

Public Awareness of Omega-3 Benefits: More Education is Needed

Two of the biggest challenges facing omega-3 acceptance in the United States are a lack of clear knowledge of its numerous health benefits and a perception that it tastes bad, according to Frost & Sullivan.

These misunderstandings point to an urgent need to improve consumer understanding of the benefits of omega-3 in order to maximize uptake of the ingredient, which otherwise is the most commonly consumed nutraceutical after multiple vitamins.

According to the Frost & Sullivan latest omega-3 report, 56 percent of American consumers still only have a vague understanding of the benefits of omega-3. Up to 70% of the adult population is aware that omega-3 is beneficial, but the majority and not aware of the specific reasons that they should supplement their diet with this super nutrient.

When it comes to the taste of fortified products, the majority of Americans believe that adding omega-3 to a food will change its taste, smell, and texture. This does not stop people from consuming the products, but they tend to choose what they perceive to be more palatable forms (such as eggs and dairy) as they place a higher priority on taste than on nutritional value.

“Although the level of awareness about omega-3 is considered high, the majority of consumers lack clear knowledge about the health benefits of omega-3. In addition, there is a strong negative perception about the organoleptic properties of omega-3 fortified food products. This indicates the need for concerted efforts from manufacturers and other industry participants that are aimed at aggressive consumer education. It also indicates the need for ingredient and food manufacturers to focus on developing omega-3 fortified products with superior taste profile.”

Frost & Sullivan

However, despite these stumbling blocks, F&S suggests that there is strong potential for further growth in the market. Consumer purchasing patterns are indicating that marine oils will continue to be popular, with F&S expecting demand to increase particularly for fish oil supplements and dairy products fortified with omega-3.

Olive Oil Active May Protect Brain Cells

A substance found in extra virgin olive oil, hydroxytyrosol, may protect neurons from the normal deterioration associated with aging.

Hydroxytyrosol was found to protect brain cells from the detrimental effects of oxidative stress and may offer a neuroprotective effect that may slow the decline in cognitive performance that occurs with age, according to findings published in *Pharmacological Research*.

Hydroxytyrosol is thought to be the main antioxidant compound in olives, and believed to play a significant role in the many health benefits attributed to olive oil. Previous research has linked the compound to cardiovascular benefits, with reductions in LDL or 'bad' cholesterol. Data also suggests that this compound may boost eye health and reduce the risk of macular degeneration.

German scientists tested the efficacy of the hydroxytyrosol-rich extract in vitro on cells exposed to both oxidative or nitrosative stress. Cells were exposed to the hydroxytyrosol-rich ingredient and then subjected to the stress.

Results showed that the olive oil compound reduced the cell damaging effects of the oxidative and nitrosative stress in a dose-dependent manner, with higher doses providing increased protection.

Numerous studies have shown that virgin olive oil has multiple health benefits. The primary active ingredients of olive oil are the polyphenolic compounds which give this fruit oil its dark color and bitter taste. Olive oil along with omega-3 fatty acids are key components of the Mediterranean diet which has been shown to significantly reduce the risk of most major chronic diseases.

Pharmacological Research

Published online ahead of print, doi: 10.1016/j.phrs.2010.06.004

Cytoprotective effects of olive mill waste water extract and its main constituent hydroxytyrosol in PC12 cells - Authors: S. Schaffer, W.E. Muller, G.P. Eckert

Volume #39 August 13, 2010 3Care Therapeutics