

## U.S. Mineral Fortification Market Product Differentiation Innovation of the Year Award

2005

FROST &amp; SULLIVAN

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Product Differentiation Innovation  
of the Year Award

### AWARD DESCRIPTION

The Frost & Sullivan Award for Product Differentiation Innovation is presented each year to the company that has best demonstrated the ability to develop and/or advance products with more innovative capabilities than competing vendors. This award recognizes the company's successful adoption of a new or existing technology that has become a part of its well-designed product family. Such innovation is expected to significantly contribute to the industry in terms of product performance and rate of technical change.

### RESEARCH METHODOLOGY

Before considering the recipient of this Award, the analyst team tracks the product differentiation strategies of competing market participants through ongoing research. This research consists of market participant interviews, end-user surveys, and extensive secondary research. The data compiled through this research is analyzed based upon specific measurement criteria. Participants are then ranked with respect to these measurement criteria. The Award recipient is the company that ranked number one in the industry.

### MEASUREMENT CRITERIA

In addition to the methodology described above, there are specific criteria used in determining the final ranking of industry competitors. The recipient of this Award has excelled based on one or more of the following criteria:

- Degree of differentiation innovation compared to other market participants
- Positive impact on sales directly related to product differentiation
- Time to market improvement based upon product differentiation strategy
- Benefit to end users due to product differentiation
- Effect of product differentiation on ease of adaptability in new end-user applications
- Effect of product differentiation on market maturation



### AWARD RECIPIENT: GADOT BIOCHEMICAL INDUSTRIES

The Frost & Sullivan Award for Product Differentiation Innovation is presented to Gadot Biochemical Industries Ltd. (GBI), in recognition of its contribution toward the U.S. mineral fortification market in 2005. Every year, GBI strengthens its market position by developing new ingredients that increase end-user benefits. The company products such as Gadophit, Gadolin Calcium, and Tri calcium Citrate with Vitamin D3 enhance absorption of minerals in the body.

#### Company Overview

GBI, an Israel-based company, manufactures ingredients for the mineral supplement, food and beverage, cosmetic, pharmaceutical, and detergent markets. Established in 1962, it is the leading supplier for citric acids derivatives and specializes in developing products, which have high bioavailability. Its product portfolio includes citrate salts, calcium citrate, magnesium citrate, zinc citrate, crystalline fructose, and phosphate salts.

#### Differentiation Innovation

GBI has accumulated a vast amount of experience and expertise over the years in developing minerals that are bioavailable. This is evident from its launch of an advanced mineral line, which combines minerals with different nutrients to achieve higher bioavailability. The synergistic effect of both nutrients provides cost-effective health benefits to end-users. Gadophit combines calcium and phosphorous in the right proportion to enhance bioavailability. Gadolin Calcium is

a combination of calcium citrate and prebiotic fiber inulin, which offers a wide range of benefits to end-users. The company's strategy to develop unique products that are different from others in the market and to add new products to its portfolio through acquisition has helped the company establish itself as a leader in the mineral fortification market.

#### Positive Impact on Sales

Product differentiation innovation has been an integral part of the company's efforts to enhance its presence in the mineral fortification market. In the past three years, GBI has successfully developed and marketed ingredients for different markets such as food and beverage, mineral supplement, and pharmaceutical markets, which has increased its market penetration. Its new mineral line has been well received in the market and has made GBI a company known to provide high quality, innovative, multifunctional, and end-user-focused products.

#### Benefits to End-users

##### Higher Bioavailability

For higher bioavailability, GBI closely follows the research done by various organizations on minerals and develops its products based on such research.

##### Cost Efficiency

The benefits that GBI products offer to end-users far outweigh their costs and offer better bioavailability. Several of the products, except for Gadophit, are soluble and hence dissolve easily in beverages. They mask any undesirable color or flavor, thus providing effective solutions for the

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end users at competitive pricing. All the products are ready to use combination of ingredients, perfectly suitable for the applications they intended for. These products are very cost effective due to the relatively high mineral concentrations.

### Ensuring High-Quality Products

GBI's technical team is committed toward developing innovative, high-quality, and multifunctional products and works in close coordination with other departments to give profitable solutions to the company's customers. This dedication is shown in the fact that GBI has established strict internal regulations for quality control at all levels in the production process. GBI follows the ISO 9001 and the Hazard analysis and critical control point (HACCP) regulation for quality control. GBI is recently GMP certified.

### **Addressing Osteoporosis - GBI Products**

With the increasing awareness of osteoporosis, food manufacturers are aiming at developing products, which are fortified with calcium. Physicians recommend the consumption of a healthy diet (by way of food, dietary supplement, or fortified foods) rich in calcium and Vitamin D3. GBI's unique product, Gadophit, helps food manufacturers achieve this goal and address this health issue successfully.

### Tri Calcium Citrate with Vitamin D3

Research shows that in the United States, about 10 million individuals are affected by osteoporosis and another 34 million are at risk of developing the condition. Vitamin D3 helps in the absorption of calcium and in maintaining bone health. Although Vitamin D is naturally synthesized by exposure of skin to sunlight, various factors such as old age and climatic conditions can deter this process of Vitamin D synthesis. GBI's Tri calcium citrate with Vitamin D3 provides both calcium and vitamin D3 for better absorption of calcium, thus providing fortified foods capable of maintaining bone health.

### **Gadophit**

Calcium and phosphorous play a vital role in the development of healthy bones. Diets lacking in phosphorous can lead to low bone mass and excessive level of phosphorous with low

calcium level can result in brittleness of bones. Maintaining the correct ratio of calcium and phosphorous is highly important for maintaining healthy bones. GBI's Gadophit combines calcium and phosphorous in the right proportion and is especially developed for the soy industry.

### Gadolin Calcium - Health Benefits

Gadolin Calcium is a combination of calcium citrate and dietary fiber. Inulin, which is a prebiotic soluble fiber, acts as a flavor masker, enhances calcium absorption, lowers cholesterol level, and controls blood sugar level. As it is low in calorie content (1.5 kcal/g), and like all other fibers, give satiety value, it can be used in weight management products. As a prebiotic fiber, it increases the activity of beneficial bacteria in the digestive tract and prevents the growth of harmful bacteria.

### **Conclusion**

GBI's dedication in developing multi-functional products by combining two nutrients for achieving added benefit in order to meet the needs of the mineral fortification market has given the company a distinct place in the market. Frost & Sullivan recognizes the outstanding contribution of GBI through the 2005 Product Differentiation Innovation Award for the U.S. mineral fortification market.



For more information, contact:

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