

Emerging nutraceuticals for aging individuals

March 18 2016



When it comes to aging, the focus is not just on living longer. Quality of life is equally as important. Baby Boomers and the aging population want a long life full of experiences and the energy and vitality to enjoy them.

For [healthy aging](#), nutrition and exercise play crucial roles. According to the National Institute on Aging, people aged 50 and older need more of some vitamins and minerals than younger adults do, including vitamin B12, calcium, vitamin D, and vitamin B6. The National Academy of Sciences recommends women aged 50 and older need 1,200 mg of calcium each day, and men aged 51–70 need 1,000 mg and 1,200 mg after [age](#) 70. Vitamin D is recommended at 600 IU for adults aged 51–70 and 800 IU for those older than 70.

Here are some of the areas where nutritional ingredients can play a role in helping the aging population maintain an active lifestyle.

Probiotics

Nyangale et al. (2015) showed that daily consumption of a patented probiotic by adults aged 65–80 increased beneficial groups of bacteria in the human gut and potentially increased production of anti-inflammatory cytokines. Thirty-six subjects were randomly assigned to receive either a placebo or the probiotic *Bacillus coagulans* GBI-30, 6086, GanedenBC30, from Ganeden, Mayfield Heights, Ohio ([GanedenBC30.com](#)). The subjects consumed 1 treatment capsule per day for 28 days, followed by a 21-day washout period before switching to the other treatment. Consumption of GanedenBC30 significantly increased populations of *Faecalibacterium prausnitzii*, a strain of beneficial bacteria that is important for gastrointestinal health. There was also an increase in the anti-inflammatory cytokine IL-10 28 days after consumption of GanedenBC30.

GanedenBC30 is a spore-former, which makes it highly stable and allows it to remain viable through most manufacturing processes, three years of shelf life, and the low pH of stomach acid. Its efficacy is backed by more than 20 published studies showing digestive and immune support.

Prebiotics

A unique trans-galactooligosaccharide, Bimuno, from Clasado BioSciences, Jersey, United Kingdom (clasado.com), was shown to have positive effects on the immune system of the elderly (Vulevic et al. 2015). The study showed that the consumption of Bimuno produced a positive effect on both gut microbiota and the immune systems of the elderly. Forty subjects aged 65–80 received both Bimuno and a placebo (maltodextrin) in a cross-over manner for 10 weeks with a 4-week washout period in between. The results showed that consuming Bimuno led to significant increases in bacteroides and bifidobacteria. Higher IL-10, IL-8, natural killer cell activity, and C-reactive protein were also observed.

Antioxidants

Antioxidants help to reduce oxidative damage, which is associated with aging and overall wellness. Important antioxidants include beta-carotene, selenium, vitamin C, and vitamin E. In addition, antioxidants such as coenzyme Q10, resveratrol, lutein, and zeaxanthin can play roles in more targeted aging concerns such as [heart health](#) and vision.

Levels of the antioxidant coenzyme Q10 decline in older people, and supplements have been shown to help maintain a healthy blood pressure, according to information from DSM Nutritional Products, Parsippany, N.J. (dsm.com). The company offers ALL-Q (CoQ10). CoQ10 is essential for energy production and is involved in many processes in the human body, from general metabolism to muscle, heart, and brain activity. It is also a powerful cellular antioxidant.

Other DSM antioxidants that aid in healthy aging are resVida, a pure form of trans-resveratrol for healthy aging and heart health, and

FloraGLO lutein and OPTISHARP zeaxanthin for eye health. Of the 600-plus carotenoids found in nature, only lutein and zeaxanthin and their metabolites are located in the macula of the eye, where they are found in the highest concentration anywhere in the human body. Lutein and zeaxanthin absorb blue light and help reduce photochemical damage caused by short-wavelength visible light. Consumption of both antioxidants is believed to play a role in decreasing the risk of [age-related macular degeneration](#).

Provided by Institute of Food Technologists

Citation: Emerging nutraceuticals for aging individuals (2016, March 18) retrieved 10 May 2024 from <https://medicalxpress.com/news/2016-03-emerging-nutraceuticals-aging-individuals.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.