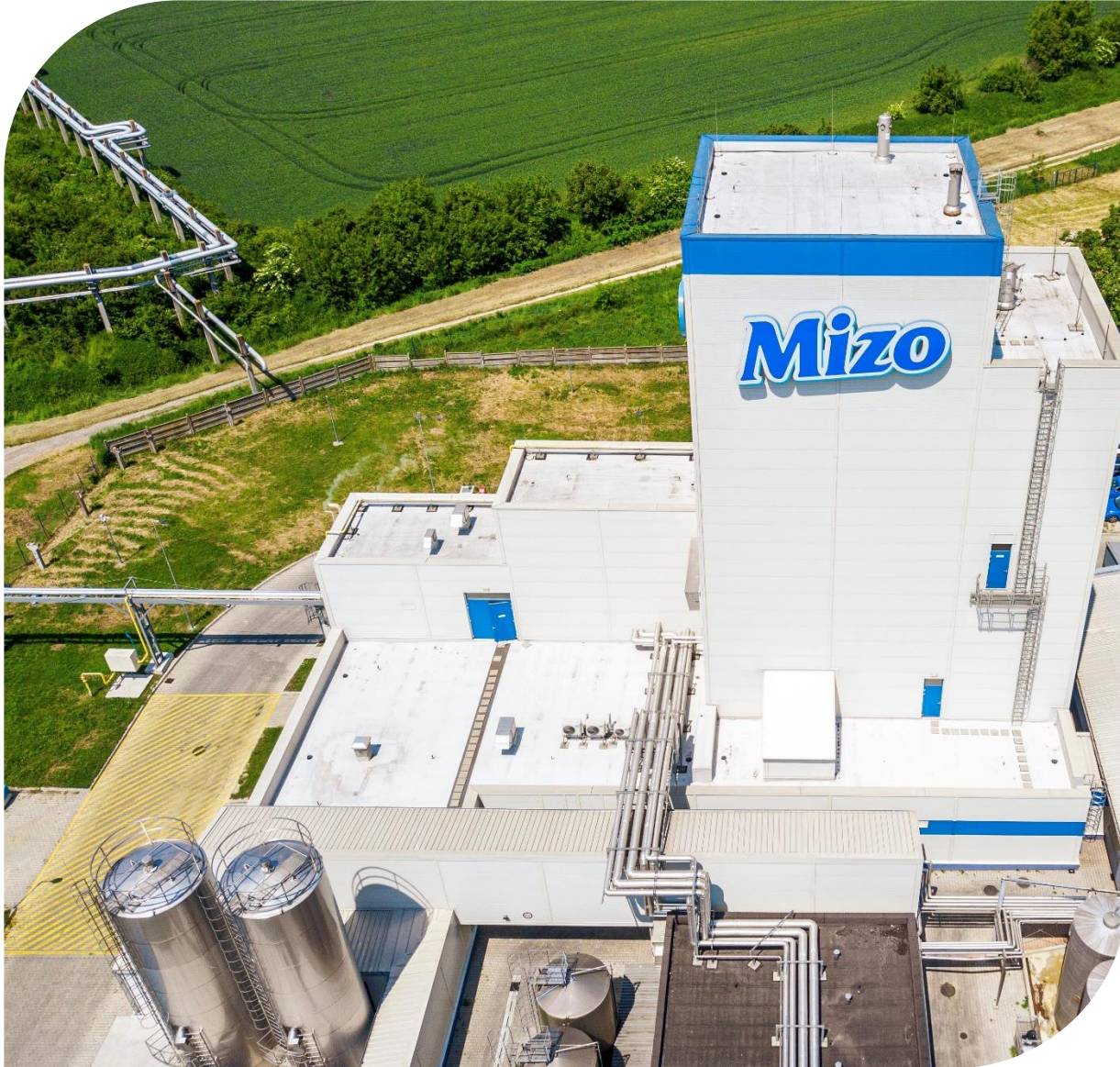


A big step forward: based on a Hungarian patent, **a pilot plant** was also established to produce MPC.

By the 1980s the Csorna plant was already the **leading and most modern milk powder producing plant** in the country.



Hungarian patent description



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Our Product, the Milk Protein Concentrate



What differentiates MPC from milk powder?

Protein level



Higher protein level achieving 80-85% in contrast with 33-35% for milk powder

Technology



MPC production requires a **higher level of technology**, known as membrane technology

Ratio of proteins



Having the essential proteins (casein and whey proteins) concentrated from the milk, the powder **retains the original ratio of proteins.**

Raw material



MPC requires **2.5 times more raw material** than milk powder

Lactose level



MPC has **lower lactose content** compared to normal milk powder – even no lactose

Our Product, the Milk Protein Concentrate & Milk Protein Isolate

What does MPC mean?

Milk protein concentrate is a **powder** produced by **filtering** milk that **captures all the casein and whey proteins** contained in the raw material.



Main characteristics of our product

Low level of **plate count** regarding **thermophilic germs and spores**.

Different bulk density – **high/low bulk density** and agglomerated powder

MPC 85: 85% relative protein content

MPI (Milk Protein Isolate) 90: 90% relative protein content

Sole-Mizo is capable of producing **MPC 60**

After collecting the **high value proteins** from the milk (casein and whey proteins), the powder retains **the original ratio of proteins**.

Very good **solubility index**



Classification of our product

Medical Nutrition (MN)

- Super strict quality
- Highest level of purity, meets the standards of medical nutrition manufacturers

Food (F)

- Highest level quality
- Quality improvement (emulsifiers and thickening agent) in food industry

Lactose-reduced

- Less than 0.1% lactose content



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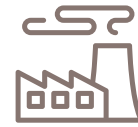
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Production of MPC & MPI



How is MPC/MPI produced?



Production of Milk Protein Concentrate & Milk Protein Isolate

Hungary

Csorna

Where is MPC produced?

Our production site utilises the **highest level technology** and the most **modern infrastructure**



The highest level technology, modern production infrastructure



New tower built in 2021



MPC/MPI production capacity is 2,200 tons/year



Production capability: <0.1% lactose content & medical nutrition grade MPC/MPI



Toll production as a service is provided

Sustainable production

Closed supply chain. All the raw material is collected every day from local Hungarian milk farmers, from which the MIZO MPC/MPI is produced. The milk comes from **local farmers**, the skimmed milk is also **processed here**.





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Benefits of MPC

We are the best choice if you are searching for a **high-quality product**.

Where can MPC be applied?



Protein intake



Water binding, thickening and viscosity



Emulsification



Foaming and whipping



Gelation



Heat stability



Colour/flavour development

APPLICATIONS



Medical and clinical nutritional products; sports nutrition, geriatric nutrition; protein/nutrition bar applications; weight management food, beverages



Soups, sauces, meat and bakery products, confectionery products, chocolate, yoghurt, cheese



Soups, sauces, ice cream, confectionery, meat products, coffee whitener



Ice cream, desserts, whipped toppings



Cheese, yoghurt, bakery, confectionery



Recombined milk, soups, sauces, enteral, medical and clinical nutritional products



Chocolate, confectionery

Benefits of High-Quality MPC/MPI

We are one of the best choice if you are searching for a **high-quality product**.

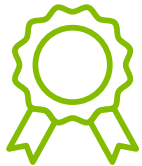
What are the advantages of using high-quality MPC?



Low count of thermophilic germs and spores



Prolonged expiry date of the end product, use in Medical nutrition, Sport nutrition sector



The mineral content of the powder is constant



Standard product quality



Maximum level of solubility, continuously tested by 3rd R&D laboratories.



Faster mixing, enhanced production process



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Our Competitiveness

We are the best choice if you are seeking a **fully trusted supplier**.

Pillars of our competitiveness



Trusted company
as part of the
Bonafarm Group

- *Bonafarm Group is one of the biggest, vertically integrated food producer in our region*



High-quality raw
material

- *From local, audited and constantly audited and/or trained farmers*
- *Made partially of raw material produced by our own farmers.*



High-level
production
technology

- *New plant built in 2021*
- *Continuous developments*



Independent
test labs

Cooperation with the Hungarian Dairy Research Institute (HDRI) and foreign labs (Eurofins, SGS)



High-quality
end product

- *High purity of the powder*
- *Low count of thermophilic germs and spores*



Lactose-free
MPC and MPI

- *MPC 85 with less than 0.1% lactose content*
- *Essential for lactose-free / reduced food production*



Joint R&D projects
with Universities

We have several R&D projects with Hungarian University of Agriculture and Life Sciences, NIZO



High service level

High level of supply security provided

Our quality management certificates



We are producing SPECIAL products in Csorna site – from our MPC/MPI

Our client is the main producer of the *Condition-specific nutritional products (clinical nutrition)* - Medifood GmbH, Swiss



MediDrink Gastro

Reduced inflammation, better nutritional status^{1,2}

MediDrink Gastro is a condition-specific FSMP that helps improve nutritional status and reduce inflammation in inflammatory bowel disease.

MediDrink Gastro is a food for special medical purposes for the dietary management of active phase of Crohn's disease as a sole source of nutrition and dietary management of inflammatory bowel diseases as nutritional support. MediDrink Gastro is lactose- and gluten-free.



MediDrink OpLoad

MediDrink OpLoad

MediDrink OpLoad is a food for special medical purposes for the preoperative dietary management of surgery patients. MediDrink OpLoad is lactose- and gluten-free.



MediDrink Neo

Immunonutrition - better immune status, favourable disease outcome.*^{1,2}

MediDrink Neo is an immunomodulatory condition-specific FSMP that helps improve nutritional status and immune functions in cancer patients.

MediDrink Neo is a food for special medical purposes for the dietary management of cancer-related malnutrition. MediDrink Neo is lactose- and gluten-free.



MediDrink Platinum

Advanced nutrition, tougher elderly^{1,2,3,4}

MediDrink Platinum is a condition-specific FSMP that helps improve nutritional status and cognition, and helps reduce the symptoms of co-morbidities in elderly.

MediDrink Platinum is a food for special medical purposes for the dietary management of disease-related malnutrition. MediDrink Platinum is lactose- and gluten-free.

Our client is the main trader of the *Badatz (extra kosher)* products – J.P.I Israel. It's main partner in MPC business is TNUVA





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Our sustainability focus

Sustainability means the future of our business



References - Sole-Mizo's main industrial customers

Our clients are large international companies with high expectations.



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