Following a request from the European Commission, the Panel on Dietetic Products, Nutrition and Allergies was asked to deliver a scientific opinion on the Tolerable Upper Intake Level (UL) of the n-3 LCPUFAs eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA) and docosapentaenoic acid (DPA). Available data are insufficient to establish a UL for n-3 LCPUFA (individually or combined) for any population group. At observed intake levels, consumption of n-3 LCPUFA has not been associated with adverse effects in healthy children or adults. Long-term supplemental intakes of EPA and DHA combined up to about 5 g/day do not appear to increase the risk of spontaneous bleeding episodes or bleeding complications, or affect glucose homeostasis immune function or lipid peroxidation, provided the oxidative stability of the n-3 LCPUFAs is guaranteed. Supplemental intakes of EPA and DHA combined at doses of 2-6 g/day, and of DHA at doses of 2-4 g/day, induce an increase in LDL-cholesterol concentrations of about 3% which may not have an adverse effect on cardiovascular disease risk, whereas EPA at doses up to 4 g/day has no significant effect on LDL cholesterol. Supplemental intakes of EPA and DHA combined at doses up to 5 g/day, and supplemental intakes of EPA alone up to 1.8 g/day, do not raise safety concerns for adults. Dietary recommendations for EPA and DHA based on cardiovascular risk considerations for European adults are between 250 and 500 mg/day. Supplemental intakes of DHA alone up to about 1 g/day do not raise safety concerns for the general population. No data are available for DPA when consumed alone. In the majority of the human studies considered, fish oils, also containing DPA in generally unknown (but relatively low) amounts, were the source of EPA and DHA.