GOED Technical Committee - Minutes

Date: July 6, 2023

PRESENT (please let us know if you were present, but not listed below)

Jenna Ritter (*chair* – Nature's Way of Canada)
Tony Bimbo (International Fisheries)
Dimitri Sclabos (Tharos)
Mohamed Koroma (Pharmavite)
Claus-Michael Brieber (Henry Lamotte Oils)
Helen Albans (Croda)
Bas Arntz (Novosana)
Henriette Meiser-Zessner (KD Pharma)
Christine Krumbholz (KD Pharma)
Einar Lúthersson (Lysi)
Arnar Halldórsson (Lysi)
Frank Möllering (Nutriswiss)
Guy Ben-Zvi (Omega-3 Galil)
Isabelle Francois (Thar Process)
Chloé Lhomme (Fermentalg)
Ida Aspmodal (KD Pharma)
Vibeke Bløndal (BASF)
Dagmar Behmer (Bruker Optics)
Tina Vestland (Golden Omega)
Tim Johanek (Carlson Laboratories)
Juergen Gierke (BASF)
Jonathan Cortes Linero (Naturmega)
Miguel Carillo (TASA)
Agata Szygula (TASA)
Mike Roberts (HuvePharma)
Huan-Ah Kim (Nutrasource Diagnostics)
Ingjerd Lystad (Pharma Marine)
Davide Mazza (Sochim)
Eneko Ganuza (Qualitas Health)
Marita Buarø (GC Rieber)
Davina Nagington (Croda)
Heike Meyer (Imperial Oel)
Udaya Wanasundara (Algarithm)

GOED Staff:
Gerard Bannenberg (GOED
Ellen Schutt (GOED)

Guests:

Absented:
Jonathan Smith (Eurocaps)
Kaitlin Roke (GOED)
Harry Rice (GOED)
Chris Gearheart (GOED)
Erik Fuglseth (Orivo)
Geir Frode Olsen (Epax Norway/Pelagia)
Anthony Bible (Wiley Companies/Organic Technologies)
Christine Bousses (Fermentalg)
Roger Johan Pettersen (Holtermann)
Ivana Kostic (Colpex)
Manuel Reyes (Colpex)
Craig Mallon (DSM)

Invitees for this call:

Approval of Agenda and Minutes (Jenna Ritter - committee chair)

- Any comments on the minutes of the last meeting?
  - *No comments.* The minutes of the last meeting were approved.
- The agenda and meeting documentation were sent out on July 4th, 2023. Any additions or changes?
  - The agenda was approved.

New Technical Committee Members (Jenna Ritter)

- **New members of the Technical Committee**
  - **Stig Jansson (Grontvedt)** – *not present*
  - **Jai Kumar Mishra (BASF) –** *not present*
  - **Ivana Kostic (Colpex) -** *absented*
- **Members who have left the committee:**

Monograph/Pharmacopeia Updates (Gerard Bannenberg - GOED)

- **GOED Guidance Documents - Update on information on AOCS Ce1i-07 (Gerard)**
  - **Gerard –** (*shows the document provided with the agenda*) We would like to expand the information we have in our Guidance Document (link) about one of the methods GOED recommends for the quantification of EPA and DHA, namely AOCS Official Method Ce 1i-07. The current information is shown at the top, and the proposed expansion of information below. We kindly ask the Technical Committee to provide any changes or edits you may have, especially if you have experience with this method. The reason why we would like to provide additional information is a recent discussion at the GOED board where it was pointed out that, while the method is suitable for refined fish oils, differences in results in comparison with other methods like Ph.Eur. 2.4.29 and the GOED Fatty Acid method are observed when carried out with omega-3 concentrates. The expanded information provides information on how this method should be properly carried out, including some tips on how to avoid these deviations for concentrates. Please have a look at this first draft text, and send us your feedback.
    - **Action Item**: Review the proposal for updated information about AOCS Ce1i-07 and send feedback to Gerard or Jenna (**Technical Committee members**)

- **Technical report on practical approaches for how to meet label claims for EPA/DHA content (Gerard)**
  - **Gerard –** This document (*a copy was provided with the agenda*) we have developed over the past six months or so. You are looking at the second revision now. We received a minor comment from Harry Rice regarding some regulations about label claims we were referring to in the introduction, and decided to just remove those as it was not really within the scope of this document.
    The document has a short introduction, and two types of explanations: i) regarding how to establish your label claim for EPA/DHA content for new products, and ii) how to adapt your label claim for an existing product, when for example your ingredient changes. This is illustrated with several examples. The document is meant to be helpful information for GOED members.
  - **Mohamed Koroma (Pharmavite)** – I was supposed to get back to you on this document. I will provide my input next week. There are a few caveats there that I would like us to capture, because this document does not take into consideration at the finished good or at the bulk level some of the variabilities, for example, the overages that we consider. There are also methods and other variabilities other than just the raw material. It would be nice to capture those caveats in this document, so people understand that it is not just a straight fill and expecting your calculations to just give you whatever you are claiming on your label. So, it is not too much of a change, but it would be nice to capture that, so people are aware of the reality.
  - **Gerard** – Happy to receive your new input. We will make an updated document, aim to circulate that, and go for approval in our next committee meeting.

  - **Action Item**: Update document with Mohamed's new comments, circulate the document and ask for final comments (**Mohamed, Gerard, Technical Committee**)

- **Technical report on Conversion factors for polar lipids (PLOCF WG) (Gerard)**
  - **Gerard –** The technical report for conversion factors for polar lipid oils (*copy included with the agenda*) was developed in the technical committee working group on polar lipid oils conversion factors (PLOCF WG), composed Eneko Ganuza (Qualitas Health), Gunnar Herstad (Aker Biomarine), Udaya Wanasundara (Algarithm), Jenna Ritter and myself. On the first draft we discussed in our last call, we received input from DSM (Craig Mallon) who offered a useful excel-based content calculator that they were already using, and which we integrated into the document and have expanded with the relevant polar lipids. See document.
    This has now developed into a very interesting document with all relevant conversion factors (appendix A) allowing the interconversion of the content of the seven omega-3 long-chain

polyunsaturated fatty acids from free fatty acid equivalents to various polar lipid chemical forms as well as relevant neutral lipids, and the reverse. The document is illustrated with several examples for krill oil, *Nannochloropsis* oil, as well as blends of polar lipid oils with neutral lipid oils.
We have also renamed this document from "Industry Advisory" to "Technical Report", to reduce concerns that this information may be misinterpreted as some kind of mandatory requirement by GOED towards its members. From comments received from one member, we have appreciated the need to better clarify when these conversion factors can be used for the expression of content in polar lipid form. Whereas GOED asks its members that produce and market triglyceride and ethyl ester oils to express omega-3 content in free fatty acid equivalents, often companies also express content of EPPA, DHA and Total Omega-3 in the relevant chemical form, for example on specifications and certificates of analysis. In order to make sure that there are no misunderstandings and better understand the implications, we will ask GOED's Regulatory Affairs committee to review the document and suggest any clarifications. We will hear back from the Regulatory Committee in our next meeting.

- **Ingjerd Lystad (Pharma Marine)** – Are there any recommendations on how to measure the various lipid classes?
- **Gerard** – No, that is not in the scope of this document. That is certainly important, but it is a very difficult task to list all suitable methods for all those different lipids. Many methods will not be official methods either. To make that overview is a task for the future.

- **Action Item**: Regulatory Affairs Committee to evaluate the Technical Report on conversion factors. Discuss recommendations in the next Technical Committee meeting (**Technical Committee**)

Legislative Updates (Gerard Bannenberg)

- **Scientific Opinion on polybrominated diphenyl ethers & occurrence data collection (Gerard)**
  - **Gerard** – EFSA recently published a Scientific Opinion on the risk of polybrominated diphenyl ethers (PBDEs) in food (link). We were caught a bit by surprise that this was published, although we had started to discuss brominated flame retardant since the beginning of this year in the Technical Committee. The overall conclusion of the risk assessment was that these contaminants pose a risk for health, particularly in the group of toddlers. Meat and fish were the food groups in which highest levels were found and pose the highest source of exposure. PBDEs are highly lipophilic compounds, and by deduction if they are found in fish, it is to be expected that they will also carry over to fish oils. This Scientific Opinion is now open for public consultation, and comments can be submitted until July 20. If you have any comments that you would like GOED to submit, please let us know.

After I asked for occurrence data from the technical Committee earlier this year, only one member provided data for their oils (showing low or undetectable levels from a multiyear record). EFSA mentions in the opinion that high levels of BDEs are found in fish oil supplements, but they did not present any occurrence measured by EU reference laboratories. They do refer to some academic literature, in particular a 2018 publication from a Canadian database on PBDEs in food and supplements (link), which report high levels in cod liver oil, menhaden oil, salmon oil, seal oil, and tuna oil. Here you can see a summary of those reported levels (*shown on screen*). Seal oil is not of relevance to the EU market, and I don't know if today there are supplements produced with menhaden oil. A little concerning are the very high levels in cod liver oil and tuna oil. There is a predominance of BDE-47 in these oils, and BDE-209 in tuna oil.

I would like to indicate to everybody, to be aware of these "new" contaminants, and start measuring these in your ingredients and products, so that at least you understand whether this may be of concern for your products or not, and to be prepared. We have no idea if the European Commission (EC) is considering setting limits for these compounds, but if EFSA is working on these it means they are of concern to the authorities. Also, this recent Scientific Opinion is one of six opinions that EFSA will publish on halogenated flame retardants (there are other groups of flame retardants). If you have any occurrence data, please send me (*and as usual all data will be handled anonymously*).

- **Chloe Lhomme (Fermentalg)** – Regarding algal oil, do you have any data, or from EFSA, or any recommendation?
- **Gerard** – Unfortunately, nothing yet for microalgal oils.
- **Chloe** – From what I understood it could be found in water, and in fish and meat, and many places. I wonder if we use the right isolation of the oil, we may not have this issue.
- **Gerard** – These are environmental contaminants that can accumulate in organisms, and are transferred through the food chain to higher organisms. They are not likely to be found in microalgae or oils made from these. But of course, you can only know for sure for your materials if you verify by measurement. We can provide information on laboratories that can measure these contaminants. And we will return to this topic in the future.

- **Action Item**: Members to measure halogenated flame retardants in their oils, and submit occurrence data to Gerard (**Technical Committee**)

All Other Business (Gerard)

- **Technical publications notification (Jenna)**

  - **Jenna –** There is quite a list for this month (*included in the documentation sent out with the agenda*). There is some publications about structural lipids, enzymatic extraction and value-

added products with omega-3. Give the list a look, and as always, if you come across any interesting publications, please forward them on to us and we can add them to the bulletin.

- **Action Item**: If you see an interesting technical publication, please send to Jenna or Gerard (**Technical Committee**)

- **Proposal to initiate a GOED Mention for highly proficient 3rd-party testing laboratories for the quantification of EPA/DHA (Gerard, Geir Frode Olsen)**

  - **Gerard** – We have developed a proposal (*see document sent out with the agenda*) to initiate a kind of mention system, a type of award, for highly-proficient 3rd party testing laboratories for the quantification of EPA and DHA. This was partly developed by Geir Frode Olsen (Epax Norway/Pelagia). About a year ago we discussed this topic when Geir Frode made a presentation to this committee showing the poor accuracy in EPA and DHA quantification by many laboratories, based on the results of the AOCS-GOED Nutraceutical Oils Laboratory Proficiency Program (LPP). From the 35 or so participating laboratories, there were only two or three that consistently accurately determined the EPA and DHA content of all six test samples that laboratories receive every year. That suggests that there are many laboratories that do not know how to properly set up their instrument or don't carry out the method properly. There is a lot of room for improvement. Secondly, in parallel, recently at the board level there was a quite intense discussion about how to improve the testing performance by third-party laboratories. Why? – because our members may employ 3rd-party labs to test products but also their clients test those same products using 3rd-party labs, and frequently the results for EPA and DHA content differ substantially. There was a big concern at the board level that, somehow, we must improve the accuracy of third-party testing laboratories. In alignment with that discussion, we already had a proposal in mind to develop a kind of GOED Mention system to promote those laboratories that make a reported accurate quantification of EPA and DHA in omega-3 oils. This is the draft proposal (*shown on screen*). This will affect very few members of GOED, as most of the laboratories we like to target are 3rd-party labs external to GOED. If you have any suggestions on this proposal, let us know.
    The idea is to have a very demanding criterion for accuracy, as described in the proposal. The results are evaluated on a voluntary basis, where the lab that is interested in obtaining a GOED mention comes to us with their LPP results and shows us that they have highly accurate results. The laboratory would receive a yearly title or mention as a highly-accurate third-party testing laboratory for the quantification of EPA and DHA. And GOED would promote these laboratories as such, for example by highlighting them in the Current, or other ways, to drive business to these laboratories preferentially. The mention is valid for one year, pending renewal based on the LPP results of the next year. Hopefully in the long run that will

make it attractive to laboratories to improve their accuracy and also opt in for a GOED mention.

This proposal is one additional part of improving EPA/DHA quantification – we have also developed a number of industry advisories with useful information regarding methods for omega-3 quantification and expression of results.

We welcome your input and constructive ideas. The board has approved this idea already in general terms. We were thinking to roll this out on a two-year basis to see how this works out, determine if there is any interest, and how GOED can promote these laboratories, and then evaluate.

- **Vibeke Bløndal (BASF)** – I think this is a good idea. I have some questions. For example, the consensus value, how will that be defined?
- **Gerard** – The consensus value is the consensus value for EPA and DHA content as determined for each test sample in the AOCS-GOED Nutraceutical Oils LPP, in which these laboratories are already participating. AOCS publishes every year the results of all the participating labs, on an anonymous basis, and also reports the results to each individual participant laboratory. GOED will then say that any laboratory who is interested in opting for this GOED mention can submit their results to show that they meet the accuracy criteria. If a lab is indeed confirmed to be accurate, GOED will issue that mention for one year. So it is based on the performance in the AOCS-GOED Nutraceutical Oils LPP.
- **Vibeke** – And the 2% requirement will be for each individual analysis, right?
- **Gerard** – Yes. The laboratory would have to meet the 2% requirement for all the six samples. It is a demanding requirement.
- **Vibeke** – And it will be an annual qualification to keep the mention?
- **Gerard** – Yes, an annual requalification.
- **Vibeke** – Thank you. I support this.
- **Jenna** – It may be useful those of us who use third-party labs who don't currently participate in the LPP, if there could be something available on the GOED website that we could give to the labs to encourage them to participate.
- **Gerard** – Good idea. The promotional part is still to be developed.
- **Arnar** – What we are doing here, we do have two or three third-party laboratories that you see from the proficiency programs that are specializing in omega-3 EPA and DHA. When we have some other third-party labs that are participating but are not specialized in omega-3s too much, it is sometimes difficult for a lab doing plant oils, and on the side doing fish oils. The industry labs are usually professional in doing this on a frequent, daily, basis. This is kind of harmonizing the industry with the third-party laboratories. This proposal will also help in that sense. This is a harmonization effort.
- **Gerard** – That is a good point.
- **Arnar** – I have a question regarding methods – Do you say in the draft that the labs have to participate in the AOCS-GOED Nutraceutical Oils LPP, and they have to use the GOED recommended methods?

- **Gerard** – Yes. You can see here in the proposal (*shown on screen*) that GOED recommends several methods (Ph.Eur. 2.4.29/GOED Fatty Acid method, USP 401 and AOCS Ce1i-07), and these same methods are the ones that participants in the LPP are asked to use. And that will also what we will be asking for in this mention system - only labs that use one of these methods can apply for a GOED mention.
- **Arnar** – These should only be official, validated, methods that are referred to. There was no mention of deviations from the methods. Most labs do deviate from these methods to some extent – maybe they follow the methods in general. But as you could see from the GC setup survey we did; you could see that there was a lot of different setups going on between laboratories. We should also force laboratories that when they want to meet these strict requirements to harmonize the GC setup as well, I guess.
- **Gerard** – That will be difficult for us to check, because we can't go in a laboratory to check how they set up their GC instrument.
- **Arnar** – Of course if you are asking for these strict requirements, you are forcing everybody to go in and optimize their setup. It is all good. It has multiple effects I can see, both short term and long term, if the participation is there.
- **Gerard** – That is good to hear. That is what we hope, and we expect it will take some time before this will start having an effect, and more laboratories start improving their proficiency. Hopefully the GOED promotion will help in getting more laboratories interested, and promote the business of those highly accurate laboratories.
- **Arnar** – This is an extra qualification by GOED on the laboratory proficiency by the LPP.
- **Gerard** – Yes. But is separate from the AOCS awards. We may want to cross-check with AOCS that what a laboratory tells us is correct, but this is a GOED mention.
- **Arnar** – It is a GOED verification on these labs. Good.
- **Gerard** – if you have any further suggestions, please send us, and hopefully we can approve this in our next meeting in August.
- **Ellen Schutt (GOED)** – Regarding logistics, the LPP results are coming out at a certain month? Would the labs be required to submit their results in a several month period, so the year starts then?
- **Gerard** – Exactly. As soon as a lab receives the official LPP results from AOCS, they can come to GOED and tell us they want to be considered for the annual mention of highly-accurate third-party laboratory for the quantification of EPA and DHA. If they meet the requirements, we roll them in the program, and then GOED will promote this lab. For example, by mentioning them in the Current, or have a special mention on our website. May be these labs can also use some specific marketing language that they are a recipient of this GOED mention. Tony, when do the labs receive the LPP results?
- **Tony Bimbo** – After the results are done, it is usually another month where the labs can question whether the results that were published are correct. We are into July 1 when we finally got the last fourth quarter data. That is why it has not been published yet.
- **Gerard** – So the labs don't get the results until early summer?

- **Tony** – The GOED Nutraceutical Oils LPP participants receive samples in the second and third quarter.
- **Gerard** – And how long does it take before they receive the results from AOCS?
- **Tony** – Once the report is sent out to the participants, they have a month to challenge the results.
- **Ellen** – So, right now, the participants are in this month-long challenging period?
- **Tony** – July 1 was the final fourth quarter day the challenge is ended.
- **Gerard** – But the fourth quarter is not relevant for the GOED Nutraceutical Oils LPP, right?
- **Tony** – Yes, but AOCS waits with publishing the results only when all the LPPs are finalized. Everything before that is interim results.
- **Gerard** – So we will wait for the final official results, and then we will start our mention program.
- **Tony –** They should publish the final results from last year within the next 30 days, I guess.
- **Ellen –** Thank you.
- **Henriette Meiser-Zessner (KD Pharma)** – The program is not for the AOCS award winners, it is really regarding the result in comparison to the consensus value? Because I think the AOCS award winners will be published by summer, but the results are already published in April/May, then you have your first results. Then you have this appeal period, and I think it is early summer when you have the results, but not yet the awards, which are announced later in the summer.
- **Gerard** – Then I think the laboratories that want to apply for the GOED mention can come to us when they have received the results that they deem are satisfactory. If they want to appeal, they may come to us a bit later.
- **Henriette** – OK. And not only the award winners can apply.
- **Gerard** – Yes, for clarification, it is important to note that the AOCS award also takes into account additional quality parameters, such as peroxide Value, Anisidine Value and Acid Value. These other parameters are not of relevance for this GOED mention system, which will focus only on EPA and DHA quantification.
- **Henriette** – OK. It is really a good idea, because we always have discussions with our customers regarding the results. I think it is really good idea that also third-party laboratories work on their proficiency, very important.
- **Gerard** – Thanks, that is good to hear.

- **Action Item**: Provide input on the draft proposal for a GOED mention for highly-accurate third-party laboratories for the quantification of EPA and DHA & Develop something to share with laboratories to encourage them to participate in the AOCS-GOED Nutraceutical Oils LPP (**Technical Committee**)

- **Update on GOED member MOH occurrence data (Gerard)**

- **Gerard –** The last update on mineral oil aromatic hydrocarbon (MOAH) occurrence data from our producers was given in December 2022. Here is an update with data from a total of 17 members now (*slides shown on screen*). Data are shown in box plots for MOSH and for MOAH, for crude fish oils, refined fish and microalgal oils, ethyl ester (EE) concentrates and re-esterified triglycerides. The number of observations (individual tested batches) ranges from 31 for rTGs and 244 for crude oils.

  You can see that the median levels observed are 23 mg/kg for crude fish oils, 14 mg/kg for refined oils, 35 mg/kg for EE, and 21 mg/kg for rTGs. While refining appears to reduce the level of MOSH, why there is an apparent increase in EE concentrates is unclear. Overall the distribution in values for MOSH can be pretty wide. In any case, we don't expect a maximum level (ML) for MOSH by the European Commission (EC).

  For MOAH, there is a harmonized action level set by the EU member states of 2 mg/kg, but we don't know yet if the EC will decide to advance with a ML Our sectorial occurrence data show that for crude fish oils the median level of MOAH is 2.1 mg/kg, 1.6 mg/kg for refined oils, zero for EE and 1.3 mg/kg for rTGs. The distribution of the results is pretty tight, with few very high values. This is a best-case scenario when we assume that the 6.8% of the samples where an enhanced LOQ was needed by the laboratories (due to method interference) do not contain MOAH (enhanced LOQ values set to zero). If for those 6.8% of samples the enhanced LOQ is used as the real value (*i.e.* a worst-case scenario), the median values are 3.5, 2.0, 1.4 and 1.3 mg/kg, respectively. The real values likely lie somewhere in between the best- and worst-case scenarios. Again, it is good to see that refining leads to reduced levels. It is good to see that overall, the percentage of samples with interferences is lower compared to results summarized earlier. Overall, the situation suggests that producers can produce oils that meet a putative ML of 2 mg/kg MOAH, but that on the other hand there is still a considerable portion of batches that exceed this level. The results do not mean that all batches will actually be used for the production of consumer products, but merely reflect the capacity of our producers.
  If you look at all refined oils and concentrates together, *i.e.* all that could be used as ingredients for retail products, for MOAH about 60% of batches fall below 2 mg/kg in the best-case scenario.
- **Arnar** – Did EFSA say anything about limits? They kind of excluded the MOSH/POSH as a carcinogen. Were any limits mentioned for MOAH?
- **Gerard** – I attended a meeting on MOH a few weeks ago in Berlin, where both EFSA, the EC and other groups presented. EFSA is expected to publish the final Scientific Opinion probably in August. We will see if there are any changes. Based on that, the EC will start elaborating the need to establish a ML for MOAH. It sounded like that that may still take a bit more time, and may not come as fast as perhaps expected. But we will try to keep an eye

out for any announcements. As you say, MOSH were not considered a hazard for consumers by EFSA, and a ML for MOSH is not expected.
It is interesting to mention that EFSA is receiving some criticism for its stance on the risk of MOAH as a carcinogen because the toxicology studies underlying this are based on skin-painting studies in rodents, and no oral exposure studies are available. Also, there are no good data for the MOAH fractions with 3- or more rings. In contrast, and a bit of a turn in our understanding, there are voices that indicate that the toxicology of MOSH may be underestimated, because the accumulation of these substances in humans (from post-mortem analysis) in so called lipogranulomas (accumulation of certain MOSH classes into deposits in tissues) is much greater than in the animal (rat) models used to evaluate this accumulation. How and when new studies will be done to better evaluate the MOSH and MOAH toxicity are unanswered questions, but it sounds like the situation is not totally clear regarding their effects in humans. The EC on the other hand generally takes a precautionary approach, and tends to regulate harmful substances according to the as-low-as reasonable-achievable (ALARA) approach, so may decide to set a ML or at least MOAH anyway, in order to protect consumers.

If anybody is measuring MOSH or MOAH in their products, please share your new results with us. I can share a new update of these occurrence data for MOH in when there is something new to report.

- **Action Item**: Members to measure MOSH and MOAH in their oils, and submit occurrence data to Gerard (**Technical Committee**)

- **Update 2023 JRC Guidance on MOS and MOAH hump integration and method updates (Craig Mallon, DSM/ Gerard)**

  - **Gerard** – The idea was that Craig would give us a short update on recently published guidelines from the Joint Research Centre (the technical branch of the European Union) on how to process MOH samples and carry out peak integration in order to reduce the inter-laboratory variability we are seeing. Craig could not make our call today, so I like to move this topic to our next meeting. If you are interested in seeing this guidance, please reach out to us.

<u>Presentation</u>: *No presentation today*

End of meeting.

Summary of Action Items

- **Action Item**: Review the proposal for updated information about AOCS Ce1i-07 and send feedback to Gerard or Jenna (**Technical Committee members**)
- **Action Item**: Update document with Mohamed's new comments, circulate the document and ask for final comments (**Mohamed, Gerard, Technical Committee**)
- **Action Item**: Regulatory Affairs Committee to evaluate the Technical Report on conversion factors. Discuss recommendations in the next Technical Committee meeting (**Technical Committee**)
- **Action Item**: Members to measure halogenated flame retardants in their oils, and submit occurrence data to Gerard (**Technical Committee**)
- **Action Item**: If you see an interesting technical publication, please send to Jenna or Gerard (**Technical Committee**)
- **Action Item**: Provide input on the draft proposal for a GOED mention for highly-accurate third-party laboratories for the quantification of EPA and DHA & Develop something to share with laboratories to encourage them to participate in the AOCS-GOED Nutraceutical Oils LPP (**Technical Committee**)
- **Action Item**: Members to measure MOSH and MOAH in their oils, and submit occurrence data to Gerard (**Technical Committee**)

Date of next meeting

- The next Technical Committee meeting will be scheduled for Thursday, August 17th, 2023.

USEFUL LINKS:

- Useful documents that the committee has discussed can be found in the Technical Committee folder. You can upload any material there yourself as well: https://drive.google.com/drive/folders/0B-5CurmVIvvETm1Wd29xemU5YVU

- Past minutes can be found here:
  2023 - https://drive.google.com/drive/folders/1Q_aJTzxZL106KkZJUkgrkLT2MdgDiEXh?usp=share_link
  2022 - https://drive.google.com/drive/folders/1Pt8CJafBCjIYaLZF0ZJ08csPqlzW5XaC?usp=sharing
  2021 - https://drive.google.com/drive/folders/1VGy-t4TuWtDUB30jU98unIxWYzpnZuNj?usp=sharing
  2020 - https://drive.google.com/open?id=1olF0Ab9UeGO_VaQpSshICS3xn0V8IiLK
  2019 - https://drive.google.com/drive/folders/0B0usR2nagMSpSU1aaTR6Ty0yTE0

2018 - https://drive.google.com/open?id=1lXXmBgN3F9XwZnXKxqq0hwC-oLZl9rc
2017 - https://drive.google.com/drive/folders/0B6uJWj5y9FY9NDRRS2lVdUQ1ZWs
2016 - https://drive.google.com/drive/folders/0B6uJWj5y9FY9UVZpU3NLejBIMEk

- GOED Newsletters: If you do not receive newsletters from GOED, please sign up since this is our best way of communicating with members. Here is the link: http://eepurl.com/F-p5