

GELITA

# UPTODATE

The Newsletter for GELITA Customers

#42

Summer feeling:

A tour around  
the world  
of ice cream

More on page 15

# Dear reader,

For GELITA, being a pioneer in our industry not only means developing and launching new products, but breaking new ground everywhere. One example is the world's first expert blog on gelatine and collagen proteins, which we have been running since this spring. Here internal and external experts share their expertise on #AmazingGelatine and #AmazingCollagen.

GELITA's delivery systems are equally unique. No competitor has made as much progress with the controlled release of encapsulated actives as we have. Our portfolio ranges from GELITA® RXL R2 for extremely fast release to GELITA® EC for heavily delayed release. In an interview, Dr. Holger Becker, Technical Product

Manager Pharma, Research and Business Development, explains the market opportunities this opens up for manufacturers and the current trends on the capsule market.

About one and a half years ago we presented our SMART TECHNOLOGY (ST) collagen peptides. We have optimized their properties in such a way that customers are able to improve their production processes without additional investments. Meanwhile, the first clients are working with ST products and have given us consistently positive feedback. We are just as pleased about this as about the fact that we received one of ten gold awards at the German Innovation Award ceremony for our detergent additive NOVOTEC® CB800.

We hope you enjoy reading this edition!

## Michael Teppner

Global VP Marketing & Communication  
GELITA AG



uptodate spoke to Dr. Holger Becker,  
Technical Product Manager Pharma,  
Research & Business Development

Interview with master  
confectioner Siegfried Brenneis  
**Going for gold**



[8]

Interview

[3]

"No competitor is as  
advanced as we are  
with development"

NEWS

GELITA Blog,  
German Innovation Award

[12]

Global perspective

A tour around the  
world of ice cream



[10]

Applications

Improved wound  
healing with  
medical gelatine



[15]


Innovation

SMART TECHNOLOGY  
made clever!



[6]

Interview



"Our pharmaceutical gelatine is as versatile as a Swiss Army knife!"

How can the active ingredients of drugs and nutritional supplements be packaged in such a way that they are released optimally in the body? Dr. Holger Becker, Technical Product Manager Pharma, Research & Business Development, explains in an interview why no pharmaceutical gelatine manufacturer can answer this question better than GELITA.

&gt;



# "GELITA offers its customers a wide range of solutions"

**Dr. Becker, hard and soft gelatine capsules are among the most popular forms of administration for medicines and dietary supplements. What makes the capsules so successful?**

**Dr. Holger Becker:**

In addition to the high consumer acceptance, capsules have a technical advantage over tablets. They protect the contents from oxygen and light, which improves the shelf life of a drug or dietary supplement, and also makes a higher quality of the ingredients possible. In addition, oily substances are best packaged in soft capsules.

**The shelf life of gelatine capsules is a challenge for the pharmaceutical industry. What impairs long-term stability?**

**Dr. Holger Becker:**

Reactions between the coating and ingredient can affect stability. But the climate also plays a role. High humidity and temperatures, such as those prevailing in South America or Asia, can reduce the shelf life. The optimal release of the active ingredient and thus its durability are particularly important for manufacturers. The product should release the substance at the right time in the right place and in the right concentration. After two years, it should still be just as efficient as on day one.

**What solutions does GELITA offer?**

**Dr. Holger Becker:**

GELITA has conducted a lot of development work into the controlled release profile with gelatine. We offer our customers an all-round

package. There is a special GELITA® gelatine for very rapid release. It dissolves in the mouth within a few seconds enabling the active ingredients to be absorbed immediately



through the oral mucosa, which is crucial in acute treatments, for example. Our innovative portfolio also includes GELITA® RXL R2, which dissolves almost completely in the stomach within five minutes and is therefore particularly suitable for fast-acting drugs, for example. Our standard pharmaceutical gelatine dissolves constantly, but more slowly.

**"No competitor is as advanced as we are with development"**

And with GELITA® EC, we offer a product for a strongly delayed release in the intestinal tract. Some active ingredients would be destroyed by the acidic pH of the gastric juices. They must pass safely through the stomach so that they can be released specifically in the intestine. There are also slightly alkaline conditions in the gut, so that many substances can be better absorbed and are also more stable.

**What trends are there in the capsule market?**

**Dr. Holger Becker:**

The bioavailability of active ingredients is increasing in importance. Humans cannot convert 100% of the substances or energy in food. We try to formulate our products in such



**Dr. Holger Becker,**

joined GELITA in 2013. Becker, who studied chemistry, previously spent 10 years in the collagen industry in the food and medical products sector and knows the secrets of this versatile biopolymer. He is an enthusiastic table tennis player, is committed to supporting the next generation, and trains youngsters in his free time.

a way that the greatest possible proportion of the specified amount of active ingredient can be absorbed by the body.

Our gelatine also offers the possibility of producing microencapsulated nutritional supplements with oil-soluble vitamins in which the active ingredient is already encased in the gelatine matrix. This enables the

can offer consumers new, fast-acting ibuprofen formulations. The range of dietary supplements available in drugstores is steadily increasing. Products with rapid effectiveness or high bioavailability stand out and have a higher acceptance among consumers.

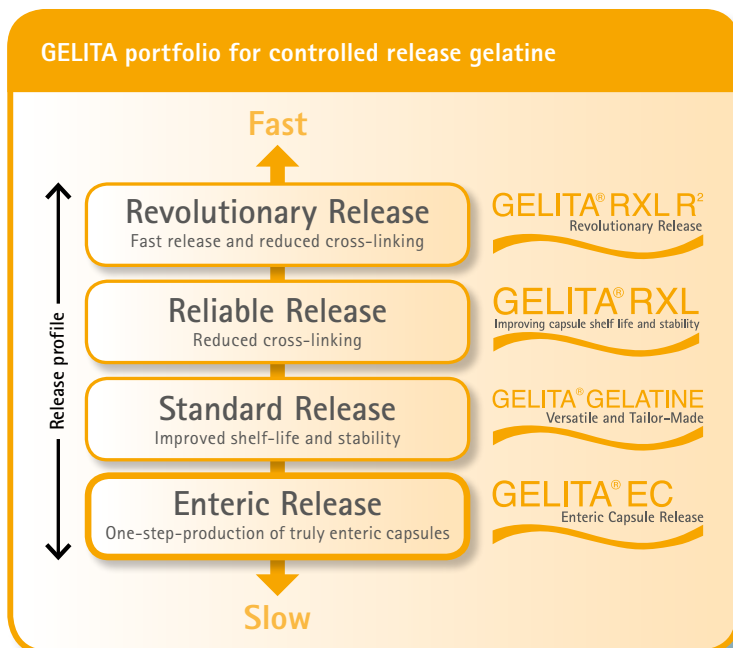
**What is of particular importance to GELITA in its developments?**

**Dr. Holger Becker:**

On the one hand, we develop products that are close to the customer and the market. This also includes establishing the product and building up enough capacity to serve the market. On the other hand, we are on site with the customer and support him with the technical implementation. We conduct many feasibility studies and have generated many convincing results. Both help the customer in the production and marketing of new products.

Gelatine is a product made from a natural raw material that is subject to fluctuations. Nevertheless, we always succeed in providing consistently high quality. Our customers also appreciate this.

The advantages of pharmaceutical gelatine.  
Source: Gelatine Manufacturers of Europe (GME),  
[www.gelatine.org](http://www.gelatine.org)



intestine to better absorb oily substances. There is a trend towards dosage forms that use technologies from the food sector (fruit gums). The USA is a pioneer in this area, where such systems are already offered as medicines.

**Are any other ingredients used in capsule production?**

**Dr. Holger Becker:**

Yes, alternatives can be advantageous for some special applications that represent less than 10% of the market. Their disadvantage, however, is that unlike gelatine, which is a foodstuff, they are additives with E numbers or chemically modified substances.

**What other market opportunities do GELITA delivery systems offer manufacturers?**

**Dr. Holger Becker:**

GELITA sees itself as an innovation leader and as a developer of solutions that our customers can use. No competitor is currently as advanced as we are with development. The interest on the part of industry is very high. For example, our customers

## Pharmaceutical Gelatine

NO OTHER NATURAL OR SYNTHETIC POLYMER PROVIDES GELATINE'S UNIQUE TECHNOLOGICAL AND BIOPHARMACEUTICAL ADVANTAGES.





# Healthy skin is what matters most

Improved  
wound healing  
with medical  
gelatine



Dr. Aubrey Woodroof founded PermeaDerm in 2013. The medical device company in Carlsbad, California, USA, is revolutionizing wound healing. A key factor in this is MedellaPro®, the medical special gelatine from GELITA.

Wound management generally involves removing non-viable tissue, preserving vital tissue, and creating a moist but not wet environment. Flexible and comfortable wound dressings are particularly in demand for chronic wounds, scalds and severe burns. They are designed to prevent fluid build-ups, minimize the formation of scar tissue, reduce the risk of local infection, and accelerate healing. "We focus on the art of directing the fluid produced in the wound through the first dressing into a second absorbent dressing without disrupting the wound healing process. As this can help minimize fluid accumulation, fewer complications from inflammation occur," says Woodroof.



Burns heal faster thanks to PermeaDerm.

With PermeaDerm B for burns, and PermeaDerm C for chronic wounds, Woodroof has developed the world's

first flexible primary dressings with variable pore size that have the properties of skin. Patented silicone and a nylon membrane not only promote optimal fluid management, but also oxygenation of the wound. The pore size of the material can be adjusted to a greater or lesser extent by stretching.

## Less pain, lower costs

"With PermeaDerm, we have succeeded in reducing patients' wound pain. Furthermore, bandages need to be changed less frequently." This benefits patients and helps reduce the costs of wound treatment at the same time. Woodroof, however, is not resting on his laurels. "In combination with an anti-scar substance, PermeaDerm has the potential to prevent the formation of scars. We are currently working on a corresponding variant." In addition, PermeaDerm G, a glove-shaped dressing that promises to relieve burns, is to be launched as early as summer 2018.

To manufacture his intelligent products, Woodroof relies on MedellaPro® from GELITA. The advantages of this medical gelatine include its excellent biocompatibility, low and controlled endotoxin levels, minimal bacterial count, low allergy potential, and high tissue cell affinity.

"MedellaPro® is crucial for the early adhesion of PermeaDerm to the wound,"



Dr. Aubrey Woodroof, founder of PermeaDerm.

says Woodroof, who has launched PermeaDerm B and C in the USA and Europe to date. He has been involved in the Wounded Warrior Project since 2010, which aims to help wounded soldiers find their way back into civilian life. One goal of this project is to create skin, bones and nerves. "Dr. Robert Christy, who is in charge of the project, is attempting to create skin using PermeaDerm and the body's own stem cells. In this way, PermeaDerm is making a further positive contribution to patients' lives."

Glove-shaped bandage.



### MORE INFORMATION:

Melissa Simon  
Phone +1 712 943 0391  
[melissa.simon@gelita.com](mailto:melissa.simon@gelita.com)  
PermeaDerm  
[www.permeaderm.com](http://www.permeaderm.com)

# GOING FOR GOLD: GELATINE FROM GELITA

Siegfried Brenneis has won countless prizes with his baked goods and cakes – including six gold medals for his Black Forest gateau. To achieve this, the master baker and confectioner, who was appointed captain of the German Bakers' National Team in 2010, uses gelatine from GELITA. Who better to explain how to use leaf gelatine correctly?

**Mr. Brenneis, what do you most like to conjure up with leaf gelatine?**

**Siegfried Brenneis:**

Black Forest gateau, because it combines the taste of cherries, dark chocolate dough, and cream flavored with cherry brandy. I find that interesting. I use the leaf gelatine to keep the cream stiff.

**How do you successfully process leaf gelatine and cream?**

**Siegfried Brenneis:**

For the cake, I whip about 1000 grams of cream until it's almost stiff. Before that I soak six to eight gelatine leaves in cold water for five to ten minutes. I gently squeeze out the soft leaves and heat them in a saucepan

while stirring until they dissolve and become creamy. Then I stir in 100 – 200 grams of the cold cream into the warm gelatine. This matching of temperatures prevents lumps from forming. Then I pour the mixture into the rest of the cream and whip it again until it is really stiff.

**What went wrong if lumps occur?**

**Siegfried Brenneis:**

It's possible that the stirring when matching didn't continue until all the gelatine had dissolved in the mixture. Or that the gelatine had already thickened while stirring in.

**What helps in this case?**

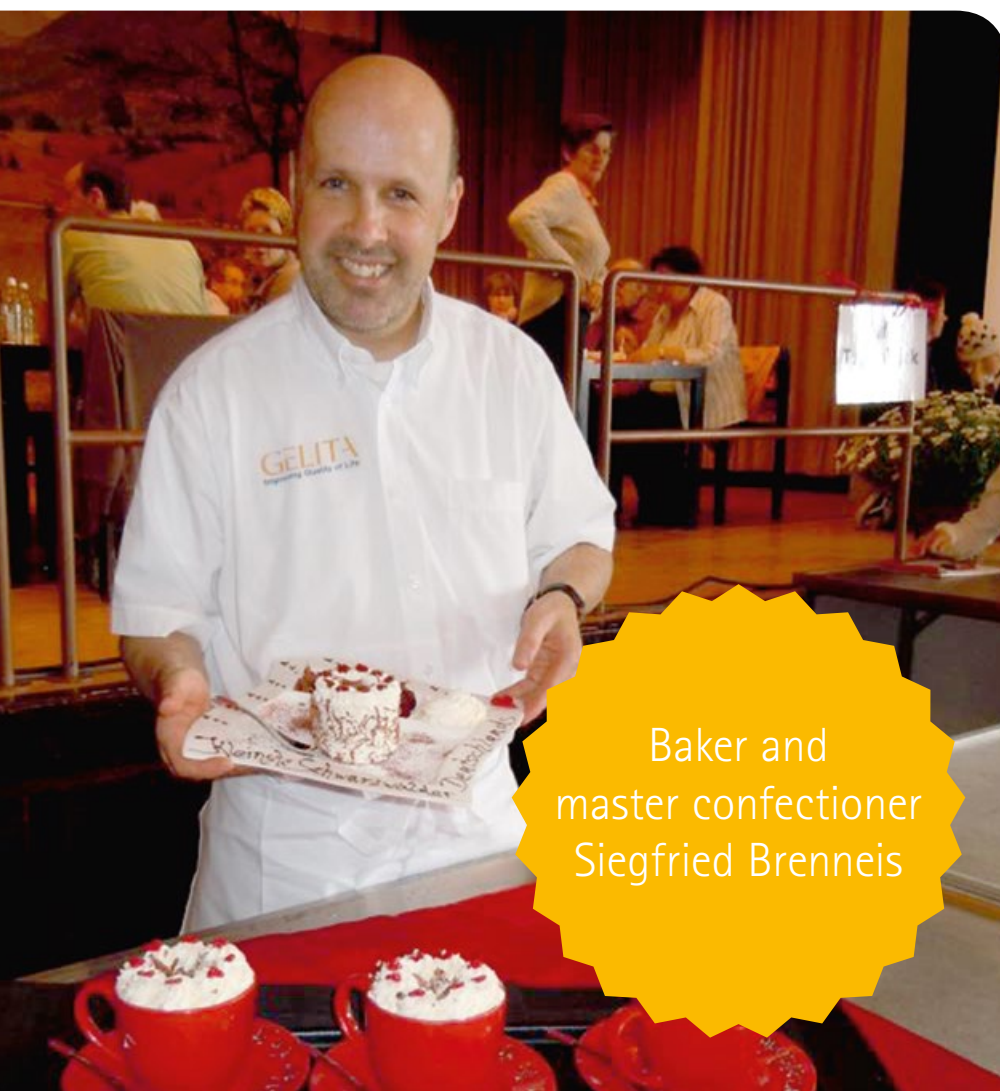
**Siegfried Brenneis:**

Gelatine becomes liquid again when heated, which means that the cream-gelatine mixture can be carefully warmed up. As a result, the cream then becomes runny, but that doesn't matter. This mixture must then be matched again with a portion of the remaining cream.

**What else is it important to know about using leaf gelatine?**

**Siegfried Brenneis:**

Gelatine should not be heated above 80 °C, as it loses its gelling power at high temperatures. That's why the pan must be removed from the hot plate immediately and the gelatine removed as soon as it has dissolved. The water for soaking must be cold, lukewarm temperatures dilute the leaf gelatine. It should also not remain in the water for too long, five to ten minutes is enough. And the gelatine must always be well mixed in.



Baker and  
master confectioner  
Siegfried Brenneis





**Award-winning:** Siegfried Brenneis has already won six gold medals with his Black Forest gâteau.

Some fresh fruits such as pineapple or kiwi are not compatible with gelatine. Why is this the case? And is there a workaround to making delicious cream slices with these fruits?

**Siegfried Brenneis:**

The proteic enzymes in these fruits dissolve the gelatine and prevent it from gelling. Heating or blanching the fruit destroys these enzymes so they can no longer harm the gelatine. If you want to simplify matters, use canned fruit.

**You're captain of the national bakery team. How did this honor come about?**

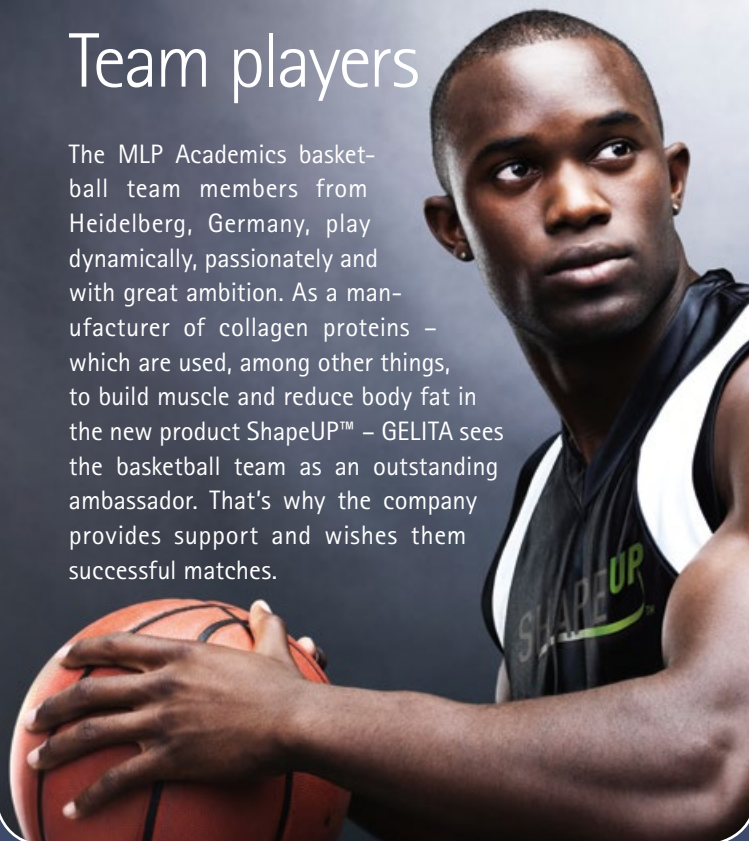
**Siegfried Brenneis:**

First of all, I qualified for the national team via the German baking industry championships. Since I have been committed to my guild for many years, I was elected captain in 2010. The great thing about it is that I get to travel all over the world – I've been to countries like Japan, the USA, Spain and Italy with the team – and I learn something new every time.

*For lots of delicious recipes with leaf gelatine go to [www.leafgelatine.com](http://www.leafgelatine.com)*

## Team players

The MLP Academics basketball team members from Heidelberg, Germany, play dynamically, passionately and with great ambition. As a manufacturer of collagen proteins – which are used, among other things, to build muscle and reduce body fat in the new product ShapeUP™ – GELITA sees the basketball team as an outstanding ambassador. That's why the company provides support and wishes them successful matches.



**GELITA**  
TRAIL MARATHON HEIDELBERG  
urban & nature | 1.500 vertical meters

## "Awesome. Higher. Harder."

That's the motto for hundreds of ambitious runners who will be at the start line again for the GELITA Trail Marathon in Heidelberg on September 16, 2018. In the sixth edition of the running event, participants can select distances between 42 and 9 kilometers. Trail running professional Florian Neuschwander is also keen to take on the challenge again. Young and old visitors alike can look forward to a varied support program in the start and finish area of the old town.

**Registrations at [www.trailmarathon-heidelberg.de](http://www.trailmarathon-heidelberg.de)**

# Cleverly made!



In 2016, GELITA expands its product portfolio and presents pure collagenous proteins whose processing properties have been improved. The first customers are now using these optimized collagen products – and they are delighted.

■ The improved properties were achieved mainly by the use of a new technology in the gelatine industry – SMART TECHNOLOGY (ST). The design of ST products is optimized for the special requirements of individual customer groups. This makes it possible to simplify processes, minimize the susceptibility to faults, and make products that could not be produced with the technical possibilities available or only at a significantly lower quality level.

Until the market launch of ST products, collagen peptides were only commercially available as a fine-grained powder with low bulk density, which posed many problems for companies in further processing. In the production of highly concen-

trated solutions especially, these include clumping or excessive foaming. But even in pure powder applications, the low bulk density promotes dust formation during handling. Adding other substances with different bulk densities or particle distributions also increases the risk of individual substances settling. SMART TECHNOLOGY has succeeded in solving these procedural problems – without the need for additional investment by the customer. Users can thus improve their process performance and cost effectiveness while optimizing the properties of their products at the same time.

SMARTTECHNOLOGY opens up completely new options. Hybrid ST (HST) collagen proteins – a combination of the physio-

logical functions of collagen peptides and the functional properties of gelatine – can produce clear fruit gums with a protein content of up to 35%. Three jelly bears, for example, made with VERISOL® HST already contain the recommended daily dose of 2.5 grams of VERISOL®. "We have filled a gap in the market with our HST products. Although there were already a few products before with this high concentration of collagen peptides, they were not clear due to foaming or had a color gradient for this reason," Dr. Margarethe Plotkowiak, Head of Global Product Management Food & Food Specialist at GELITA explains. Foaming and color gradient are not just optical disadvantages; uncontrolled foaming also makes molding difficult. The mixture



GELITA tests new applications  
in cooperation with customers.



draws more threads, for example, increasing the reject rate and contaminating the molding starch. Now that GELITA has got the foaming problem under control, customers can produce protein-enriched clear fruit gums without any additional effort.

### Positive feedback

Customers are showing great interest in the new technology, but are HST products really fulfilling their promise? Customer feedback after the first use of collagen proteins in production has been consistently positive. "For our customers to remain competitive, it is important to launch new products ever faster. GELITA is continually working on new solution-oriented approaches that make life easier for manufacturers," Plotkowiak emphasizes. This also includes extensive testing of the products before they are presented.

Reduced filling volume thanks  
to SMART TECHNOLOGY.

Customer's wishes and ideas can, of course, be integrated into the ST concept and – if desired – be supported by GELITA.

Fruit gums with VERISOL® HST are the first products to be manufactured using SMART TECHNOLOGY. In cooperation with customers, GELITA is currently also testing HST products in other applications such as snacks, bars and chewy candies.

### MORE INFORMATION:

Dr. Margarethe Plotkowiak  
Phone +49 (0) 6271 84-2552  
[margarethe.plotkowiak@gelita.com](mailto:margarethe.plotkowiak@gelita.com)

### NEWS

# Optimally filtered

GELITA invests in new filters  
at its Chicago plant – and in  
doing so, improves its produc-  
tion processes.

Filtration systems play an important role in gelatine production: they remove impurities from the extraction vessels and clarify the product. The so-called Cricket filters offer a larger filtration range than the previous system. "The new filters are based on a simplified design. They have no moving parts inside so are less susceptible to faults, which means less downtime," explains Ryan Williams, process engineer at the Chicago plant. "They can also use the diatomaceous earth required for the filtration process more efficiently, helping to reduce production costs," Williams concludes.



New Cricket filters at the Chicago plant, USA.



# WORLD'S FIRST BLOG FOR COLLAGEN PROTEINS

GELITA is expanding its presence in social media and has launched an expert blog on gelatine and collagen proteins. Seven employees and external experts write for [www.gelita.com/blog](http://www.gelita.com/blog).

"The blog is intended to be a leading source for formulators, product developers, marketers and operational staff from the food, pharmaceutical, health and nutrition sectors. GELITA knows all about the amazing properties and benefits of gelatine and collagen peptides. Now experts can share

their insights and experiences through this blog," says Michael Teppner, Global VP Marketing & Communication. The blog is a further building block in GELITA's comprehensive social media initiative. The aim is to make #AmazingGelatine and #AmazingCollagen better known.



**SUZANE LESER**, Director of Nutrition Communication, Business Unit Health & Nutrition. The accredited nutritionist has 20 years of experience in the food industry. ✓

**LARA NIEMANN**, Marketing Director, Americas. Niemann, who has been with GELITA for 15 years, works closely with product management, research and development, and corporate development. She will contribute wide-ranging knowledge about the company and its products. ✓



**DR. MED. HANS-CHRISTOPH KNEFÉLI**, Senior Manager Medical Affairs/Life Science. Dr. Kneféli conducts health and nutrition studies and shares his knowledge of collagen peptides in presentations to scientists around the world. ✓

**MARTIN JUNGINGER**, Head of Global Product Management Pharma/Business Development Gelatine. The graduate engineer is responsible for the pharmaceutical gelatine portfolio, especially for soft capsules with a controlled release profile. ✓



**DR. MARGARETHE PLOTKOWIAK**, Head of Global Product Management Food Innovation & Food Specialist. Dr. Plotkowiak is responsible for product improvements, new product development and product management. ✓

**DR. STEPHAN HAUSMANN**S, VP Business Unit Health & Nutrition and Sales Collagen Peptides. The chemist and bio-technician is co-inventor on more than 30 patents and has published numerous articles in trade journals on food and beverage technologies. ✓



**DR. HOLGER BECKER**, Technical Product Manager Pharma, Research & Business Development. Dr. Becker is responsible for the technical product management of pharmaceutical gelatine. The chemist also coordinates research and development projects for new types of gelatine. ✓

More information: [www.gelita.com/blog](http://www.gelita.com/blog)



## German Innovation Award

# Gold for NOVOTEC® CB800

At the prize-giving ceremony for the first German Innovation Award on 6 June 2018 in Berlin, GELITA was awarded one of ten gold prizes for its detergent additive NOVOTEC® CB800. The jury was particularly impressed with how the surface protection offers a highly effective and environmentally friendly solution for industrial cleaning.

The functional proteins of NOVOTEC® are added to water-based cleaning formulations. They form robust, water-attracting protective coatings on many surfaces. In contrast to the well-known lotus effect, for example, which repels water but allows water-insoluble dirt to stick to the surface, particles of dirt float on the protein film and are simply washed away on contact with water. This self-cleaning effect significantly extends the cleaning intervals, which saves water, energy and time, and with it, costs. NOVOTEC® CB800 is furthermore free of aggressive chemicals, skin-friendly and biodegradable.

650 companies entered the competition for the German Innovation Award. The German Design Council, founded in 1953 by the German Bundestag and sponsored by the Federation of German Industries (BDI), conducts the contest. Awards are presented for innovations in 40 categories.

A detailed report on the innovative applications of our NOVOTEC® proteins can be found in issue 40 (July 2017) of our uptodate in the archive at [www.gelita-online.com](http://www.gelita-online.com) or [www.gelita.com](http://www.gelita.com)



**GERMAN  
INNO  
VATION  
AWARD '18**



Nina Offenbecher (Associate Innovation & Portfolio, Business Development Photo/Technical at GELITA), Andrej Kupetz (Managing Director of the German Design Council) and Dr. Matthias Reihmann (GELITA Head of Global Product Management Photo/ Technical) at the award ceremony in Berlin (from left to right).

Source: German Design Council/  
Photo: Martin Diepold/Grand Visions

## Nutra Ingredients Awards

FORTIBONE®  
WINS

GELITA's FORTIBONE® has won the title "Ingredient of the Year 2018" in the "Healthy Ageing" category at the Nutra Ingredients Awards. The product is the best tailor-made solution to ensure the physical and mental well-being of an increasing number of elderly people around the world, the jury judged. The nutritional supplement FORTIBONE® significantly improves bone density, thus alleviating osteopenia and osteoporosis. The award ceremony took place on 16 May in Geneva.

More information about the award ceremony and FORTIBONE® will follow in the next issue of uptodate.



## TRADE FAIRS

## DATES:

Visit GELITA and experience innovative products for the megatrends of tomorrow. In the second half of 2018, we will exhibit, among others, at the following fairs:

IFT, Chicago	16 - 18 July 2018
VITAFOODS ASIA, Singapur	11 - 12 September 2018
CPhI, Madrid	09 - 11 October 2018
SSW, Las Vegas	08 - 09 November 2018
Food Matters Live, London	20 - 22 November 2018
HIE, Frankfurt	27 - 29 November 2018

## Masthead

uptodate is a newsletter of the GELITA Group

**Publisher:**  
GELITA AG  
Uferstraße 7  
69412 Eberbach  
Germany  
www.gelita.com

**Editing team:**  
Stephan Ruhm,  
Marketing & Communication  
stephan.ruhm@gelita.com  
Michael Teppner,  
Head of Marketing & Communication  
michael.teppner@gelita.com  
Phone: +49(0)62 71 84-2190  
Fax: +49(0)62 71 84-2718

**Design and text by:**  
srg werbeagentur ag,  
Mannheim, Germany

**Print:**  
Laub GmbH & Co. KG,  
Elztal-Dallau





## Global perspective

# A tour around the world of ice cream

A summer without ice cream? Unthinkable. And that for 5,000 years. Back then the Chinese were already using snow or natural ice to cool their drinks. The first ice delicacies were prepared with cinnamon, honey or fruit juices. The Greek physician Hippocrates even valued it as an invigorating and painkilling medicine. And Nero was so crazy about the ice-cold treats that he had ice and snow fetched by relay skiers from the Apennines. In 1530, a Sicilian confectioner revolutionized ice cream production. He succeeded in creating artificial cooling with the help of saltpeter. This made the production of ice cream independent of ice and snow. Around 140 years later, the first ice cream parlor opened in Paris – and soon ice cream was on everyone's lips.

Today we lap up ice milk, fruit ice cream, dairy ice cream, soft ice cream, sorbet, water ice cream or frozen yoghurt. Ice on a stick, ice cream glazes or novelties such as ice mallows – a foamed ice cream specialty – can be conjured up with GELITA® RTE-ICE. The gelatine blend ensures rapid gelling of the coatings and improves texture and stability. GELITA's OPTICE® ensures wonderfully creamy ice cream containing zero fat or sugar. The versatile emulsifier and stabilizer, which is also suitable for soft ice cream or frozen desserts, imitates the mouthfeel and texture of full-fat products, thus allowing icy pleasure without remorse – Hippocrates and Nero would have enjoyed it for sure.



## USA & South America

An ice cream parlor in Mérida, Venezuela, offers no fewer than 860 different types of ice cream. Some flavors such as beef or cheese, however, leave most guests rather cold. More popular are scoops of ice cream with alcohol, such as rum or vodka-pineapple. On Brazil's beaches, sunbathers are tempted by vendors selling chilled açai fruit puree. Hardly anyone can resist the taste of the healthy palm fruits with a red wine and chocolate flavor. US Americans are world beaters when it comes to ice cream consumption: they polish off a cool 18 liters per person each year.



## Europe

The world's best ice cream comes – of course – from Italy. A gelatician from the Umbrian region convinced the jury of the Gelato World Tour 2017 with his pistachio ice cream. Italian ice cream should be creamy and soft, with a maximum milk fat content of 3.5%. Second place went to two German ice cream makers with a sorbet of strawberry grapes. By the way, anyone thinking that the hotter it is in a country, the more ice cream is eaten, is mistaken. While Italians lick away some six liters, Finns lap up 12 liters per person each year.



## Asia

Thai people love freshly made ice cream on a steel plate cooled down to -30° C. The liquid ice cream mass is spread over the plate, freezes at lightning speed and is then shaped into small rolls with a spatula. In China, Taiwan, Korea and Japan, "shaved" ice cream is all the rage in high summer. The ice cream is scraped off a block of ice. The fine ice flakes are refined with condensed milk or syrup and garnished with fruit, bean paste or mung beans.



Read more about TENDOFORTE® at [www.gelita.com](http://www.gelita.com) and download brochure free of charge!

Follow us on Facebook, Twitter, YouTube and LinkedIn.



You can also read up to date on the Internet. All the articles in GELITA's customer magazine are published in English, German, Portuguese and Spanish.

See for yourself: You'll find the current issue and the previous issue at [www.gelita-uptodate.com](http://www.gelita-uptodate.com).

**GELITA AG**  
Uferstr. 7  
D-69412 Eberbach  
Germany

[www.gelita.com](http://www.gelita.com)

**GELITA**  
Improving Quality of Life