



GLOBAL ORGANIZATION FOR EPA AND DHA OMEGA-3S

8 January 2022

The following were submitted electronically in response to EFSA's [*Scientific Opinion advising on the development of harmonised mandatory front-of-pack nutrition labelling and the setting of nutrient profiles for restricting nutrition and health claims on foods.*](#)

General Comments

n/a

Abstract

n/a

Keywords

n/a

1 Introduction

n/a

2 Data and Methodologies

n/a

3 Assessment

3.1.2.2 EPA and DHA

While “The Panel considers that intakes of EPA and DHA may be inadequate for primary CVD risk reduction in Member States with low consumption of fish/seafood and products thereof,” it does not appear that the Panel considered data from the Global Burden of Disease (GBD) study (<https://www.thelancet.com/gbd>), which was mentioned in Appendix A of the consultation as a viable source of information.

Data from the GBD study provides further support of the inadequate intakes of EPA and DHA, which are referred to as seafood omega-3s within the GBD framework, and should convince the Panel that intakes of EPA and DHA are inadequate. Note that starting with the 2019 GBD, a diet low in omega-3 fatty acids is defined as an average daily consumption (in milligrams per day) of less than 430–470 milligrams of EPA and DHA. The omega-3 theoretical minimum risk exposure level (TMREL) was revised from 200–300 to 430–470 milligrams/day based on the availability of new data. This means that the intakes of EPA and DHA for more people will be considered inadequate.



GLOBAL ORGANIZATION FOR EPA AND DHA OMEGA-3S

GOED retrieved data from 2019 for all 27 EU countries on deaths from ischemic heart disease (IHD) and disability-adjusted life years (DALYs) attributed to diets low in seafood omega-3s. The data is for all ages and males and females combined. Both numbers (i.e. number of deaths from IHD due to low seafood omega-3 intake) and percentages (i.e. percentage of IHD deaths due to low seafood omega-3 intake) are provided.

Here's the reference for the downloaded data, which is provided as an attached file: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 (GBD 2019) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2020. Available from <http://ghdx.healthdata.org/gbd-results-tool>.

4 Conclusions

n/a

5 References

n/a

Appendices

n/a

Glossary, abbreviations, acronyms

n/a

Measure	Country	Cause	Metric	Value	Upper	Lower
Deaths	Austria	IHD	Number	557.8671364	703.26825	362.0369721
Deaths	Austria	IHD	Percent	0.030851646	0.037893	0.019684327
DALYs	Austria	IHD	Number	7591.795767	9339.3884	4877.273988
DALYs	Austria	IHD	Percent	0.032537882	0.039303	0.020932281
Deaths	Belgium	IHD	Number	465.8002674	578.4464	312.548327
Deaths	Belgium	IHD	Percent	0.030759524	0.0374826	0.02120878
DALYs	Belgium	IHD	Number	6930.359834	8469.5103	4780.328191
DALYs	Belgium	IHD	Percent	0.03249576	0.0391227	0.022512679
Deaths	Bulgaria	IHD	Number	1106.92083	1508.7757	606.8393008
Deaths	Bulgaria	IHD	Percent	0.032130852	0.0404056	0.018579042
DALYs	Bulgaria	IHD	Number	19368.86259	26750.169	10726.19816
DALYs	Bulgaria	IHD	Percent	0.034605774	0.0433241	0.019586228
Deaths	Croatia	IHD	Number	435.3968547	646.01303	163.564345
Deaths	Croatia	IHD	Percent	0.033009327	0.0438646	0.012118906
DALYs	Croatia	IHD	Number	6688.574421	9954.8412	2469.679008
DALYs	Croatia	IHD	Percent	0.035264292	0.0468952	0.012875304
Deaths	Cyprus	IHD	Number	52.75243579	69.852847	31.90991594
Deaths	Cyprus	IHD	Percent	0.033087688	0.0413053	0.019339452
DALYs	Cyprus	IHD	Number	1013.533279	1325.8724	586.1462498
DALYs	Cyprus	IHD	Percent	0.0363095	0.045368	0.020640833
Deaths	Czechia	IHD	Number	1015.901649	1358.3388	598.3116915
Deaths	Czechia	IHD	Percent	0.030824322	0.0382118	0.018763752
DALYs	Czechia	IHD	Number	15442.17111	20812.69	9325.687383
DALYs	Czechia	IHD	Percent	0.032407605	0.040086	0.019749323
Deaths	Denmark	IHD	Number	217.0435242	272.56456	148.2477689
Deaths	Denmark	IHD	Percent	0.030279506	0.037423	0.020716026
DALYs	Denmark	IHD	Number	3037.976469	3750.2283	2147.70478
DALYs	Denmark	IHD	Percent	0.030586184	0.0372446	0.021096889
Deaths	Estonia	IHD	Number	136.7342161	192.12486	82.39825406
Deaths	Estonia	IHD	Percent	0.030869955	0.0379408	0.019036525
DALYs	Estonia	IHD	Number	1973.941074	2746.3558	1219.995778
DALYs	Estonia	IHD	Percent	0.032475894	0.0396702	0.020828299
Deaths	Finland	IHD	Number	461.2690731	579.12949	298.5305208
Deaths	Finland	IHD	Percent	0.031143335	0.0378899	0.020644571
DALYs	Finland	IHD	Number	6236.753494	7651.3752	4033.911662
DALYs	Finland	IHD	Percent	0.032378151	0.0390878	0.021427131
Deaths	France	IHD	Number	2080.317298	2623.9535	1343.88504
Deaths	France	IHD	Percent	0.030454171	0.0371388	0.019591853
DALYs	France	IHD	Number	29434.21628	36165.681	19586.67168
DALYs	France	IHD	Percent	0.032820646	0.0398274	0.02159907
Deaths	Germany	IHD	Number	5743.521057	7291.7338	3409.157808

Deaths	Germany	IHD	Percent	0.031165043	0.038617	0.018122945
DALYs	Germany	IHD	Number	82093.50484	102364.24	48939.07269
DALYs	Germany	IHD	Percent	0.033136776	0.0408149	0.019719222
Deaths	Greece	IHD	Number	853.762466	1102.513	460.1695887
Deaths	Greece	IHD	Percent	0.032666999	0.0410719	0.017469858
DALYs	Greece	IHD	Number	13449.97754	17174.566	7258.99475
DALYs	Greece	IHD	Percent	0.035760582	0.0451939	0.019492056
Deaths	Hungary	IHD	Number	1093.964282	1456.0311	627.3782934
Deaths	Hungary	IHD	Percent	0.030450638	0.0377196	0.017836199
DALYs	Hungary	IHD	Number	17964.37875	24036.196	10869.46325
DALYs	Hungary	IHD	Percent	0.032696187	0.0400274	0.019251964
Deaths	Ireland	IHD	Number	164.431719	201.24495	111.8789211
Deaths	Ireland	IHD	Percent	0.028305561	0.03383	0.019573346
DALYs	Ireland	IHD	Number	2668.622144	3237.0209	1834.105173
DALYs	Ireland	IHD	Percent	0.030459164	0.0364045	0.020862657
Deaths	Italy	IHD	Number	3295.334939	4200.0593	1923.490444
Deaths	Italy	IHD	Percent	0.032588899	0.0400295	0.018990611
DALYs	Italy	IHD	Number	44831.33712	56385.501	26458.05753
DALYs	Italy	IHD	Percent	0.034603938	0.0423231	0.019862835
Deaths	Latvia	IHD	Number	264.217577	338.64118	182.9779237
Deaths	Latvia	IHD	Percent	0.029301615	0.035746	0.020722789
DALYs	Latvia	IHD	Number	3983.331767	5113.4552	2814.096492
DALYs	Latvia	IHD	Percent	0.029651593	0.0361999	0.021725895
Deaths	Lithuania	IHD	Number	441.1160068	574.4968	289.4837968
Deaths	Lithuania	IHD	Percent	0.030136288	0.0368861	0.020193916
DALYs	Lithuania	IHD	Number	6521.542312	8439.0851	4276.022641
DALYs	Lithuania	IHD	Percent	0.031548722	0.0378967	0.021171598
Deaths	Luxembourg	IHD	Number	18.58453428	23.894799	12.72643269
Deaths	Luxembourg	IHD	Percent	0.030152727	0.0370484	0.020663254
DALYs	Luxembourg	IHD	Number	285.0924472	360.00513	202.1895089
DALYs	Luxembourg	IHD	Percent	0.031975568	0.0389417	0.02286279
Deaths	Malta	IHD	Number	28.30510148	35.73583	18.77427392
Deaths	Malta	IHD	Percent	0.030775569	0.0376191	0.02046419
DALYs	Malta	IHD	Number	437.6603254	545.78217	298.0490558
DALYs	Malta	IHD	Percent	0.032204955	0.0390373	0.021410709
Deaths	Netherlands	IHD	Number	551.5232954	696.98478	330.6096786
Deaths	Netherlands	IHD	Percent	0.031270792	0.0387402	0.019517078
DALYs	Netherlands	IHD	Number	8789.142142	11052.896	5346.805708
DALYs	Netherlands	IHD	Percent	0.033485625	0.0412616	0.020484887
Deaths	Poland	IHD	Number	3130.251229	4041.2981	1994.721434
Deaths	Poland	IHD	Percent	0.032204642	0.0387829	0.020595465
DALYs	Poland	IHD	Number	49844.0342	63862.738	31519.64638

DALYs	Poland	IHD	Percent	0.033966681	0.0406709	0.022059414
Deaths	Portugal	IHD	Number	415.4250816	532.34169	249.1351845
Deaths	Portugal	IHD	Percent	0.031981749	0.0396913	0.019546189
DALYs	Portugal	IHD	Number	6257.695115	7784.5896	3898.052644
DALYs	Portugal	IHD	Percent	0.034025527	0.0417473	0.021054217
Deaths	Romania	IHD	Number	2245.416125	3079.3317	1143.642206
Deaths	Romania	IHD	Percent	0.032172308	0.0413238	0.015936635
DALYs	Romania	IHD	Number	37577.25764	52048.107	18313.86317
DALYs	Romania	IHD	Percent	0.034664178	0.0446263	0.016381108
Deaths	Slovakia	IHD	Number	557.0404795	773.91698	299.9310663
Deaths	Slovakia	IHD	Percent	0.031339936	0.0390865	0.017259338
DALYs	Slovakia	IHD	Number	9226.483516	13052.46	4803.130523
DALYs	Slovakia	IHD	Percent	0.03349947	0.0420878	0.017769569
Deaths	Slovenia	IHD	Number	90.15901131	122.40337	56.44058846
Deaths	Slovenia	IHD	Percent	0.030275353	0.0368387	0.020570845
DALYs	Slovenia	IHD	Number	1416.253816	1898.146	893.1799728
DALYs	Slovenia	IHD	Percent	0.032096828	0.0387602	0.021846135
Deaths	Spain	IHD	Number	1674.083607	2098.7313	1085.630173
Deaths	Spain	IHD	Percent	0.031231866	0.0381574	0.020358518
DALYs	Spain	IHD	Number	25010.09388	30492.102	16257.21689
DALYs	Spain	IHD	Percent	0.033697139	0.0407068	0.022196308
Deaths	Sweden	IHD	Number	593.0804453	745.36456	379.0769757
Deaths	Sweden	IHD	Percent	0.031265886	0.0388281	0.020349735
DALYs	Sweden	IHD	Number	7892.767238	9726.668	5288.981331
DALYs	Sweden	IHD	Percent	0.031545778	0.038614	0.021454633