

No 153 2011



BAKELS

News





A Long Held Wish Came True!

Although Bakels' headquarters has been in Switzerland for 50 years the acquisition of

Hochdorf Nutribake AG

constitutes the first active business presence for Bakels in the Swiss bakery market. Acquiring Nutribake makes Bakels a major player in the Swiss bakery industry for the first time. For more information please read the press release under www.bakels.com/news.



The Nutribake team



Bakels Group CEO Armin Ulrich (right) with Nutribake MD Benno Eigenmann

Nutribake is one of the market leaders in Switzerland in the field of bakery ingredients. The company has been supplying craft and industrial bakeries for more than 70 years. By providing expert service, customer application support and customer oriented innovations Nutribake has consolidated and further developed its market position in recent years. Its management and sales team have between them very many experts with a sound knowledge of the bakery and confectionery business.

Food engineers and technologists are continuously working on research and development projects, aiming to find innovative bread concepts and new technologies for the national and international bakery industry. New products and recipes are developed and tested in the fully equipped test bakery. Combined with excellent marketing strategies Nutribake's innovative bread concepts are very popular amongst customers and consumers.

Nutribake will continue to sell the brands that are well known in the industry, such as Levit, Albako, Sumax, Moul-Bie and many more Swiss products. They will be produced exclusively in Switzerland to the same high quality standards.



The Nutribake test bakery



The Hochdorf Nutribake brand will be maintained for the immediate future. In the medium term, it is intended to distribute the internationally successful lines of the Bakels Group in Switzerland but also to improve the international marketing of high quality Swiss products from Nutribake with the help of the Bakels Group.

Bakels warmly welcomes the Nutribake team into its organisation. We look forward to reporting on the development of our new company in future issues of Bakels News.



Dear Reader

Nothing better demonstrates our strap line of «thinking globally – working locally» than the launch of our new bread improver brand Quantum.

By the time you read this issue of Bakels News we expect Quantum improvers to be available in many of our major markets and their availability will eventually expand to cover all the markets we serve.

Bakels Research have spent more than three years thinking (and working!) to determine the optimal way to use off the ingredient building blocks available to bread improver formulators to deliver the local market requirements.

On the one hand we needed to understand the specific market requirements and on the other hand understand the underpinning technologies which are common to all bread making processes. This puts us in a position of being able to launch a new generation of bread improvers which will deliver exactly what is required for each market or application, but with products linked by common technology, represented by a common name – Quantum.

The application needs of bakers and desires by end consumers are quite common in most markets. They include:

<i>For the baker</i>	<i>Consistent quality</i>
	<i>Process tolerance</i>
	<i>Tolerance to raw material variation</i>
	<i>Yield / cost effectiveness</i>
	<i>More sales!</i>
<i>For the consumer</i>	<i>Constant quality</i>
	<i>Shelf life / softness</i>

and in an increasing number of markets the use of fewer additives, or «clean label».

The new technology behind Quantum branded improvers will consistently deliver these requirements. We are particularly proud of the performance of the clean label Quantum products.

Of course we have not forgotten about our customers who are confectionery bakers or pastry cooks. Throughout this issue of Bakels News you will find examples of new products, or new ideas for old favourites.

We thank you, as ever, for taking the time to read our magazine. We trust you will find something of value in Bakels News 153.

*Armin Ulrich
Chairman*



Spotlight	2
Editorial / Contents	3
Innovate British Bakels	4-5
Innovate South Bakels	6-7
Innovate Australian Bakels	8-9
Innovate NZ Bakels	10-11
Innovate Irish Bakels	12
Innovate Nordbakels	13
Innovate Bakels Chile	14
Innovate Bakels Peru	15
Innovate Bakels Ecuador	16
Innovate Bakels Brazil	17
Behind the Scenes	18/19
The Bakels World	20



NEW IMPROVERS

Quantum

As with bakers worldwide British Bakels customers are also reaping the benefits of getting the most out of their ingredients with the added bonus of more and better bread, when using this new generation improver. (see «Behind the Scenes», pages 18/19).

Quantum provides an emulsifier free and thus a clean label improver system. When used at the recommended level of 0.5 to 1% increased water absorption to doughs of between 2 to 4% can be achieved, resulting in improved crumb softness and batch yield.

Doughs produced from **Quantum** are easy to process with excellent dough stability. Side wall collapse, one of the issues in super soft bread production in the UK, is avoided when **Quantum** is used.

Quantum is suitable for the production of bread and rolls, including wholemeal.

Quantum, when combined with Bakels clean label softeners, dough relaxers, sustainable palm oil or sour dough powders provides a complete clean label bakery solution.



Premium Ferment 4%

Premium Ferment 4% is a new clean label powdered bread improver containing sour dough for the production of top quality crusty, artisanal style breads, baguettes and ciabatta etc.

Premium Ferments 4% provides bakers with the opportunity to produce breads with the appearance and eating qualities of long process breads in less than three hours as only one hour bulk fermentation is required.

Premium Ferment 4% delivers a firm and crunchy crust, with the delicious flavour and aroma normally associated with sour doughs. The crumb has the uniform, yet pleasant, open and waxy textured crumb of artisan breads.

Water levels can be increased and when following the standard recommended recipe incorporating 74% water, it provides the added benefit of increased yield.

The unrivalled quality and consistency of breads produced from **Premium Ferment 4%** really stand out from other crusty goods, with their distinctive and appetising appearance they really do eat and taste as good as they look.



Speciality Bread Mixes

While oats are especially popular with consumers at breakfast, **Oat & Barley Bread Concentrate** provides an ideal opportunity for bakers to extend this interest into premium bread and rolls and healthy eating sandwiches for school lunches.

Suitable for both craft and industrial bakeries, **Oat & Barley Bread Concentrate** used on a 50/50 ratio with wholemeal flour, is fibre-rich and full of flavour from fermented wheat flour, malted wheat flakes, malt flour, oat meal and flakes, barley and wheat fibre.

Award winning and UK leading **Country Oven Multiseed Low GI Bread Concentrate** continues to grow in popularity with both bakers and consumers alike and is now being sold and exported worldwide.

Country Oven Multiseed Low GI Bread Concentrate is a blend of wheat bran and oat flakes and packed full of pumpkin, linseed and sunflower seeds, but its outstanding success results from its delicious flavour and superb soft eating quality.

Products produced from it are high in fibre and contain less salt than the 2012 government recommended guidelines.

«Ask for it by name» is the theme of the free point of sale material available for both the **Oat & Barley** and **Country Oven Multiseed Low GI** concentrates. Contact our customer service for further details on 01869 356400.



Carrot Cake Mix

Traditional spicy carrot cake is still hugely popular as it is indulgent, light, moist and delicious to eat, whether served as a simple dessert or as a snack with coffee or tea.

Carrot Cake Mix requires only the addition of water, grated carrot and oil to produce this classic cake. Because of the inclusion of sweet freshly grated carrot cakes produced from this mix are naturally tasty, full of goodness, with an excellent shelf life.

From this one mix a range of carrot cakes, sheet lines and cup cakes can be produced. For contrast and added value some of the carrot can be replaced with crushed pineapple, moist raisins and shredded coconut.

Suggested extension recipes available for **Carrot Cake Mix** include spice oat parkin, banana & walnut and courgette cake. All of which can be finished with **RTU Carrot Cake Topping**.

Baking Industry Awards 2011



The London Park Lane Hilton Hotel was the venue for the 24th Baking Industry Awards on 7 September 2011 and British Bakels were, for the second year running, delighted to sponsor the «Speciality Bread Product of the Year» category.

The Baking Industry Awards is the premier event in the UK bakery calendar, acknowledging the very best of the talent our industry has to offer. All eleven of the prestigious categories in the awards are fiercely contested.

The speciality bread product of the year award was open to bakers of all sizes, from artisan businesses to large automated manufacturers producing unwrapped or packaged breads. The judges searched the country for the best producers making the most original and successful speciality breads. Entrants did not have to be Bakels customers and the category was open to all bread varieties including continental, sour dough, seeded, ethnic and fruited breads.

Details on the winner of this year's «Speciality Bread Product of the Year» category are featured on our website www.britisbbakels.co.uk.



Quantum Improvers

South Bakels has started to use the Bakels Research developed **Quantum** advanced bread improver technology (see «Behind the Scenes» on pages 18/19).

The **Quantum** technology involves using traditional ingredients for greater water absorption in bread and roll dough. This produces softer dough which is not sticky but easy to handle and process and results in a far softer crumb.

The South Bakels range includes:

Quantum Highvol Bread Mix – a 5% premix designed to achieve maximum water absorption.

Quantum 1% Improver – designed for those bakers who prefer to make their own premix but still benefit from 2-4% increased water absorption.

Quantum Jumbo – a 5% premix designed to produce a super type of bread baked in a jumbo bread pan.

Bakels One Spread

Bakels One Spread is a chocolate/caramel flavoured spread. Ideal for glazing eclairs, for use in and on cakes, sponges, slices or as a flavour paste for butter creams.

Bakels One Spread is a very economical product.



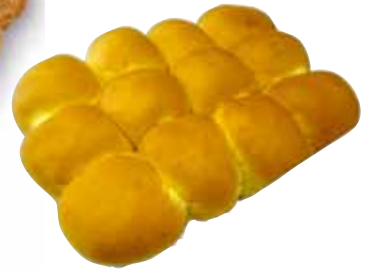
Powder based Premixes

South Bakels range of economical powder based premixes has been launched for those customers who prefer using powder premixes rather than paste premixes.

- 6% Crispy Powder Premix
- 10% Soft Powder Premix
- 15% Exsoft Powder Premix
- 20% Sweet Powder Premix



10% Soft Powder



15% Exsoft Powder



20% Sweet Powder



6% Crispy Powder

Please contact your local Bakels representative for more information.

Bakbel Range to South Africa

South Bakels is proud to announce it has started to import the **Diamond Glaze** range, a high quality line of cold application glazes to produce a mirror effect on cakes, sponges, cheesecake etc. The **Diamond Glaze** range has been imported from Bakbel Europe, South Bakels' sister company in Belgium. The range consists of neutral, gold, silver, white, chocolate and caramel.

Please contact your local Bakels representative for more details.





Australian Bakels introduces Two Quality Bread Options for Consumers

Healthy bread options are becoming increasingly important in a market where consumers are becoming more aware of what they eat. Australian Bakels works tirelessly to provide the highest quality products that are not only healthy but taste sensational!

Oat and Barley Bread Concentrate is a clean label product providing a good source of fibre and lower salt. The benefits of whole grains are well known, however, it is the great taste that will bring your customers back time and time again!



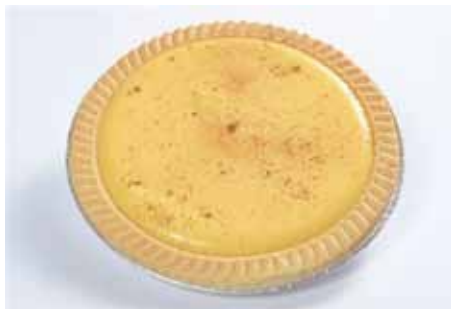
Soy and Linseed Bread Concentrate allows bakers to produce this popular bread variety without the hassle of all the extra raw materials and weigh up! This clean label product, packed full of omega 3 and fibre, provides a fantastic healthy alternative in any bakery.

Both of these products include all of the advantages of the latest **Quantum** improver technology.

Relaunch of Baktem Blue

In the fast pace, economically difficult world of bakery manufacture, Bakels provides customers with a time saving, cost effective solution to the production of high quality bread products!

Baktem Blue produces high quality soft bread and rolls, hamburger buns and hotdog rolls. Excellent crust characteristics and super soft, smooth eating texture will have customers queuing for more!



Bakels Custard Tart Mix – Up to 240 extra custard tarts for no extra cost in every bag!

Australian Bakels has reformulated **Bakels Custard Tart Mix** to be even more versatile and economical to use. The new formulation allows up to 20% more water, providing efficiency in manufacture as well as a better bottom line!



Bakels Frangipane Mix – versatile and delectable

Bakels Frangipane Mix is an extremely versatile product providing bakers and pastry cooks with the opportunity to craft delicate tarts, delectable slices, or delicious cakes and friands. This product is the perfect base for any creation.



Kurri Kurri Hot Bread has made the Quantum Leap!



Phillip Van Laarhoven is a second generation baker, working in the family business which was established in 1989 by Phillip's parents Keith and Elizabeth Van Laarhoven. Kurri Kurri Hot Bread is a busy bakery producing high volumes of bread and baked products for the immediate and surrounding area.

Once the benefits of **Quantum** were explained and demonstrated, Phillip immediately requested supply of Quantum improver. Phillip stated that, «**Quantum** has assisted with the quality of the bread with the new season's flour, enabling consistent quality and increased water addition.»

Bakels would like to take this opportunity to thank Kurri Kurri Hot Bread for their continued and long-lasting business.

Phillip Van Laarhoven with Doug Black, sales representative for the area

NEW APPOINTMENTS

Technical Advisor – Bread



Australian Bakels welcomes Steven Anderson to the position of technical advisor – bread. This is a new position providing focus on the bread category. Steven's role includes providing technical support to the sales team, product review and development, plant bakery account management, as well as an overall revitalisation of the bread category within Bakels.

Prior to Bakels, Steven was the bakery manager at BRI (formerly the Bread Research Institute) where he was responsible for tailoring training solutions to specific client requirements, developing products, test baking and pilot scale baking, process optimisation and technical support to the baking industry. Steve brings his passion and motivation to the Bakels team providing the link between practical baking and the technical aspects of ingredients and process.

Technical Manager



Australian Bakels appointed Akila Rajanbabu to the position of technical manager in June 2010.

Akila joined the company with 12 years experience in technical and quality roles with a leading flour milling and ingredients manufacturing company. She holds a masters degree in food science and has attained formal qualifications in quality assurance.

In an environment of escalating requirements in quality and compliance from both customers and regulatory authorities this role is critical to the ongoing success of Australian Bakels. In her first 12 months with us Akila has taken the company's accreditation for BRC/HACCP and Australian dairy export license from «B» grade to «A» grade.



The Lord Of The ... Bread Improvers!

Apart from New Zealand's movie trilogy «The Lord Of The Rings», another phenomenon has hit New Zealand: the new **Quantum Bread Improvers**. Early June we successfully launched the first two bread improvers in the Quantum range, using the unique and innovative ingredient technology developed by Bakels Research (see «Behind the Scenes» on pages 18/19).

Quantum Plus

a 1% Premium improver (containing one emulsifier).

Quantum CL1000

a 1% premium clean label improver without emulsifiers.

The essence of the **Quantum** breakthrough are new ways of enhancing the function and quality of traditional ingredients. This also allows for the reduction and elimination of some of the standard ingredients, resulting in more label friendly and more cost effective bread improvers.

Since its release many of our bakery customers have changed to these **Quantum** bread improvers and they all will whole heartily agree that these new improvers have contributed to significant improvements in overall bread quality, dough tolerance and water absorption in all types of breads. They will also confirm that **Quantum** improvers are very cost effective and will contribute to a saving in overall ingredient cost.



Christmas Bread Varieties Using Bakels Spiced Bun Concentrate

Late last year we launched a new bread concentrate for baking the traditional and very popular **Hot Cross Easter Buns**. This concentrate is used at 20% on flour weight and apart from flour, only yeast, water and dried fruits are required. It produces high quality moist spiced fruit buns with a delicious flavour due to a nice melange of cinnamon and mixed spice.

Due to the great success of this **Spiced Bun Concentrate** for the making of these Easter treats, we also developed a range of festive delicacies for Christmas time using this concentrate. Why wait until Easter? – we are convinced that consumers will be delighted to enjoy these spiced fruit buns and breads also during the Christmas season.

So for Christmas we are promoting and demonstrating:

Hot Cross Christmas Buns. Spiced fruit buns with red or green coloured crosses and sprinkled with coconut for the snow effect.

Christmas Chelsea Buns. Rolled up sheet of spiced bun dough with a layer of Almond paste and chopped glazed cherries.

Christmas Trees. Cut out Christmas tree shapes from spiced bun dough and decorate with streamers of Bakels chocolate and white truffle and rainbow choc chips.

Christmas Stollen. Everyone's Christmas favourite bread. Very rich in fruit (75% fruit on flour), with a baked in roll of almond paste, folded into the traditional stollen shape and dusted with Bakels dusting sugar. Or for variation, individual stollen dough pieces baked in muffin trays and topped with almond paste.





Richemont Advanced Confectionery Courses

After a very successful training course held in early 2011, NZ Bakels have conducted their first Advanced Confectionery Course in conjunction with the prestigious Richemont Bakery School of Lucerne Switzerland which was headed by tutors Hanspeter Walchli from Richemont and NZ Bakels' Malcolm Cook.



This school sets standards for the rest of the world and covers everything from craft baking & chocolate work to retail skills, as well as formal lectures.

This advanced course is designed to recognize the competence, knowledge and specialist skills required for craft confectionery products within the craft baking industry. The course certificate is awarded to participants who are able to demonstrate the ability to prepare, apply and combine products from raw baking ingredients. Candidates are required to produce baked specialised craft products that are frequently required for niche markets.

Renovations

NZ Bakels have recently completed extensive renovations which will improve the test bakery facilities. There we can make presentations to customers, and provide a dedicated facility to deliver practical training courses, such as the Richemont advanced confectionery courses.

«Back Office» areas used by R&D and laboratory staff have also been upgraded.

If you would like more details on training courses available please visit the website www.nzbakels.co.nz or call 0800 BAKELS.



Bakels People – Tony Marshall



Tony joined NZ Bakels early 2009 and is bringing 24 years of experience within the baking industry to Bakels, including extensive knowledge in breads, cakes and pastries. Tony has also managed nine supermarket bakeries which included a role in staff training.

Prior to that Tony has been a sales manager for a leading bakery machinery company, a hands-on tutor and a business consultant for Bakers Delight in New Zealand. Whilst working with this well known franchise Tony completed a diploma in front line management which has provided the skills he maintains today.

Whilst looking forward to new challenges and opportunities within NZ Bakels, Tony also enjoys Kiwi's favourite pastimes rugby, horse racing and his family.



NEXT GENERATION OF BREAD IMPROVERS

Bakels has been to the forefront of bread improver development for over 50 years and Bakels Research has now developed the next major innovation in bread improver technology (see «Behind the Scenes» on pages 18/19).



Quantum Clean Label Bread Improvers

This unique development combines innovative ways of using traditional ingredients in a clean label format (no emulsifiers) to improve dough rheology with the following benefits:

- Increased water absorption (average 2 to 3% on flour weight)
- Improved yield
- Improved softness
- Improved processing/moulding
- Improved tolerance over a range of flour
- Low usage rate/low cost in use

Irish Bakels initial launch includes:

Quantum Clean Label Improver

Usage 0.5 to 1% based on flour weight. All purpose improver for pan bread, rolls, morning goods and wholemeal breads.

Quantum Clean Label Rustique

Usage 2 to 4% based on flour weight. All purpose improver with the added benefit of a natural dried ferment for enhanced flavour.



Flat Bread Company wins Business Award

The Flat Bread Company, a customer of Irish Bakels, has won the Best Emerging New Business Award 2011 out of 15 participating companies after less than 2 years in business. The bakery began production of pizza bases in October 2009 and is now running at a high level of capacity with a team of 29 people.

We wish to congratulate Managing Director Kieran Walsh (pictured receiving the award) and his team on their excellent achievement.



Healthy Style Bread Concentrates

Jogga Bread – a base rich in flavour with malted wheat flakes and bran high in dietary fibres. Suitable for all kinds of plain breads.

Megaofin – a bread full of seeds and fibres, which contains omega 3 and 6 based on rapeseed oil.



Ginseng & Oats – a blend rich in dietary fibres and containing the health food additive ginseng.

Danish Rye Bread – a flexible blend for Danish rye bread to which the baker adds the desired amount of seeds, dried fruits and herbs.

New Products

Wholemeal Muffin – a powder mix for the production of excellent moist vanilla flavoured wholemeal muffins with good volume and appetizing appearance.

Oat Cookie Base – for traditional oat cookies. Can usefully be flavoured with dried fruit or chocolate.

Kistamässan – Swedish Bakery & Confectionery Exhibition

The exhibition, not far from Stockholm city, is held every three years. It is a forum for the entire bakery & confectionery sector. Nordbakels will participate as always in the fair that will run from Thursday to Sunday 15 – 18 September 2011.



Social Events / Health Activities

In our efforts to keep our tremendous spirit of fellowship ongoing, we joined a national walking contest as a health activity for 5 weeks.

With four teams, a pedometer for each participant and steps registration on internet, we have been walking during lunch breaks and in the evenings, taking care to avoid busses and cars etc! It was a fight to the bitter end but finally we could congratulate the winners, Team Sund from our Pettinice and Remonce production.

In addition, Nordbakels attended the Gothenburg race, which is the largest half marathon in the world with almost 60.000 registered runners from around the world. We had several participants representing Nordbakels this year.



NEW INNOVATIVE BUSINESS CONCEPT FOR THE CHILEAN MARKET

Ovalett

Gel emulsifier for sponge cakes, Swiss rolls, pound cakes and others. This ingredient produces a stable batter and a high volume, homogeneous crumb structure with improved shelf life.

The advantages of **Ovalett** include a low dosage rate, and the product is 100% vegetable.



Bizcolett Vanilla Bizcolett Chocolate

These sponge cake concentrates, formulated with selected ingredients, are used in combination with **Ovalett**.

These concentrates allow the production of consistent sponge cakes, with improved freshness, soft texture, excellent colour and taste.

FIPACH 2010

FIPACH is one of the leading bakery and confectionery expositions staged in Latin America. The 8th FIPACH was held over three days in August 2010 during which it became the focus for the entire Chilean bakery and confectionery industry.

Bakels Chile, together with Bakels Peru, Bakels Ecuador and Bakels Argentina, welcomed 12.000 visitors, amongst whom were our most important clients and distributors.

FIPACH allowed us to share our business concepts and product ideas, help to establish Bakels as an international company now with an extensive presence in Latin America.



Bakels Peru



A Perfect Couple

At the end of 2010 we launched in the Peruvian market **Bakels Platinum Yeast**. Taking advantage of this fact, during the first quarter of this year, we launched the concept «The Perfect Couple», that associates our main product, **Unipan Premium Bread Improver** for all kinds of dough, with **Platinum Yeast**.

This concept was launched to reinforce the positioning of our brands and to consolidate the image of our company.



INNOVATE

Prince Sponge Cake Premix

As for new developments, it is important to highlight our **Chocolate Cake Industry Premix**. This premix stands out by its greater retention of moistness and well defined chocolate flavour, thus achieving a smoother product, with a firm crumb and a pleasant flavour.

It was developed for our industrial segment where quality is of the utmost importance.



New Agency in Cusco

In April 2011 Bakels Peru inaugurated a new agency in the attractive tourist city Cusco. This action not only reflects the sustained growth of the Peruvian market, but also the philosophy which sets us apart from our competitors – close alignment with our customers, including physical proximity. This guarantees our ability to support them with quality products and excellent service.

An inaugural event was held on 8th April in a hotel in Cusco attended by our first local clients. We had the opportunity to present our business with our brand image and our range of products and their various applications in final products. Our customers received our presentation positively and we are confident that our new agency will be successful. In the first week of opening we managed to contact 140 clients who showed great interest in our lines.





NEW SPECIAL MIXES

Donuts, Cookies and Pizza

Bakels Ecuador has launched three new mixes to the market: **Donuts, Cookies and Pizza.**

The new mixes require only basic ingredients such as water, yeast and margarine, making the job easier and faster. These products make it possible to obtain constant quality and flavour.



The launching event was brought to the 3 major cities in the country, Quito, Guayaquil and Cuenca with enormous success.

The guests were able to witness an original, entertaining and fun launching where the new products were shown for the first time.

Workshops for clients throughout the country will follow the event, allowing them to learn how to use the new products and experience the great benefits of these donuts, cookies and pizza mixes.

The products come in three presentations: 1kg, 3kg and 11kg.



left to right: Holger Aguirre, product manager; Ana Carolina Madero, product coordinator, Carla Espin, marketing

behind the table: Ery Pico, bakery technician

Bakels Brazil



INNOVATE

Milestones in Pastry

The Bakels Group became active in Brazil in 2008 with the acquisition of Gb Ingredientes do Brasil.

Since then «Bakels Brazil», as the company became named, has benefited from the support of a Group of companies with more than 100 years experience in the development and technical support of bread and pastry ingredients.

This has enabled us to select new products suitable for the Brazilian market from the extensive Bakels Group product range.

Our objective is the continuous improvement of our product offering to provide the best and most modern products and services to our customers.



In the coming months Bakels Brazil is launching an innovative product for the Brazilian market: **Fond Suisse**. Especially developed for the pastry market it can be used as a very versatile filling making products with an irresistible taste and elegance what goes towards the wishes of the new Brazilian consumers of the 21st century.

We, from Bakels Brazil, are very proud of the success and progress of our products in the promising Brazilian pastry market.

Instant Active Dry Yeast

In 2011 Bakels Brazil has launched the **Bakels Yeast Standard** and **Bakels Yeast Platinum**.

They are high quality instant active dry yeasts due to fermentation power and excellent oven spring, making products with very good volume, taste and flavor.

Available in 10kg boxes containing 20 packages of 500gr each, with a shelf life of 2 years.



BEHIND THE SCENES



Bread Improvers

Bread improvers, or dough conditioners, are an essential part of commercial bread production in all markets.

Bakels have been involved in researching, developing and technically supporting bread improvers from their introduction in the 1950's. The earliest products were based on the naturally occurring emulsifier lecithin and the prefix «leci» is still in many Bakels bread improver names. Later Bakels pioneered the use of data esters or datem and «tem» was added to «leci» to produce the brand name «**Lecitem**».

Early bread improvers also incorporated enzyme active soya flour and diastatic malt flour to benefit from their naturally occurring enzymes. The 1960's and 70's saw the introduction of chemical components in bread improvers such as potassium bromate and azodicarbonamide (ADA). Potassium bromate is no longer permitted in most markets and ADA has also largely been replaced.

In addition to data esters other emulsifiers also became popular, in particular sodium stearoyl lactylate (SSL) and distilled monoglycerides (DMG). As potassium bromate ceased to be used ascorbic acid became an increasingly important component to oxidise flour components and so develop dough strength.



However it is the use of enzymes in modern bread improver formulations which has been the significant development in improver technology. The first enzyme to be specifically produced was alpha amylase. This enzyme occurs naturally in wheat flour, and also in diastatic malt flour, but the level will vary with each year's crop growing conditions. The addition of alpha amylase is used to standardise or «correct» flour and is also added at varying levels to optimise the baking process.

Enzymes are very specific to the components of the dough on which they have an effect. Fundamental research by enzyme producers continues to identify enzymes which perform desired functions in the bread making process. Producing these enzymes commercially is as challenging as identifying them in the first place and in both cases modern biotechnology has an increasingly important role. One of the «megatrends» in today's market place is a desire by the consumer for the use of fewer additives. Enzymes have an essential role in these «clean label» products.



It would take more space than Bakels News allows to describe the function of all the «tools in the tool box» of a bread improver formulator but the main ones are described below.

Ascorbic acid – mainly used to assist the forming of chemical bonds in the gluten network during the dough development process.

Data esters – emulsifier used to enhance volume and dough tolerance to mechanical handling.

SSL – emulsifier used to enhance crumb softness.

DMG – emulsifier used to enhance crumb softness and extend shelf life, important in sandwich and other packaged breads.

L-cysteine and glutathione – synthetic and naturally occurring dough relaxers used to avoid shrinkage or tightening of doughs, especially in baguettes or pizza base production.

Diastatic malt flour/enzyme active malt flour & soya flour – ingredients with naturally occurring levels of enzymes with a positive effect in bread making.

Enzymes

The specific dough component on which an enzyme has a function is described in the enzymes name as illustrated below:

Enzyme name	Dough component acted on
Alpha Amylase	Amylose
Cellulase	Cellulose
Hemicellulase	Hemicellulose
Lipase	Fat or «Lipid»
Protease	Protein



BEHIND THE SCENES



Fats and oils, particularly higher melt fat required in the Chorleywood bread process, also have important functions in some bread improver formulations.

The preservatives calcium propionate, sodium propionate and calcium acetate can be incorporated into improvers, as can flavour components such as fermented sour dough cultures.

With so many «tools» available selection of the optimum ones for each desired finished product outcome is the role of the bread improver formulator. Not only function and performance have to be considered but also cost and increasingly the consumers attitude towards certain additives. To complicate matters some ingredients work against each other by competing for components in the dough system such as water or oxygen – more is not always better.

Only by a thorough understanding of fundamental science behind the action of each ingredient can the optimum formulation be created for a specific bread improver application. It is work by Bakels Research to fully evaluate all the available tools, and how they work in combination with each other, which underpins the global launch of Bakels new generation of bread improvers under the brand name «Quantum».

The roll out of this research into our operating companies is reported throughout Bakels News 153 and will continue until it is available to all Bakels customers worldwide.



Bakery Fair 2011 – Manila, Philippines



Over 12.000 industry players and baking enthusiasts trooped to Manila's World Trade Center from February 18-20, 2011 as the 6th biennial bakery fair was staged to highlight the latest trends and innovations in the baking industry.

Bakels Philippines showcased the applications of a broad range of products from Bakbel Europe. **Les Fruits** fruit fillings, **Pastryfill**, **Frutojam Gourmet** as well as **Diamond & Sapphire Glazes** were used in various recipes of cakes & muffins, breads & pastries and displayed around its 90sqm stand strategically located in front of one of the main entrances of the exhibition hall.

Bakbel Europe's export manager Yves Keyaerts supported the local Bakels team during the show. Drawing even more attention was the 3-hour product presentation and demonstration on «Fruitful Ideas» and «Sparkling Designs for Cakes & Pastries» conducted by local chefs, James Antolin and Clyden San Pedro from the Pastry Alliance of the Philippines, that focused on various applications, versatility and quality of Bakbel products alongside other Bakels products. The attentive audience savoured baked samples prepared to pleasure their palates and appreciate the various Bakels ingredients used.

In tandem with Bakbel's products, Bakels Philippines showcased an array of its recently launched and best selling products as applied on an assortment of baked goods that elicited compliments from the excited visitors at the stand who keenly inquired about the Bakels products. Product demonstrations were conducted at the Bakels stand for the entire duration of the bakery fair.

The country's pioneering exposition showcased the leading bakery ingredients and equipment suppliers in the country and was aimed to promote, support and strengthen the country's baking industry. Held biennially, the much-anticipated bakery exhibition was organized by the Filipino-Chinese Bakery Association, Inc and was supported by the country's biggest names in the baking industry.



HEAD OFFICE

EMU AG / BAKEX AG

6403 Kuessnacht am Rigi/Switzerland
Tel. +41 418 544 644 • Fax +41 418 544 645
emu@bakels.ch

EUROPE

AB NORDBAKELS

40252 Gothenburg/Sweden
Tel. +46 31 755 3500 • Fax +46 31 755 3549
info@nordbakels.se

BRITISH BAKELS Ltd

Bicester, Oxfordshire OX26 4JT/England
Tel. +44 1869 247 098 • Fax +44 1869 242 979
bakels@bakels.com

IRISH BAKELS Ltd

Dunshaughlin Co. Meath/Ireland
Tel. +35 31 825 0645 • Fax +35 31 825 0646
general@irishbakels.ie

BAKELS SENIOR NV

1380 AA Weesp/Netherlands
Tel. +31 294 414 559 • Fax +31 294 480 265
info@bakels-senior.nl

DEUTSCHE BAKELS GmbH

c/o BAKELS SENIOR NV
1380 AA Weesp/Netherlands
Tel. +31 294 414 559 • Fax +31 294 480 265
info@bakels-senior.nl

FINNBAKELS OY

00700 Helsinki/Finland
Tel. +35 810 424 9700 • Fax +35 810 424 9777
bakels@finnbakels.fi

RUSSKY BAKELS

190020 St. Petersburg/Russia
Tel. +7 812 313 7470 • Fax +7 812 313 7471
info@bakels.ru

RUSSKY BAKELS

127106 Moscow/Russia
Tel. +7 495 988 8910 • Fax +7 495 933 1252
info@bakels.ru

BAKELS Polska Spzoo

93231 Lodz/Poland
Tel. +48 42 254 6600 • Fax +48 42 254 6601
biuro@bakels.pl

BAKELS SWITZERLAND Ltd

6403 Kuessnacht am Rigi/Switzerland
Tel. +41 418 544 644 • Fax +41 418 544 645
emu@bakels.ch

BAKELS INTERNATIONAL SA

c/o British Bakels Ltd
Bicester, Oxfordshire OX26 4JT/England
Tel. +44 1869 247 098 • Fax +44 1869 242 979
pltm.excom@bakels.com

BAKBEL EUROPE SA

7180 Seneffe/Belgium
Tel. +32 64 846 110 • Fax +32 64 846 111
info@bakbel.be

BAKELS UKRAINE Ltd

Kiev 73/Ukraine 04073
Tel. +38 044 227 2072 • Fax +38 044 468 4495
info@bakels.com.ua

HOCHDORF NUTRIBAKE AG

6280 Hochdorf/Switzerland
Tel. +41 41 914 6565 • Fax +41 41 914 6747
nutribake@hochdorf.com

AFRICA

SOUTH BAKELS (Pty) Ltd

Johannesburg 2000/South Africa
Tel. +27 11 673 2100 • Fax +27 11 477 7382
sbakels@global.co.za

BAKELS ZIMBABWE (Pvt) Ltd

Bulawayo/Zimbabwe
Tel. +263 9 479 189 • Fax +263 9 470 610
bakelszwacc@zol.co.zw

BAKELS NAMIBIA (Pty) Ltd

Windhoek/Namibia
Tel. +264 61 238 419 • Fax +264 61 239 231

BAKELS EAST AFRICA Ltd

Nairobi 00506/Kenya
Tel. +254 20 824 670 • Fax +254 20 3540 190
bakels@bakelsbea.co.ke

AUSTRALASIA & OCEANIA

AUSTRALIAN BAKELS (Pty) Ltd

Silverwater NSW 1811/Australia
Tel. +61 2 9739 9300 • Fax +61 2 9739 9464
ausbak@bakels.com.au

NZ BAKELS Ltd

Penrose 1061/New Zealand
Tel. +64 9 579 6079 • Fax +64 9 525 0978
bakels@nzbakels.co.nz

BAKELS EDIBLE OILS (NZ) Ltd

Mt. Maunganui/New Zealand
Tel. +64 7 575 9285 • Fax +64 7 575 9441
bakels@beobakels.co.nz

BAKELS (FIJI) Ltd

Nadi/Fiji Islands
Tel. +679 6721 764 • Fax +679 6721 922
bakels@connect.com.fj

ASIA

BAKELS SINGAPORE (Pte) Ltd

Singapore 916110
Tel. +65 6265 2577 • Fax +65 6264 1593
bakels@bakelsingapore.com.sg

BAKELS (MALAYSIA) Sdn Bhd

40708 Shah Alam
Selangor Darul Ehsan/Malaysia
Tel. +60 3 5191 6396 • Fax +60 3 5191 6399
bm@maybakels.com.my

BAKELS HONGKONG Ltd

Hung Hom, Kowloon/Hong Kong
Tel. +852 2334 6881 • Fax +852 2362 5235
bhk@hkbakels.com.hk

BAKELS CHINA Co Ltd

Shanghai 201613/China
Tel. +86 21 5774 2434 • Fax +86 21 5774 7550
bakelschina@yahoo.co.uk

INDO BAKELS Pvt Ltd

Mumbai 400 021/India
Tel. +91 22 2287 3636 • Fax +91 22 2202 0065
inbakels@gmail.com

BAKELS PHILIPPINES Inc

1605 Pasig City/Philippines
Tel. +63 2 9150 372 • Fax +63 2 9150 375
bakels.phil@bakelsph.com

BAKELS THAILAND Co Ltd

Bangkok 10110/Thailand
Tel. +66 2 367 1767 • Fax +66 2 712 2367
info@bakelsthai.com

PT BAKELS INDONESIA

Jakarta Selatan 12920/Indonesia
Tel. +62 21 3002 9368 • Fax +62 3002 9369
bid@bakels.co.id

AMERICAS

BAKELS CHILE SA

Santiago/Chile
Tel. +56 2240 7000 • Fax +56 2240 7002
bakels@bakelschile.cl

BAKELS BRAZIL Ltda

04253-000 Sao Paulo/Brazil
Tel. +55 11 2144 2877 • Fax +55 11 2215 2430
brazil@bakels.com.br

BAKELS PERU SAC

Lima 03/Peru
Tel. +51 1 618 4640 • Fax +51 1 618 4641
info@bakels.com.pe

BAKELS ECUADOR SA

Quito/Ecuador
Tel. +593 2 250 6662 • Fax +593 2 298 5100
bec@moderna.com.ec

BAKELS ARGENTINA SA

Buenos Aires/Argentina
Tel. +54 11 5275 0554
info@bakelsargentina.com.ar

BAKELS RESEARCH

BAKELS RESEARCH (Pty) Ltd

Silverwater NSW 1811/Australia
Tel. +61 2 9739 9300 • Fax +61 2 9748 3180
baksearch@bakels.com.au

BAKERY INGREDIENTS SINCE 1904

