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GOED Completes Second Year of Randomized Testing Program

February 8, 2021: GOED has finished the second year of our revamped Randomized Testing Program (RTP), which allows GOED to obtain a snapshot of EPA/DHA omega-3 finished product quality from GOED members around the world. GOED believes this annual program is informative for showcasing member quality, identifying existing and emerging challenges, as well as enabling GOED to provide helpful feedback to product owners to improve their quality.

For the 2020 program, 24 finished products were randomly chosen from current GOED members. They were purchased and tested for all aspects of quality as defined by the GOED Voluntary Monograph, including environmental contaminants, oxidation parameters and EPA/ DHA content. Eurofins (Hamburg) carried out the analysis for the second time. Products were transported and stored in their original packaging at room temperature protected from light until analysis. All products were analyzed before their stated date of expiry.

GOED typically asks colleagues based in the respective countries where the randomly chosen products are sold to purchase the product, either in a local shop/health store, from the internet or directly from the member's website. Internet sales are not universal, as specific products are frequently sold in only a limited number of countries. To avoid long transit times, we prefer that products are bought in the most efficient manner and close to a consumer's location, while trying to purchase products from various types of points of purchase. This year, however, all products were purchased from the internet or directly from a member companies' website, given that we did not want to expose anyone unnecessarily to COVID-19 by requesting they go to a pharmacy or health store to purchase a product.

RESULTS

Product origin (point of sale):

Americas: 12	Canada 3, USA 9
Asia / Middle East: 4	China 1, Israel 1, Japan 1, Turkey 1
Australia/NZ: 1	Australia 1
Europe: 7	Belgium 1, Germany 2, Italy 1, Poland 1, Spain 1, UK 1

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Types of purchase:

- Products purchased through internet reseller: 10
- Products purchased from member company website: 14
- Products purchased from physical store: 0

Conclusions:

- All tested products (100%) complied with maximum limits for environmental contaminants (dioxins and furans, dioxin-like PCBs, dioxins, furans and PCBs, total PCBs, lead, cadmium, mercury and inorganic arsenic).
- Of the 24 products tested, four products (16.7%) exceeded the maximum limit for Peroxide Value (PV).
- Three products (12.5%) exceeded the maximum limit for para-Anisidine Value (p-AV).
- Four products (16.7%) exceeded the maximum limit for TOTOX number.

Follow-Up Actions:

All member companies tested were contacted by GOED. Specific challenges and follow-up actions for non-compliant products have been discussed with product owners.

For the six products that did not comply with the GOED Voluntary Monograph, the following explanations were offered:

- One product likely suffers from increases in secondary oxidation during storage and/or distribution by the internet reseller it uses to sell the product. The company will try to better understand and improve its distribution channel.
- One product owner did not control oxidative quality throughout shelf-life. The company has already improved the closure mechanism of the product, which it suspected was not optimal.
- As a result of the Randomized Testing Program, one product owner began a large investigation into all aspects of their ingredient oil qualities, distribution and storage,

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and discovered that the temperature in the warehouse of one storage provider was not uniform, leading to too high temperatures in part of the products. Improved temperature control will be organized.

- One product owner was found to be selling product stock from a previous owner that
 was incorrectly labeled. Also, product storage was not properly controlled. The product
 owner is now selling properly labeled products, and quality control will be improved. A
 product will be retested in next year's RTP, to verify that proper product quality has been
 achieved.
- The owner of a product with a too high secondary oxidation did not control secondary oxidation since it is not required in the market where the product is being sold. GOED has asked that the company starts testing anisidine value, and controls secondary oxidation of their products, since this is a requirement for GOED members.
- One owner of a product that did not comply with primary and secondary oxidation showed their commitment to improve the encapsulation conditions by identifying a better contract manufacturer and improving product shelf-life stability.