About Ganeden Biotech, Inc.
Founded in 1997, Cleveland, Ohio based Ganeden Biotech is at the forefront of probiotic research and product development. Ganeden has an extensive library of published studies and more than 100 patents covering food, beverage, animal health, and topical applications. Ganeden Biotech takes special care to help manufacturers develop and market probiotic products. Ganeden Biotech is currently featuring two branded ingredients:

**About Bonicel**
Ganeden's newest ingredient, Bonicel™ is a patented probiotic-derived topical cosmeceutical ingredient. Bonicel has been shown to increase skin hydration, increase skin elasticity, reduce the appearance of fine lines and wrinkles, reduce the appearance of roughness, reduce pore size and reduce the appearance of redness. Bonicel is the trademarked name for the supernatant produced by GanedenBC³⁰ (Bacillus coagulans GBI-30, 6086), Ganeden Biotech’s popular shelf-stable probiotic ingredient. Bonicel is produced during the fermentation of GanedenBC³⁰ and is optimized to contain the perfect combination of naturally derived metabolites. Bonicel can be formulated for use in anti-aging creams, gels, masks, serums, body lotions, cosmetics and hair care products. For more information, please visit BonicelForBeauty.com

**About GanedenBC³⁰**
Ganeden is best known for GanedenBC³⁰® (Bacillus coagulans GBI-30, 6086), its patented, FDA GRAS probiotic ingredient found in more than 75 leading food, beverage and animal health products.

GanedenBC³⁰ is a probiotic bacterium. Probiotics are live microorganisms which, when administered in adequate amounts, confer a beneficial health effect on the host. GanedenBC³⁰ is a patented, gram positive, spore-forming, lactic acid producing strain of Bacillus coagulans. GanedenBC³⁰ (Bacillus coagulans GBI-30, 6086) has received a GRAS no-objection letter from the US FDA. Unlike other probiotic strains used in food and beverages, GanedenBC³⁰ is highly stable, can remain viable through processing, shelf life and the low pH of stomach acid has been shown effective in 17 peer reviewed, published papers. GanedenBC³⁰ is shelf stable for up to three years. For more information, please visit GanedenBC30.com
Ganeden Biotech’s Historical Milestones:

- 2008 won Frost & Sullivan North American Food and Beverage Probiotics Product Innovation Award
- 2009 introduced Ganpro into the livestock market as a direct-fed microbial (DFM)
- 2009 won the Scientific Excellence Award with the Red Mango USA franchise
- 2010 won Wellness Foods Readers' Choice Awards: #1 in probiotics category
- 2011 sold the Sustenex and Digestive Advantage brands to Schiff Nutrition and granted them the worldwide, exclusive rights to GanedenBC$^{30}$ in the dietary supplement market.
- 2011 NutrAward winner for Best New Finished Product: Good Cacao™ chocolate bars formulated with GanedenBC$^{30}$
- 2012 launched Bonicel, a premium probiotic-derived cosmeceutical ingredient
- 2012 received FDA GRAS for GanedenBC$^{30}$

STOP BY BOOTH #1161

To get your FREE Bonicel sample

Or if you’re interested in Bonicel, the supernatant of Ganeden’s probiotic GanedenBC$^{30}$, shown to reduce the appearance of fine lines and wrinkles, improve skin elasticity & moisturization, reduce skin inflammation and reduce under-eye puffiness --- stop by for a free sample.

For more information about Ganeden Biotech and licensing opportunities please visit GanedenBiotech.com.
Ganeden Biotech knows the value of long lasting partnerships.

Every partner is an extension of Ganeden Biotech—we don’t just sell probiotics, we collaborate with our partners to develop high-quality, innovative products. Our full-service lab, marketing team and account managers are always available to assist you. Through this unique relationship, R&D time has been cut in half by some of our partners. It’s one of the reasons why Frost & Sullivan has named Ganeden Biotech a North American Food and Beverage Probiotics Product Innovation Award winner.

Ganeden’s Extra Step Program

1 | Let’s talk
   It all starts with a conversation with one of Ganeden’s account managers to get a feel for your best product to enhance with GanedenBC®30. We will also walk you through a complete overview of our technology via a webcast and follow-up with literature and non-confidential data relating to our technology to get you in-the-know and show you why GanedenBC®30 is unique.

2 | Shhh!
   Sign a mutual confidentiality agreement. It’s a simple document. We protect your confidentiality and you protect ours.

3 | Get the facts
   We will send our clinical data for you to review.

4 | Get the stuff
   We will work with you to determine the proper inclusion rate of GanedenBC®30 for your products and send you a sample to try.

5 | Get the results
   Send samples of your products formulated with GanedenBC®30 to our research and development facility. Our scientists will analyze your samples to determine the level of GanedenBC®30 in them. We also can perform short term stability testing so you know how GanedenBC®30 will perform in your products over time.

6 | Ready to go?
   Sign a purchase and license agreement and we are officially partners. Signing of this agreement entitles you to the use of trademarks, patents and associated data to support your products.

7 | A dash of style
   We’ll send you our style guide with information on how to list GanedenBC®30 in the ingredient declaration, along with directions for properly displaying our logo and acceptable claims on your packaging.

8 | The final test
   We will review and approve the use of the GanedenBC®30 logo on your label before you start marketing your product.

9 | Get the word out
   Our marketing team will help you draft a press release and distribute it throughout our extensive media channels. We’ll also provide you with all the industry and marketing guidance you may need to prepare for your launch.

10 | It’s a-go!
    Launch your newly formulated products and let your consumers experience the healthy benefits of probiotics!

ganedenbiotech.com
What is Bonicel?
Bonicel is the tradmarked name for the “supernatant” of GanedenBC³⁰.

What is supernatant?
Supernatant is the metabolic byproduct produced during the bacterial fermentation process of GanedenBC³⁰.

Is Bonicel a probiotic?
No. Although a probiotic organism produces Bonicel, it is not a probiotic.

What is a probiotic?
According the FAO/WHO, a probiotic is defined as: Live microorganisms which when administered in adequate amounts confer a health benefit on the host.

Is Bonicel natural?
Bonicel is naturally derived from Ganeden’s patented, GRAS probiotic strain Bacillus coagulans GBI-30, 6086 which is marketed under the trade name, GanedenBC³⁰.

How is Bonicel produced?
Ganeden utilizes proprietary processes to maximize the metabolic activity of the fermenting organism producing maximum amounts of: Naturally derived L+ Lactic acid, Bacteriocins, Hydrogen peroxide, Enzymes and other metabolites.

Has Ganeden performed any clinical trials on Bonicel?
Ganeden recently completed its third human clinical trial showing that the probiotic-derived ingredient, Bonicel drastically improves skin hydration, improves elasticity, reduces the appearance of under eye puffiness, reduces the appearance of fine lines & wrinkles, reduces the appearance of roughness, reduces the appearance of pore size and reduces the appearance of redness.

What kinds of products can Bonicel be used in?
Bonicel can be incorporated into any anti-aging creams, gels, masks, serums, soaps and body lotions and cosmetics, along with virtually any other skin or hair care products.
Bonitel is the first science-backed, probiotic-derived personal care ingredient that has been shown to significantly improve the appearance of seven common signs of aging.

Bonitel is the trademarked name for the supernatant produced during the fermentation of GanedenBC30 (Bacillus coagulans GBI-30. 6086), Ganeden Biotech’s popular shelf-stable probiotic ingredient, and is optimized to contain the perfect combination of naturally derived metabolites.

**USE**
- Incorporates easily into topical formulations
- Use level - 5%
- For external use only

**PROPERTIES & STORAGE**
- Water soluble liquid
- Light amber color
- pH range 4.0-4.5
- Store at room temperature not to exceed 70 degrees

**APPLICATIONS**
- Anti-aging creams, gels, masks, serums and body lotions
- Skin care and cosmetics
- Hair care products
- Soaps

**NO PRESERVATIVES ADDED**
Our proprietary process protects the metabolic activity of the probiotic without the use of synthetic preservatives.

**INCI Name:** Bacillus ferment
Backed By Science

Bonicel has powerful antiaging benefits. In recent double-blind, placebo-controlled human clinical trials Bonicel was shown to:

- Increase Moisturization 19.10%
- Increase Skin Elasticity 5.22%
- Decrease the Appearance of Fine Lines and Wrinkles 62.99%
- Decrease the Appearance of Roughness 19.44%
- Decrease the Appearance of Pore Size 48.10%
- Decrease the Appearance of Redness 33.33%

Ganeden Biotech
INNOVATIONS IN PROBIOTIC TECHNOLOGY

Ganeden Biotech is a science driven organization with extensive research on its branded ingredients. Ganeden’s anti-aging ingredient, Bonicel, is the newest innovation to spring from Ganeden’s labs. Ganeden offers a successful history of bringing new ingredients to the marketplace. Always on the forefront of probiotic innovations, Ganeden is active in the science, research & development and marketing of novel, branded ingredients. Ganeden’s innovations lead to your products’ success.

For more information on Bonicel visit BonicelForBeauty.com.

To learn more about Ganeden’s probiotic technology, patents and clinical data visit GanedenBiotech.com.
Clinical Pilot Study
Ganeden Biotech performed an 8 week study to evaluate and compare the effectiveness of a topical anti-aging product containing *Bacillus coagulans* ferment (Bonicel) versus placebo to improve skin hydration & moisturization, improve skin elasticity, reduce the appearance of fine lines & wrinkles around the eye area, decrease the appearance of under-eye puffiness and decrease the appearance of dark circles.

The test group consisted of female subjects in the age range of 35-60 years with at least 25% having under eye puffiness and 25% having dark circles.

The inclusion of Bonicel was found to:
- Increase moisturization by 19.1%
- Increase skin elasticity by 3.11%
- Decrease the number of coarse skin lines by 20.57%
- Increase skin smoothness by 4.33%
- Decrease skin shadows by 7.09%
- Have 17% increase in the number of subjects showing improvement of eye area fine lines and wrinkles
- Have 8.33% increase in the number of subjects showing improvement of under eye puffiness

Clinical Confirmation Study
Ganeden Biotech performed a 28 day study to confirm the findings of previous studies that demonstrated the multiple benefits of using a cream with 5% Bonicel.

The study was randomized, double-blind and placebo controlled. The subjects were females in the age range of 35-60 with mild to moderate fine lines and wrinkles. Subjects were not using anti-aging products, nor had used them within 30 days of the start of the trial.

The inclusion of Bonicel was found to:
- Decrease the appearance of roughness by 19.4%
- Increase hydration by 19.1%
- Increase elasticity by 5.2%
- Decrease the appearance of fine lines & wrinkles by 62.9%
- Decrease the appearance of pore size by 48.1%
- Decrease the appearance of redness by 33.3%
Reduction in the Appearance of Fine Lines and Wrinkles

Reduction in the Appearance of Pore Size
CLINICAL STUDY CONFIRMS CLEANSING BAR WITH BONICEL REDUCES FACIAL REDNESS

Summary of Findings Bonicel was added at a 5% inclusion rate to a cleansing bar (Bradford Soap Works) which then demonstrated a 35% reduction in facial redness in 14 days.

Background Three previous trials demonstrated that when Bonicel is included at 5% there are many anti-aging benefits, including reduction in redness. These three previous trials were conducted in leave on creams. This study was conducted to demonstrate that Bonicel would have positive effects, even when used in a wash off product.

Design Subjects were given a moisturizing bar that contained Bonicel at a 5% inclusion rate and were instructed to wash their face twice daily for 14 days. Subjects were instructed not to use any other daily moisturizers, and were allowed to apply normal make-up. High-resolution photographs were taken at baseline and day 14 for analysis.

High Resolution Photography
- Detailed, high resolution before and after treatment digital photographs were taken, with a fixed camera
- Background, distances, angles, settings, lighting, panelist positioning, color bars and white balance were standardized
- Digitally certified as being un-retouched.

Conclusion Bonicel at a 5% inclusion decreases redness, even in a product that is applied and washed off.

Follow-Up Study

Summary of Findings A second study was conducted on a bar that did not contain Bonicel. It is known that these type of products can cause skin irritation. As expected, this study demonstrated a 31% increase in facial redness over 14 days.

BoniceForBeauty.com
Pitch This!
On trend beauty stories for journalists

Ganeden Biotech is always available to help members of the media with their editorial content. We are happy to help you obtain quotes and data, arrange expert interviews, and supply quality research. To get you on your way, we’ve put together some story ideas on the growing probiotic category.

Please contact Erin Miller, Marketing Manager at (440) 229-5214 or by email at emiller@ganedenbiotech.com for further assistance.

Meet the first science-backed probiotic-derived beauty ingredient
Sure, there are other ‘probiotic’ beauty ingredients on the market, but their supporting research is nary. Introduce your readers to Bonicel, the first science-backed probiotic-derived beauty ingredient that they will soon find in myriad beauty products.

Probiotics in my beauty products?
Yes, just like for your digestive health, probiotics can work wonders for you skin. Here’s the scoop on how probiotic technology works topically.

Bonicel: the new single beauty ingredient with 7 benefits
Probiotic-derived Bonicel improves skin hydration, moisturization, elasticity, under eye puffiness while reducing fine lines & wrinkles, roughness and redness, according to the attest 3rd party, placebo-controlled study.

Probiotics ripe for combo beauty from within/topical market
What do you get when you combine an ingestible probiotic (mint, beverage stick pack, etc.) with a topical probiotic-derived beauty product? The next trend in beauty: Beauty from within combined with a topical. Tell your readers why they are seeing more of these powerful combo products.
FOR IMMEDIATE RELEASE

NEW RESEARCH CONFIRMS BONICEL’S MULTIPLE ANTI-AGING BENEFITS

New science confirms this probiotic-derived ingredient improves skin moisturization and elasticity while reducing fine lines and wrinkles

CLEVELAND, February 5, 2013 – Ganeden Biotech announces impressive results from its third study on its beauty ingredient Bonicel.

Supporting the previous study results on Ganeden’s patented probiotic (beneficial bacteria) derived, cosmeceutical ingredient, Bonicel once again improved skin moisturization & elasticity and reduced the appearance of fine lines, wrinkles, roughness and pore size in humans, and even reduced redness. “We are thrilled that once again, a third-party, placebo controlled study demonstrates that Bonicel is so effective as a combination anti-aging beauty ingredient. Not only does it moisturize and increase skin elasticity, it also reduces the appearance of fine lines and wrinkles; it’s impressive that one ingredient can do all that,” said David Keller, Vice President, Scientific Operations, Ganeden Biotech.

This is good news for beauty manufacturers looking for natural, science-backed ingredients to launch products in this $60 billion dollar U.S. industry that experienced double digit growth last year.

“We are seeing a lot of introductions in ‘probiotic’ topical skin care products, but few, if any, have research demonstrating they work at time of application. We’re excited that we have science showing that Bonicel does,” Keller said.

Bonicel also meets the strict standards of the burgeoning natural and organic personal care industry such as non-GMO, gluten-free and natural. The $9 billion natural and organic personal care category is experiencing consistent year-over-year growth.

Bonicel can be used in lotions, creams, gels, powders, scrubs, masks and cleansers. Unlike most probiotic ingredients used in topical formulations, including Lactobacillus and Bifidobacterium, Bonicel, naturally derived from the well-documented probiotic strain GanedenBC® (Bacillus coagulans GBI-30, 6086), is easy to include in formulations.

Bonicel is produced naturally during the fermentation process of GanedenBC®, the company’s proprietary probiotic strain. Ganeden utilizes proprietary processes to optimize the metabolic activity of the fermenting organism producing maximum levels of the organism’s metabolites.
Please find photos below from the research which show the drastic wrinkle reduction.

About Ganeden Biotech
Founded in 1997 the Cleveland, Ohio-based Ganeden Biotech is at the forefront of probiotic research and product development with an extensive library of published studies and more than 100 patents for probiotic technologies for the food, beverage, animal health, and now topical ingredients markets. Ganeden is best known for GanedenBC® (Bacillus coagulans GBI-30, 6086), its patented, FDA GRAS probiotic ingredient found in more than 75 leading food and beverage products. A highly stable probiotic ingredient with physical properties that make it more stable than traditional probiotic organisms (such as Lactobacillus and Bifidobacterium); GanedenBC® is ideally suited for almost any food, beverage or animal health application. Ganeden’s newest ingredient, Bonicel, is a patented, probiotic-derived, topical cosmeceutical ingredient shown to dramatically reduce signs of aging. It can easily be incorporated in virtually any lotion, cream, soap, shampoo or other personal care product.

Ganeden Biotech takes special care to help manufacturers develop and market probiotic products. For more information about Ganeden Biotech and licensing opportunities visit ganedenbiotech.com