

Publication list



Clinical studies

Aasum, E, Pedersen, A.M, Hahn, A, Larsen, T. **(2025)** A novel Marine Oil from the Copepod *Calanus finmarchicus*, Source, Harvesting, Chemistry and Potential Application in Human Health. *Lipidology*, 2(2),11 | <https://doi.org/10.3390/lipidology2020011>

Kerlikowsky F, Bartsch M, Wiebke J, Hahn A, Schuchardt JP. **(2025)** Calanus Oil and Lifestyle Interventions Improve Glucose Homeostasis in Obese Subjects with Insulin Resistance. *Marine Drugs*, 23, 139. | <https://doi.org/10.3390/md23040139>

Vosskötter F, Burhop M, Hahn A, Schuchardt JP. **(2023)** Equal bioavailability of omega-3 PUFA from Calanus oil, fish oil and krill oil: A 12-week randomized parallel study. *Lipids*, 1-10 | <https://aocs.onlinelibrary.wiley.com/doi/10.1002/lipd.12369>

Tauschek L, Røsbjörgen REN, Dalen H, Larsen T, Karlsen T. **(2022)** No Effect of Calanus Oil on Maximal Oxygen Uptake in Healthy Participants: A Randomized Controlled Study. *International Journal of Sports Nutrition*, 32:6, 468-478 | <https://doi.org/10.1123/ijs-nem.2022-0047>

Burhop, M., Schuchardt, J. P., Nebel, J., Müller, M., Lichtinghagen, R. & Hahn, A. **(2022)**. Marine Oil from *C. finmarchicus* Enhances Glucose Homeostasis and Liver Insulin Resistance in Obese Prediabetic Individuals. *Nutrients*, 14, 396 | <https://pubmed.ncbi.nlm.nih.gov/35057577/>

Stepan, M., Dadova, K., Matous, M., Krauzova, E., Sontakova, L., Koc, M., Stich, V., Rossmeislova, L. and Siklova, M. **(2022)** Exercise Training Combined with Calanus Oil Supplementation Improves the Central Cardiodynamic Function in Older. *Nutrients*, 14, 149. | <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8747381/>

Wasserfurth, P., Nebel, J., Rühling, M.R., Shammass, H., Bednarczyk, J., Koehler, K., Boßlau, T.K., Krüger, K., Hahn, A. and Das, A.M. **(2021)** Impact of Dietary Modifications on Plasma Sirtuins 1, 3 and 5 in Older Overweight Individuals Undergoing 12-Weeks of Circuit Training. *Nutrients* 13, 3824 | <https://doi.org/10.3390/nut13113824>

Cizkova, T., Stepan, M., Dadova, K., Ondrujova, B., Sontakova, L., Krauzova, E., Matous, M., Koc, M., Gojda, J., Krackmerova, J., Stich, V., Rossmeislova, L. and Siklova, M. **(2020)** Exercise Training Reduces Inflammation of Adipose Tissue in the Elderly: Cross-Sectional and Randomized Interventional Trial. *The Journal of Clinical Endocrinology & Metabolism*, Volume 105, Issue 12,e4510–e4526. | <https://pubmed.ncbi.nlm.nih.gov/32902644/>

Dadova, K., Petr, M., Steffl, M., Sontakova, L., Chlumsky, M., Matous, M., Stich, V., Stepan, M. and Siklova, M. **(2020)** Effect of Calanus Oil Supplementation and 16-week exercise Program on Selected Fitness Parameters in Older Women. *Nutrients* 12, no. 2: 481. | <https://pubmed.ncbi.nlm.nih.gov/32074977/>

Brezinova, M., Cajka, T., Oseeva, M., Stepan, M., Dadova, K., Rossmeislova, L., Matous, M., Siklova, M., Rossmeisl, M. and Kuda, O. **(2020)** Exercise training induces insulin-sensitizing PAHSAs in adipose tissue of elderly women, *Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids*, 1865, 2. | <https://pubmed.ncbi.nlm.nih.gov/31740387/>

Wasserfurth, P., Nebel, J., Boßlau, T.K., Krüger, K., Hahn, A., and Schuchardt, J.P. **(2020)** 12-weeks of *Calanus finmarchicus* oil intake improves omega-3-index in healthy older subjects engaging in an exercise program. *British Journal of Nutrition* 1-8. | <https://pubmed.ncbi.nlm.nih.gov/32698912/>

Wasserfurth, P., Nebel, J., Schichardt, J.P., Müller, M., Boßlau, T.K., Krüger, K., and Hahn, A. **(2020)** Effects of Exercise Combined with a Healthy Diet or *Calanus finmarchicus* Oil Supplementation on Body Composition and Metabolic Markers – A Pilot Study. *Nutrients* 12 (7), 2139 | <https://pubmed.ncbi.nlm.nih.gov/32708396/>

Cook, C.M., Larsen, T., Derrig, L.D., Kelly, K.M. and Tande, K.S. **(2016)** Wax-ester rich oil from the marine crustacean *Calanus finmarchicus* is a bioavailable source of EPA and DHA for human consumption. *Lipids*, 51 (10): 1137-1144 | <https://pubmed.ncbi.nlm.nih.gov/27604086/>

Tande, K.S., Trung, D.Vo. & Lynch, B.S. **(2016)** Clinical safety evaluation of marine oil derived from *Calanus finmarchicus*. *Regulatory Toxicology and Pharmacology*, 80: 25-31 | <https://europepmc.org/article/med/27233921>



Preclinical studies

Shrook Y. Abdellatif, Nagui H. Fares, Samar H. Elsharkawy & Yomna I. Mahmoud **(2023)** Calanus oil attenuates isoproterenol-induced cardiac hypertrophy by regulating myocardial remodeling and oxidative stress. *Ultrastructural Pathology*, 47:1, 12-21 | <https://doi.org/10.1080/01913123.2022.2163016>

Schots, P.C., Jansen, K.M., Mrázek, J., Pedersen, A.M., Olsen, R. L., and Larsen, T. **(2020)** Obesity-induced alterations in the gut microbiome in female mice fed a high-fat diet are antagonized by dietary supplementation with a novel, wax ester-rich, marine oil. *Nutrition research* | <https://pubmed.ncbi.nlm.nih.gov/33049454/>

Schots, P.C., Pedersen, A.M., Eilertsen, K.E., Olsen, R.L. and Larsen, T.S. **(2020)** Possible Health Effects of a Wax Ester Rich Marine Oil. *Front Pharmacol*, 11:961 | <https://pubmed.ncbi.nlm.nih.gov/32676029/>

Jansen, K.M., Moreno, S., Garcia-Roves, P.M. & Larsen, T.S. **(2019)** Dietary Calanus oil recovers metabolic flexibility and rescues postischemic cardiac function in obese mice. *American Journal of Physiology*, 317:H290-H299 | <https://pubmed.ncbi.nlm.nih.gov/31125256/>

Salma, W., Franekova, V., Lind, T., Höper, A.C., Ludvigsen, S., Lund, J., Aasum, E., Ytrehus, K., Belke, D.D. & Larsen, T.L. **(2016)** Dietary Calanus oil antagonizes angiotensin II-induced hypertension and tissue wasting in obese mice. *Prostaglandins, Leukotrienes and Essential Fatty Acids*, 108: 13–21 | <https://doi.org/10.1016/j.plefa.2016.03.006>

Pedersen, A. M., Salma W., Höper A. C., Larsen T. S. & Olsen R. L. **(2014)** Lipid profile of mice fed a high-fat diet supplemented with a wax ester-rich marine oil. *European Journal of Lipid Science and Technology*, 116: 1718-1726 | <https://onlinelibrary.wiley.com/doi/abs/10.1002/ejlt.201400052>

Höper, A.C., Salma, W., Sollié, S.J., Hafstad, A.D., Lund, J., Khalid, J., Raa, J., Aasum, E. & Larsen, T.S. **(2014)** Wax Esters from the Marine Copepod *Calanus finmarchicus* Reduce Diet-Induced Obesity and Obesity-Related Metabolic Disorders in Mice. *Journal of Nutrition*, 144 (2): 164-169 | <https://doi.org/10.3945/jn.113.182501>

Pedersen, A.M., Vang, B. & Olsen, R.L. **(2014)** Oil from *Calanus finmarchicus*. Composition and Possible Use: A Review. *Journal of Aquatic Food Product Technology*, 23 (6): 633-644 | <https://doi.org/10.1080/10498850.2012.741662>

Höper, A.C. Salma, W., Khalid, A.M., Hafstad, A.D., Sollié, S., Raa, J., Larsen, T.S. & Aasum, E. **(2013)** Oil from the marine zooplankton *Calanus finmarchicus* improves the cardiometabolic phenotype of diet-induced obese mice. *British Journal of Nutrition*, 110 (12): 2186-2193 | <https://doi.org/10.1017/S0007114513001839>

Vang, B., Pedersen, A.M. & Olsen, R.L. **(2013)** Oil extracted from the copepod *Calanus finmarchicus* using proteolytic enzymes. *Journal of Aquatic Food Product Technology*, 22 (6): 619-628 | <https://doi.org/10.1080/10498850.2012.686008>

Vang, B., Mæhre, H.K., Jensen, I.J. & Olsen, R.L. **(2013)** Detection of tropomyosin and determination of proteins in crustacean oils. *Food Chemistry* 141: 72–76 | <https://pubmed.ncbi.nlm.nih.gov/23768329/>

Eilertsen, K.-E., Mæhre, H., Jensen, I.J., Devold, H. Olsen, J.O. Lie, R.K., Brox, J. Berg, V. Elvevoll, E.O. & Østerud, B. **(2012)** A Wax Ester and Astaxanthin-Rich Extract from the Marine Copepod *Calanus finmarchicus* Attenuates Atherogenesis in Female Apolipoprotein E-Deficient Mice *Journal of Nutrition* 142: 508-512 | <https://pubmed.ncbi.nlm.nih.gov/22323762/>

