

**Functional Foods / Health-oriented Foods**

December 27, 2011

**FORMALIZATION OF REFORMS ON INDICATING HEALTH  
FUNCTIONS**

Currently, the Japan Health and Nutrition Food Association, commissioned by the Consumer Affairs Agency, are operating a "model project on evaluating the functions of foods." They are doing a research on whether to approve functional marking of new components. This model project is researching on 11 components. Selenium, n-3 fatty acid, lutein, coenzyme q10, hyaluronic acid, blueberry extract, glucosamine, BCAA, ginkgo extract, saw palmetto, and lactoferrin. The industry hopes that functional markings for these effective components will be approved, and activate the industry as a whole. After the Great East Japan Earthquake on March 11 this year, many people had unbalanced meals, mainly eating carbohydrates such as rice balls and bread. This caused functional foods and dietary supplements to attract attention. There were many types of functional foods and dietary supplements in the aid stuff that helped prevent transmitted diseases and decrease of physical strength. On the other hand, products with little familiarity about its functions are not popular among consumers since they do not know its functions very well. It is important to let more people know about these products and inform them of its functions. In the aging society, we must promote preventive medication to reduce the amount of medical fees. In this sense, approving the markings of functional foods and its effects is deemed to be necessary.

**Trend of major companies within Japan Yakult Honsha Co.**

A dairy, lactic fermenting beverage, "Pletio" (100ml paper container) is a specified health use food for people with high blood pressure. Next year, they will reform the flavor into yogurt in order to make it easier to drink. They will also remake the package to have a better idea for its functions and taste than before. "Pletio" contains 10g of "GABA" in one bottle, which is a mixed culture of bacterium lactobacillus casei Shirota and lactococcus lactis that is processed specially by Yakult Honsha. It controls the secretion of adrenaline, the cause of vasoconstriction, and lowers the blood pressure. According to the national health and nutrition examination survey conducted by the Health, Labour and Welfare Ministry, it is estimated that 40% of the people have hypertension in a population of 40 million (over 20 years old). Also, even if the number is in the normal range, there are over 15 million people who "have worries of getting hypertension" with a little high blood pressure.

## Kaneka

Kaneka is putting their strength in selling "Reduced Form Coenzyme Q10." In addition to that, they are also selling other dietary supplements online. It has been proven by joint researches by universities that this product has the effects to "improve the oral environment and prevent periodontal diseases" and "wrinkles formed by ultraviolet rays (photoaging)."

While oxidized forms must be converted into reduced forms when it enters the body, reduced forms are already reduced. This product has high hopes to contribute to the preserving of health for elders and people under stress with low capacity to reduce within their body.

## Tsuji Oil Mills Co.

They are manufacturing products that are created by high extraction, purification, and fermentation technology, searching for the possibilities that natural products have. Some of their products are high-functioning lecithin, corn ceramide, fish collagen from fish scales. Their top seller is ceramide collagen beauty drink called "CeraFull," and they have just renewed the package design in September. There is a similar product called "Ceramide Collagen Powder" (6g x 30 packs). This is a new product that started selling in November, and it is ginger flavored. It contains 1500ug of moisturizing ingredient ceramide from corn, 5000mg of collagen peptide, 2.5mg of elastin peptide, and some natural flavor of "ginger oil." It could be carried around easily and melts in different kinds of foods like miso soup, soup, tea, and yogurt.

## Lonza Japan

They sell "L-carnitine" which is a special type of amino acid that is absolutely necessary in burning body fat and changing it into energy. The company supplies 70% of "L-carnitine" in the Japanese market, and it is used in beverages, jelly, and many food products, as well as in dietary supplements. It is contained largely in red meat such as beef and lamb. Directly attaching to the fat in the body, it plays the role of carrying the fat to mitochondria, which is where the fat is burned. According to a new clinical data targeted for Japanese test subjects, it is recognized that it could help lower the level of neutral fat, which would lead to weight loss and weakening the risk of metabolism. "L-carnitine" is used in a product of a major food product company, and it is growing its sales.

## Kewpie

Kewpie is the only company that has 2 ways of creating hyaluronic acid. One way is by extracting from the comb of a chicken and another is by fermentation. The first way is traditional, and it is used mainly at medical fields. High functional hyaluronic acid used for foods called "Hyabest(J)" is for supplements and ingestion. It is clear from clinical experiments that there is an effect for knee pain. They are providing their products to beverage and dietary supplement makers after they have these evidences. Although it is not for ingestion, "Hyaolo-Oligo" is used for face lotions since it absorbs well on to the skin with small amounts of hyaluronic acid. "Hialoveil" is used for hair shampoo, conditioner, and treatment since it sticks to the hair with an electrified hyaluronic acid. These high functional hyaluronic acids are not only selling their product in Japan, but also expanding their business mainly to East Asia, and to Europe and the US.

## Riken Vitamin

Riken Vitamin's healthcare department handles raw materials for medical products and additives for foods. Their most attractive functional raw material is crocetin. It is a natural raw material that is extracted and refined from cape jasmines. There has been evidence for that crocetin having recovery effects for eyestrain, but they have discovered a new skin perseverance effect as well. There are high hopes for this to be used in the beauty related field. Cape jasmine dye is known for its yellow natural color, and it is often used for mashed sweet potatoes with sweetened chestnuts, Chinese noodles, and saffron rice, but it has been reported by researchers that it also makes the blood flow smooth. With hopes that crocetin will have recovery effects of eyestrain, Riken Vitamin extracted and refined, high purity crocetin included in the color of cape jasmines. There was a clear recovery effect from fatigue by placebo. Riken Vitamin has already made a product called "crocetin eye" and they are selling this to health food makers.