



MILK POWDER

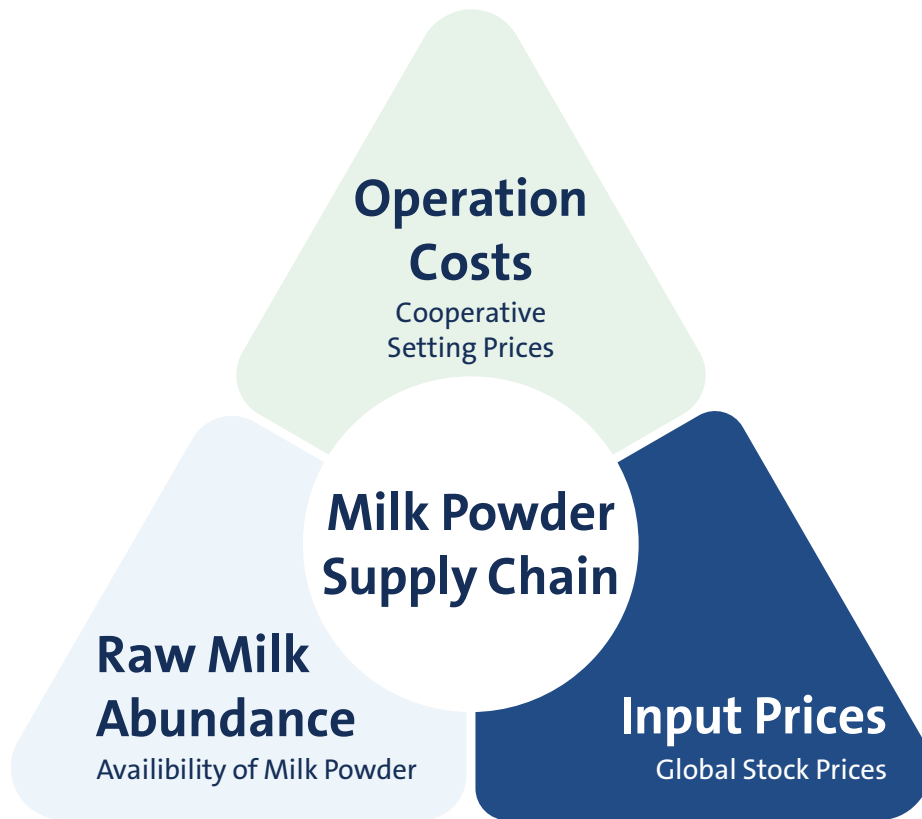
SAUDI AGRICULTURE AND LIVESTOCK COMPANY
[2023]

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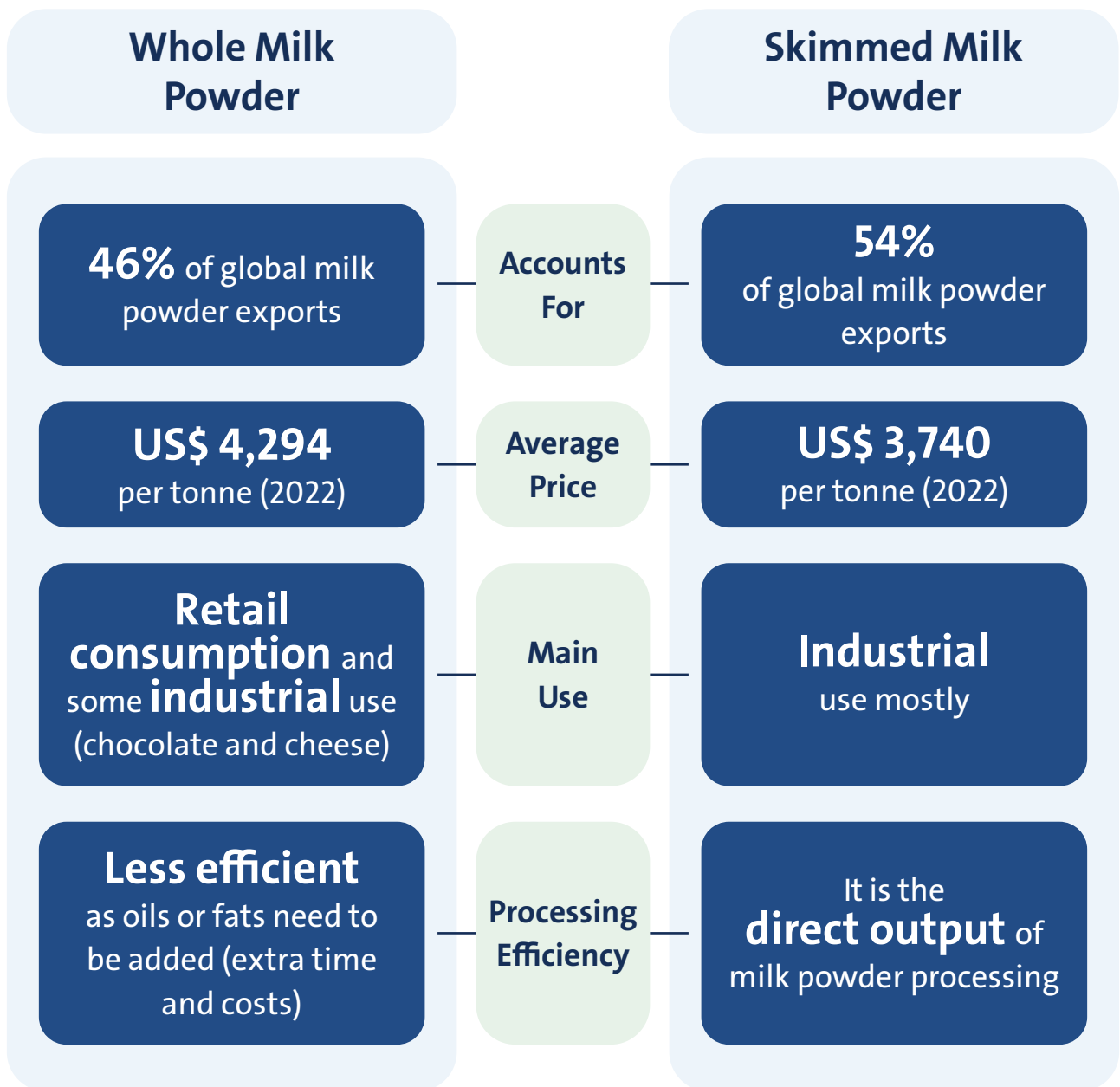
| Global Milk Powder Situation



Raw milk value chain heavily **impacts the availability and price** of milk powder, for producing and consuming markets. Feed prices, weather conditions, geo-political conflicts and the increase of raw milk availability (due to the increase in number of cow heads in high consumption markets) lead to added pressure on the inventory levels and accordingly the price.

Source: Euromonitor International from primary and secondary sources, 2023

There are **two types of milk powder** (whole and skimmed) with different uses, processing techniques and accordingly, price points. **Skimmed milk powder** is the primary output of the raw milk processing stage, while **whole milk powder** is the skimmed milk after adding fats (which could be milk fat or vegetable oils),. The choice of milk is contingent to the costing formula of the processor.



Source: Euromonitor International from primary and secondary sources, 2023

| Global And Saudi Arabia Trends



Global Trends



Health consciousness drives demand for low fat milk powder. Manufacturers are accelerating their innovation pipeline to respond with healthier products and emphasise on fortified varieties.



Global inflation pushes manufacturers for low priced alternatives for milk powder. These products are promoted as rich in nutrient, creamy textured/flavoured and easy to use.



Saudi Arabia Trends



New launches and consumer engagement help stabilise retail consumption, which is declining in Saudi Arabia. Companies are laser focused on launching healthier milk powder options.



Mothers are replacing toddler milk with milk powder with fortified ingredients, especially with pediatricians' approvals. The significant price difference attracts price sensitive consumers.

Source: Euromonitor International from primary and secondary sources, 2023

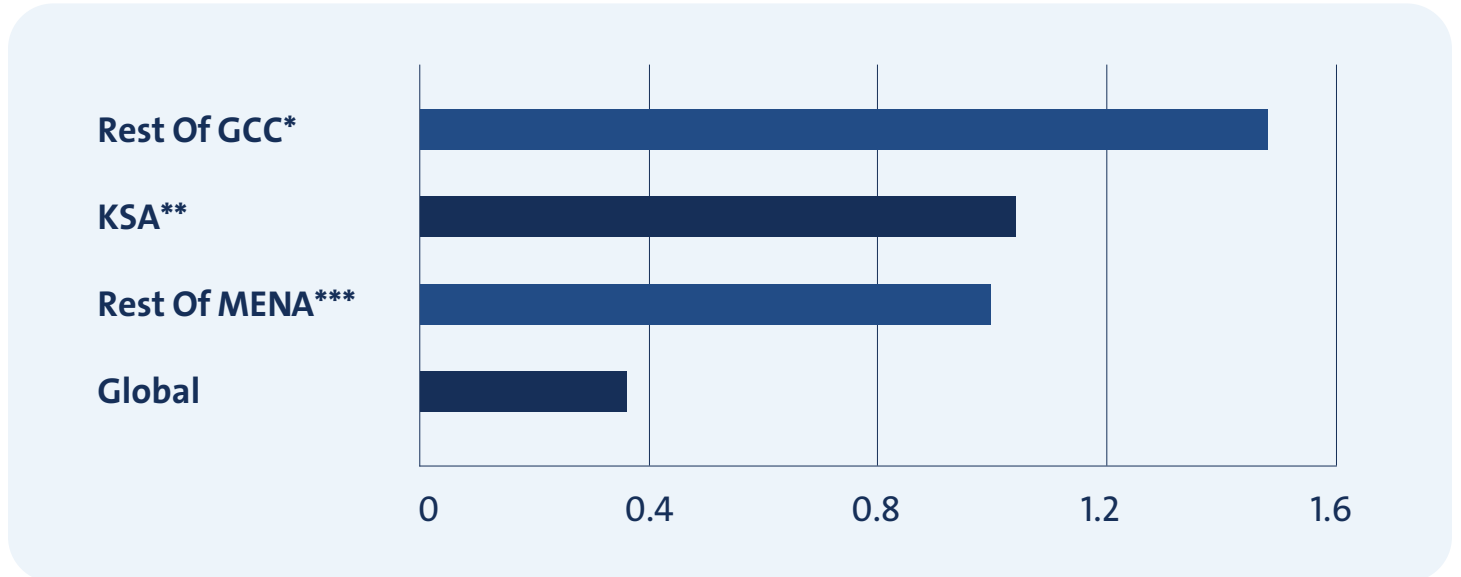
| Industry Dynamics



The low global consumption per capita of milk powder is mainly driven by **the wealth of local milk production** in the developed markets, and **consumer preference for UHT or fresh milk**. The same case has been applied on Saudi Arabia, especially with raw milk production's self-sufficiency (due to the dairy farms' expansions), compared to other GCC markets.

Retail Per Capita Consumption Of Milk Powder By Region

(2022) KG/Per Person



*GCC: Gulf Cooperation Council, **KSA: Kingdom of Saudi Arabia, *** MENA: Middle East and North Africa

Source: Euromonitor International from primary and secondary sources, 2023

| Supply Markets to Saudi Arabia

The main markets supplying milk powder to Saudi Arabia are New Zealand and Traditional European Markets.

1/ New Zealand

It represents **38.8%** from total exports to Saudi Arabia, and the latter represents **3%** of the total exports of New Zealand to the world. Its high quality and consumers' preference for the taste bolster New Zealand's position as the main source market.



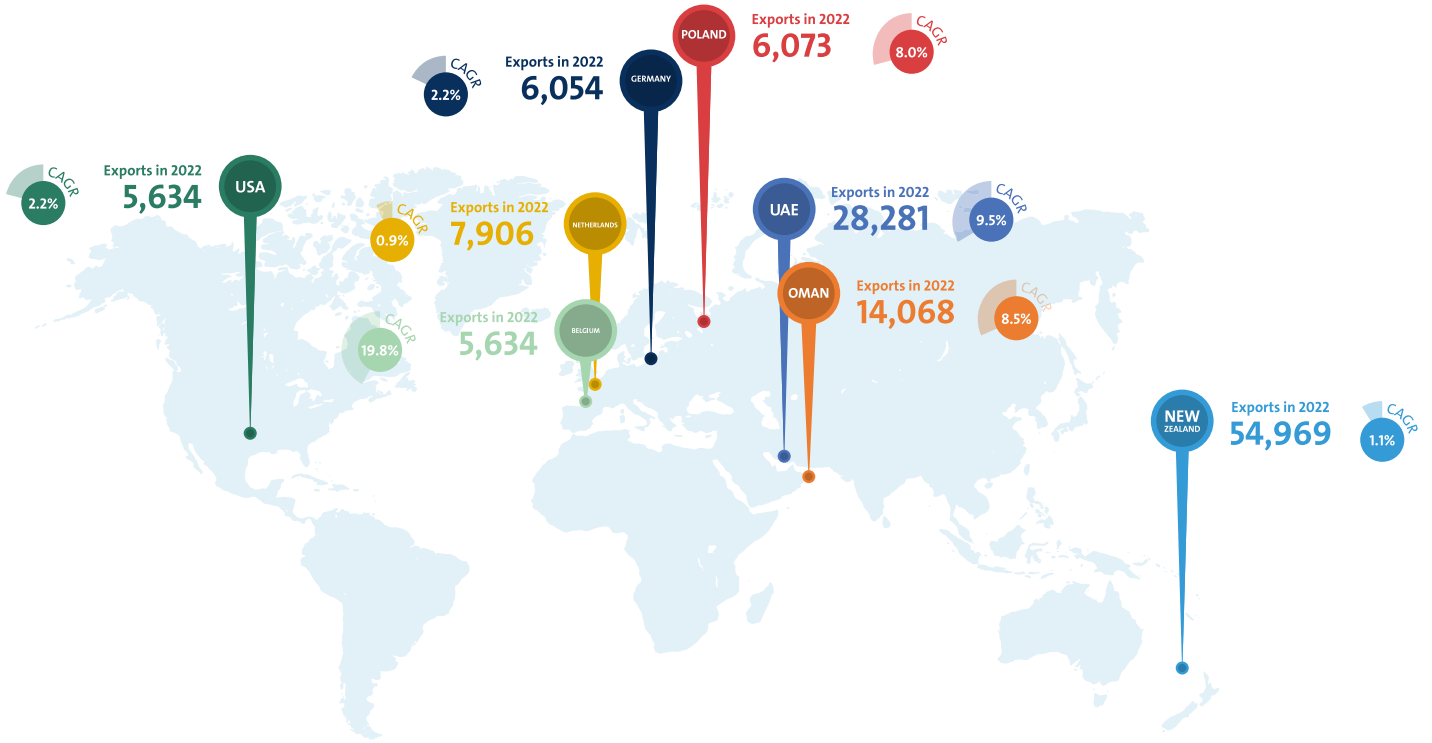
2/ European Markets

Leading milk powder producers and exporters like Netherlands remain an important source (**9.9%** share in 2022), however with slower growth in the period between 2017-2022.



Source: Euromonitor International from primary and secondary sources, 2023

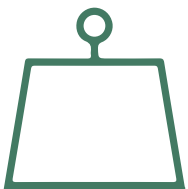
EXPORTS OF POWDER MILK TO KSA BY REGION (2012-2022)



Source: Euromonitor International from primary and secondary sources, 2023

Consumption Structure

Total market size in Saudi Arabia 2022



122,184

Total Milk Powder Market Size, **tonnes** (2022)



1.97 bn

Total Milk Powder Market Size, **SAR** (2022)

Source: Euromonitor International from primary and secondary sources, 2023

Milk powder is primarily consumed **by non-retail segments.**



Retail Sector

22%

Mainly driven by **whole milk powder** with minimal share of skimmed, as **the fat-free trend has not been prevalent** in Saudi Arabia yet.



Industrial Sector

24%

Whole milk powder is used in cheese, ice cream, chocolate and **bakery products** production to **secure the fatty taste.**



Consumer Food Service

3%

The main usage for restaurants, cafes and hotels is **cooking**, with expectations for **strong growth given the tourism outlook.**



Hotels, Catering and Institutional

25%

This segment includes the usage of hotels, hospitals, office kitchens and catering companies for **drinking and cooking.**



UHT Milk

12%

Limited number of dairy companies in Saudi Arabia are using milk powder to produce reconstituted UHT milk, while **some use it for cheese production.**

Source: Euromonitor International from primary and secondary sources, 2023

Consumption Behaviour



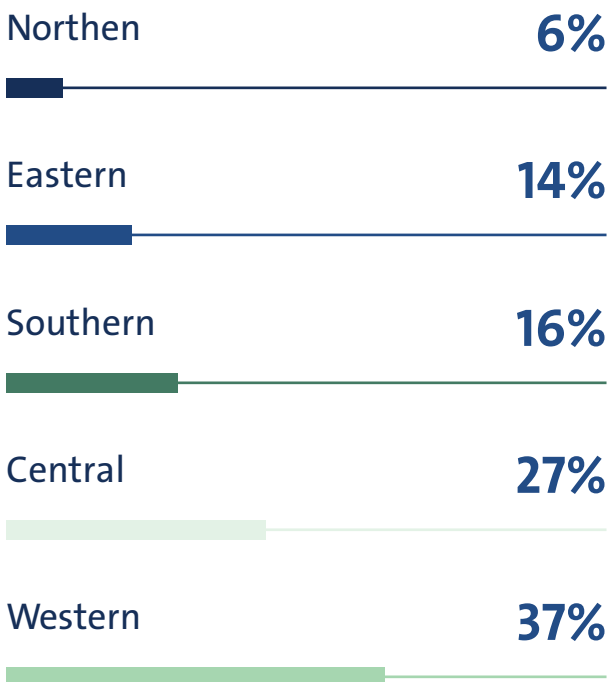
Cooking for high income



Drinking for low income

Income segments determine the usage of milk powder by households in Saudi Arabia. **The lowest income segments are the highest consumers of milk powder** due to the **lower price point** and **storage convenience** (especially blue-collar segment), while **middle- and high-income** segments still **purchase it but in lower quantity** for cooking and baking only.

Saudi consumers started **moving towards** requiring **specific fortification** to milk powder and this is likely to continue, especially with the increasing demand for products with good source of antioxidants, minerals and proteins.

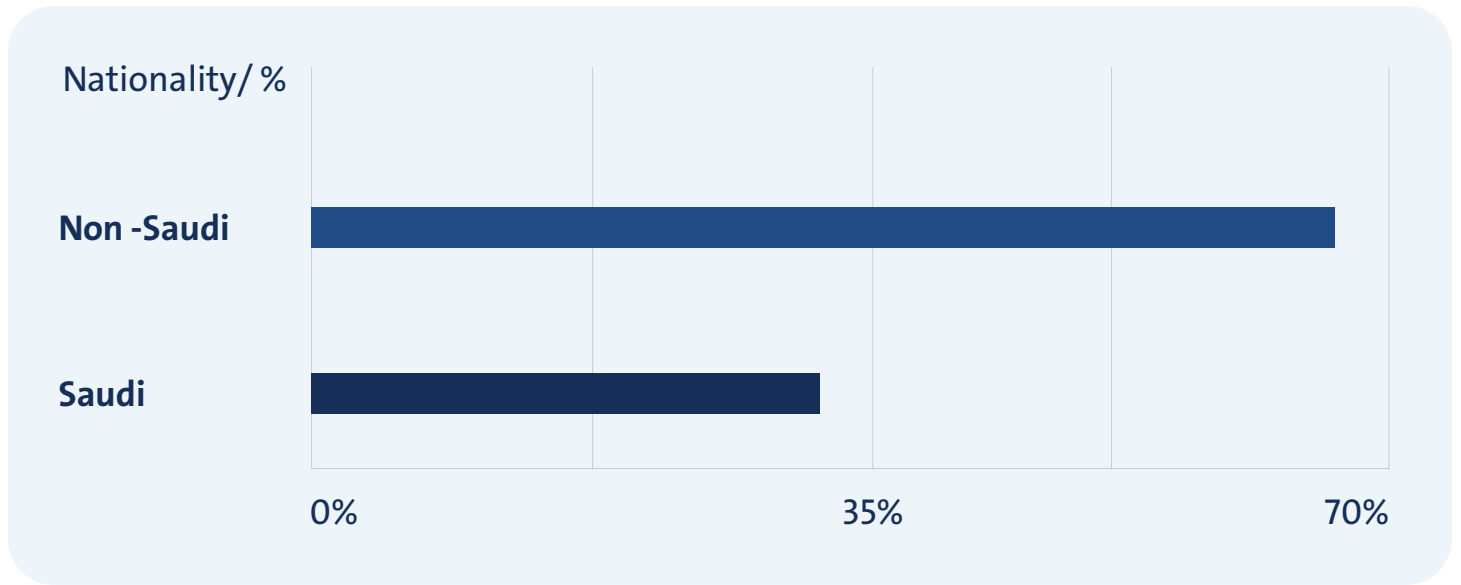


Retail Milk Powder Consumption By Region

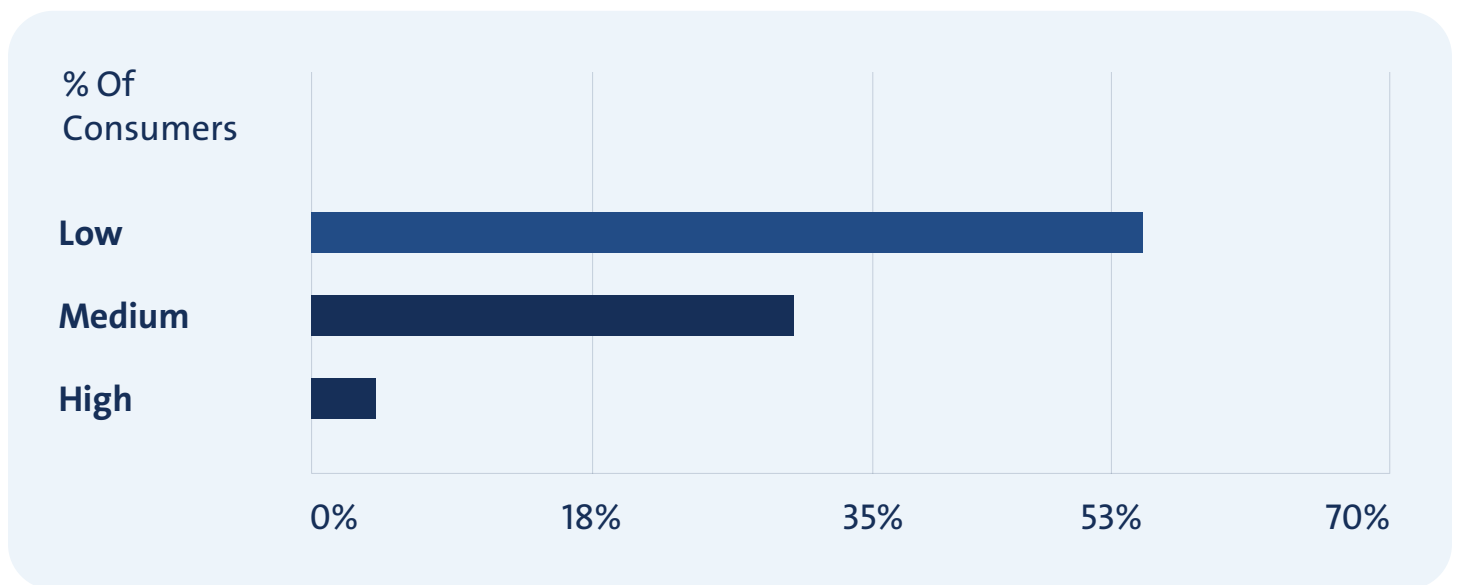


Source: Euromonitor International from primary and secondary sources, 2023

Retail Consumption By Nationality



Retail Consumption By Income Level



Source: Euromonitor International from primary and secondary sources, 2023

Technological Advancement

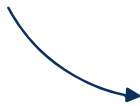
Latest Technology Trends In Milk Powder Value Chain

Innovations in various stages of milk powder processing aim for higher efficiency and better customer management using latest technologies.



01/ Collection Machine Learning

Investments in machine learning algorithms reduce risks in product quality and ensure timely delivery to better manage customers, regulatory and trade finance requirements.



02/ Transport Track and Trace Tools

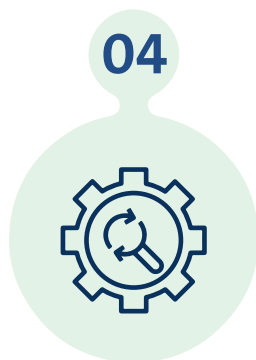
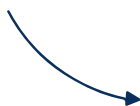
Track and trace tools improve supply chain visibility as they allow customers to track shipped goods.

Digital platforms, which act as a cloud-based database, help manufacturing companies access their milk collection and transport data.



03/ Storage Automated Storage and Retrieval System (ASRS)

Maximise storage capacity by installing conveyor systems that replace forklifts. These systems are computer and robot-aided which place items in predefined locations following pre-registered routes.



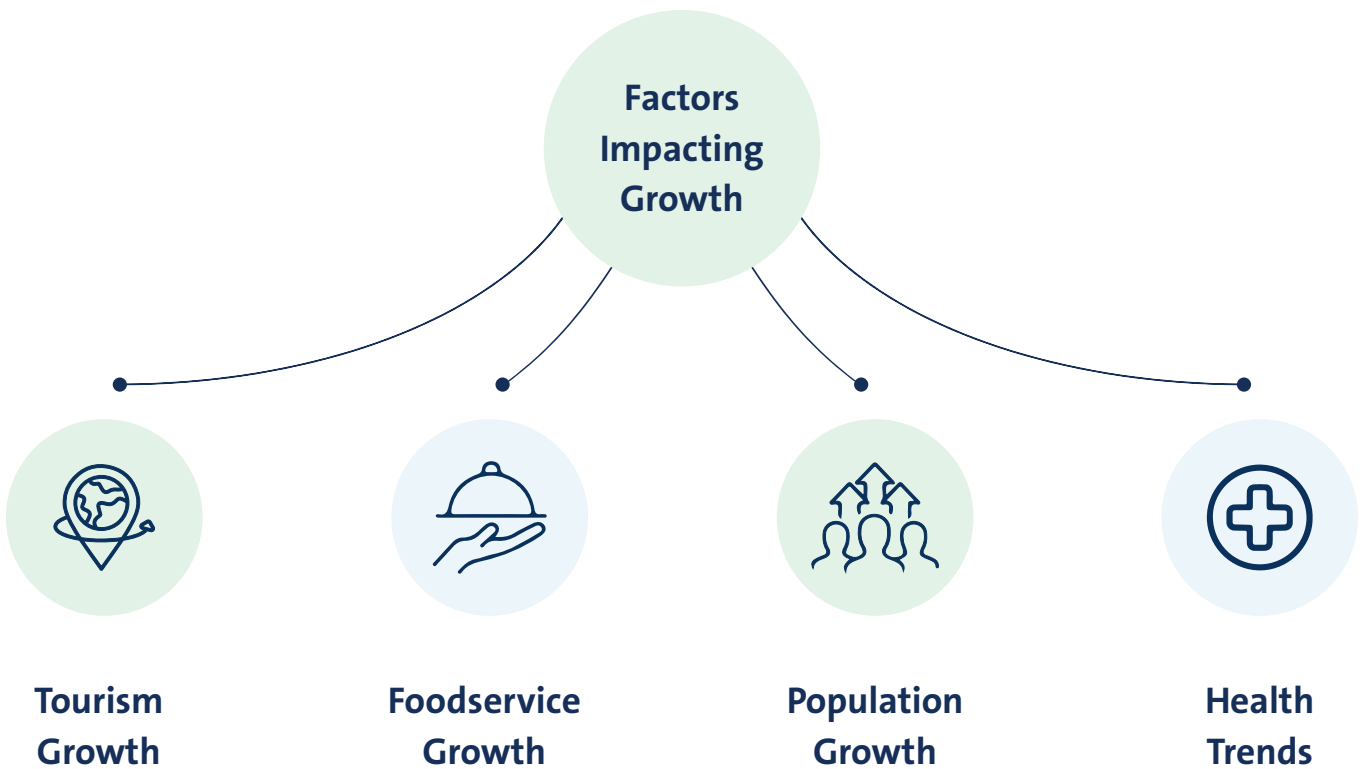
04/ Quality Control CFD for efficient and accurate products

Use computational fluid dynamics (CFD) tools to run trial tests. CFD helps with the efficient use of energy by designing the ultimate processing line for different types of dairy, including milk powder. This helps reduce food waste and protects milk powder from any contamination.

| Industry Outlook



There are various growth avenues for milk powder consumption in Saudi Arabia. The growth of **tourism and foodservice sectors** are likely to boost the demand for non-retail milk powder consumption. For **retail**, the prevalent health and wellness trends in Saudi Arabia, especially amongst youth, are likely to increase the demand for fortified milk powder with vitamins, minerals, fibres, as well as fat-free formats. Companies’ new product developments are likely to continue catering to this shift in consumer demand.



Domestic Tourism is likely to reach **SAR 111.1 bn** by 2026, while **inbound Tourism** is forecasted to reach **SAR 111.2 bn**. The tourism sector in Saudi Arabia is expected to grow at a **CAGR of 9% over 2022/26**

Foodservice sector is likely to reach **SAR 101 bn by 2026** at a **CAGR of 10.8% over 2022/26**

Population is forecasted to grow by a **CAGR of 2.5% till 2030**, with expectations of more visitors and residents, driven by inward investments in Saudi Arabia and the expansions of mega-projects

Demand on claims such as “Good source of Anti-oxidant”, “Good source of minerals” and “Good source of protein” is growing (CAGR of 3.75%, 3.18% and 2.86% respectively over 2017/22)

Source: Euromonitor International from primary and secondary sources, 2023

THANK YOU!