

February 7, 2020

Dear Clients and Colleagues:

While you may have thought this would be a commentary on the future direction of the markets, it is actually to be taken in the literal sense. As some of us bravely hang on to our New Year's resolutions to improve our health, research continues to show that a healthy gut can have a significant impact on the health of the whole body.

The human digestive system is incredibly complex and many modern lifestyles are not conducive to maintaining a healthy gut. Elevated stress levels, not enough sleep, and an unhealthy diet (processed or high sugar content foods) are factors that can have a negative impact on the gut microbiome.

One way of giving your digestive system a helping hand is to add probiotics to your diet; probiotics are live "good" bacteria. The World Health Organization (WHO) defines probiotics as "Live microorganisms that, when administered in adequate amounts, confer a health benefit on the host." As well as bacteria, certain types of yeasts can also act as probiotics.

An advantage of probiotics is that they are considered safe for most people. You can get probiotics from fermented food sources, such as yogurt and kefir, but also supplements. The global probiotics supplements market is forecast to grow at 10% compound annual growth rate (CAGR) for the 10 year period until 2027, at which point it will be worth around US\$3.3 billion. The growth will be driven by the increased use of probiotics in gut health, oral health, women's health and immune health. In emerging markets, changing lifestyles and more disposable income will increase interest in probiotics. A study has also shown that a correlation exists between probiotic consumption and a reduced need for antibiotics in children. This is very important as the WHO sees antibiotic resistance increasing and threatening the efficacy of treatments for common infectious diseases.

A company that provides probiotic supplements and is part of our portfolios, is Swedish based BioGaia. Founded in 1990, BioGaia distributes products in over 100 countries. BioGaia generates revenues from the sale of drops, gut health tablets, oral rehydration solution and oral health products to distributors. Paediatric products account for roughly 80% of revenues and adult health products for 19%. The products are primarily based on different strains of the lactic acid bacterium *Lactobacillus reuteri*, one of the two most common groups of probiotic bacteria (the other being *Bifidobacterium*).

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The company also sells bacterial cultures to be used in licensee products (such as infant formula and dairy products). In addition, BioGaia holds patents for the use of *Lactobacillus reuteri* and certain packaging solutions in all major markets and receives royalty payments for the use of *Lactobacillus reuteri* in licensee products. The company also provides unique packaging solutions which ultimately leads to probiotic products with a long shelf life.

The probiotics market is fiercely competitive. With a 6% market share, BioGaia takes its place among global leaders such as Sanofi, Procter & Gamble and Novartis. In addition to the competitive landscape, the main challenges probiotics face are the relatively low awareness among consumers, doctors and the developing regulatory landscape.

BioGaia had a challenging 2019 after Nestlé renegotiated the royalty agreement for Growing Up Milk for children at the end of 2018, and a supplier issue in the third quarter of 2019 negatively impacted results. BioGaia products are manufactured and packed in six facilities. One of them is in Belgium and this supplier had delivery delays of Protectis tablets. Production is now up and running but there is a large backlog to work through, thus the impact on the fourth quarter remains to be seen.

Moving forward, the delivery disruption is being worked through and the relationship with Nestlé remains sound. Further, BioGaia products can be still be found in many of their products such as infant formula and assorted drops, with other projects in development. Clinical trials continue to be published supporting the use of probiotics, and the company continues to launch new products that address various health issues. Despite the recent difficulties, we continue to like the long-term trends that affect BioGaia.

Have a great weekend.

The Global Alpha team

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