



Key to Success I **UHT milk with real fruit pieces**

Welcome to the world of unlimited possibilities.



SIG Combibloc

The world is waiting for new taste experiences. What are you waiting for?

The market of UHT liquid dairy products is celebrating a surprising world premiere that is taking it in a completely new direction: the first UHT milk drink with pieces of real fruit in a beverage carton. Specially-developed stabilisers make it possible for chunky ingredients such as fruit pieces to 'float' in the milk. And the world-leading filling technology from SIG Combibloc ensures that these milk products can be filled aseptically. World-wide, the dairy industry is facing new challenges. The new ease of dealing with chunky fill goods is smoothing the way for manufacturers of dairy products the world over to turn fresh new product ideas into reality and take advantage of a whole world of market opportunities.

Whether it is a question of developing completely new products or refining existing formulations, the possibilities offered by this new product concept are limitless. If dairy manufacturers can offer products

with unique taste experiences, they will succeed in capturing new target groups, markets and market segments. New product concepts lay the foundations for clear differentiation from the competition, and the creation of added values for all target groups.

Whether it is marketed as a beauty elixir, a wellness tonic or a health drink, putting pieces of real fruit in the product really highlights its vast potential, and lets consumers not simply taste the added value, but actually experience it.

Everything is imaginable. And thanks to the unique and flexible filling technology of SIG Combibloc, virtually everything is possible as well.







Filling UHT milk drinks containing real fruit particulates is easy. If you can do it.

Mengniu Dairy, China's leading dairy manufacturer in the segment of liquid UHT products, is the first provider in the world to develop a yoghurt drink containing pieces of real fruit, and has successfully launched these on the Chinese market. SIG Combibloc played a key role in bringing the product concept to fruition and in creating the necessary differentiation within the massive and highly competitive Chinese market. The company's unique filling technology has made it possible, for the first time, to aseptically fill a milk drink containing real fruit particulates. And with *combiblocMini*, the product gets the right packaging outfit. The specially-adapted drinking straw, enlarged to accommodate the size of the fruit pieces, adds a further dimension to this novel drinking experience. SIG Combibloc has been a leader in the aseptic filling of liquid foods with chunky ingredients in carton packs for more than 20 years. Each carton sleeve is individually shaped, sterilised and filled on the filling machines. The carton is ultrasonically sealed above the fill level – and not through the product – only after it has been filled. This procedure makes it possible to fill particulates of up to 15mm and fibres up to 40mm in length.

Mengniu trusts in this superior experience when developing its innovative UHT yoghurt drink, which is the result of close collaboration of SIG Combibloc and Mengniu Dairy with international food industry experts. SIG Combibloc was involved in every stage of the project from the very beginning, and had an integral role in the initial product concept, research and development. In the development stage, a range of test fillings to determine the ideal product formulations was conducted at SIG Combibloc's R&D centre. In addition, consumer tests were carried out to trial the flavours of the new product. All of this was done in close consultation between the project teams on both sides. The results bode extremely well. From the outset, the innovative yoghurt drinks containing pieces of real fruit in Strawberry, Peach, Coconut and Aloe Vera varieties have brought a new freshness to the liquid dairy sector and reached the main target audience: young women who care about their physical well-being, want a modern lifestyle and natural-tasting food. Even the decision to position the product as a real added-value milk drink, with a corresponding premium price tag, has proved to be the right one, as the sales results show.



You will know a good partnership when it comes to an end – and you want it to continue.

Mengniu's partnership with SIG Combibloc was a key factor in the realisation of the innovative product idea of an UHT milk containing pieces of real fruit, and for the success of the project as a whole. In an in-depth interview, Bai Ying, General Manager of the Liquid Dairy Business Unit and Vice President of the Mengniu Group, and Liu Shengli, Vice General Manager of Marketing, reflect on the key points and stages in the successful collaboration:

What was the key factor in Mengniu's tremendous commitment to developing the new product concept?

Bai Ying: Our market research showed that there was potential demand for this kind of new product among consumers. In general, our objective is to develop differentiated products to satisfy diverse consumer needs. We believe that this new product containing real fruit

particulates provides consumers with an entirely new dairy experience. At the same time, we also wish that our innovative drive will be transferred to the industry as a whole, thereby providing impetus for future development and growth.

What makes the new products with real fruit pieces so unique?

Liu Shengli: These are the first UHT milk drinks anywhere in the world market that contain real fruit particulates. Our R&D and production departments had to overcome a number of difficulties, such as optimising equipment and developing precise filling mechanisms that are specifically matched to the new products. The project itself was a truly international cooperation between experts specialists from the food preparation, production processing and food packaging industries.

What factors influenced Mengniu to select SIG Combibloc for such an important project?

Bai Ying: The SIG Combibloc system offers exactly what we want – the combination of a highly sophisticated, flexible filling machine system, the highest levels of efficiency and innovative packaging solutions. The key solution for launching the new products on the market was the unique filling technology of SIG Combibloc, which makes it possible to aseptically package products with chunky ingredients. This makes SIG Combibloc the perfect partner able to support ambitious growth targets.

What benefits does the combiblocMini format bring to these new products?

Liu Shengli: The format combiblocMini has a slim shape that is convenient to hold. It has a distinctive appearance that clearly differentiates it from alternative packaging options. With combiblocMini, Mengniu is expanding its product portfolio towards the premium market segment. A further advantage is that we can use the flexibility of the combibloc system to produce formats from 125ml to 250ml on the same machine.

So your experience in working with SIG Combibloc has been positive throughout?

Bai Ying: Yes. The unique particulate filling technology of SIG Combibloc is the keystone for the future market success of the new product line. The dedication and expertise of the SIG Combibloc team fully supported us in all aspects of the project, ranging from the product concept, the packaging solution, production, engineering, package design, printing, right through to the marketing activities. The whole team did a superb, professional job.

What response have you received from consumers?

Liu Shengli: So far, the new product line has been launched on a country-wide scale in China. Consumers have rated the product very highly, mentioning the package as very appealing. The package design clearly differentiates it from other products on the supermarket shelf, and makes customers want to try the milk drink. Once consumers have tried the drinks, they are won over by the new taste experience and the extra nutritional value provided by the real fruit pieces.

From March to May 2007, product sales throughout the country were climbing steadily to nearly 30 million packs – it can be foreseen a stronger upread with the next large marketing campaigns.

Are there any plans to continue the partnership with SIG Combibloc?

Bai Ying: Given the success of previous projects, Mengniu will continue to rely on SIG Combibloc. We will be involving our partner in the construction of our new plant at our headquarters in Hohhot, in Inner Mongolia, which will be equipped with an additional twelve high-performance filling machines from SIG Combibloc. The construction project is running smoothly and most of the filling machines have already been installed. We at Mengniu are looking forward to seeing the new plant completed on schedule, and it will start production in the course of 2007.

UHT milk with real fruit pieces – Key facts.

Abstract

- Mengniu is the first company in the world to launch an aseptically filled liquid dairy product containing pieces of real fruit of up to 7 mm.
- The product concept was developed in close cooperation between SIG Combibloc, Mengniu and leading experts in the international food industry.
- The healthy yoghurt drink with pieces of real fruit has been available on the Chinese market since November 2006.

Mengniu company profile

- Inner Mongolia Mengniu Dairy Industry (Group) Co. Ltd, founded in 1999, has grown in eight years from a small regional supplier in Inner Mongolia into one of China's biggest dairy companies.
- In 2006, Mengniu recorded total sales of 16.2 billion RMB (2.1 billion USD), and is China's No. 1 in the liquid UHT dairy products segment, with a market share of 33 per cent.
- Today, Mengniu has 19 production facilities in 15 provinces throughout China and portfolio of more than 100 products.

Brand/Product

- Brand: Mengniu
- Product: UHT yoghurt drink
- Market: China
- Format: combibloc *Mini* 250 ml with drinking straw
- Launch: November 2006
- Varieties: Aloe Vera, Coconut, Peach, Strawberry
- Positioning: premium product, modern lifestyle, health
- Target group: young women

SIG Combibloc: 20 years' experience in the aseptic filling of food products with particulates in carton packs

- 1985: the first products with particulates up to 9 mm were filled in combibloc *Compact*.
- Since 1995: possibility of filling products containing particulates of up to 15 mm, individual fibres can even be up to 40 mm long.
- Today: adaptation of the flexible filling technology to aseptically fill liquid dairy products containing pieces of real fruit up to 7 mm.

CFA 112-32 filling machine

- Machine output: 12,000 packages/hour
- Volume: 125 ml, 150 ml, 200 ml, 250 ml
- Filling machine adaptations:
 - improved filling nozzles through a combination of tubular design in the inlet and segment design at the outlet.
 - modified valve rods provides enough room for the particulates while simultaneously controlling the flow of the low-viscosity liquid content.

The adjustments can be made to all SIG Combibloc filling machines.

- UHT/Upstream: special mixing unit to mix the ingredients, which are separately sterilised or pasteurised, before they are filled.