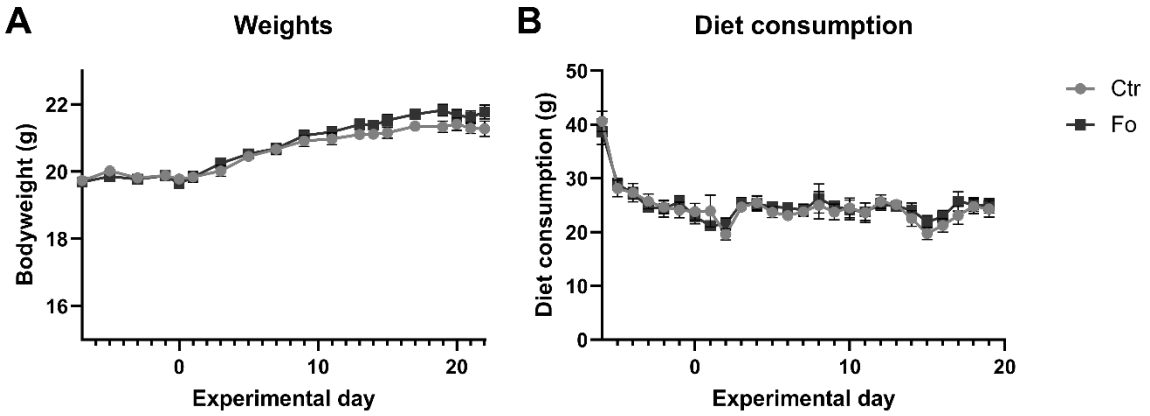
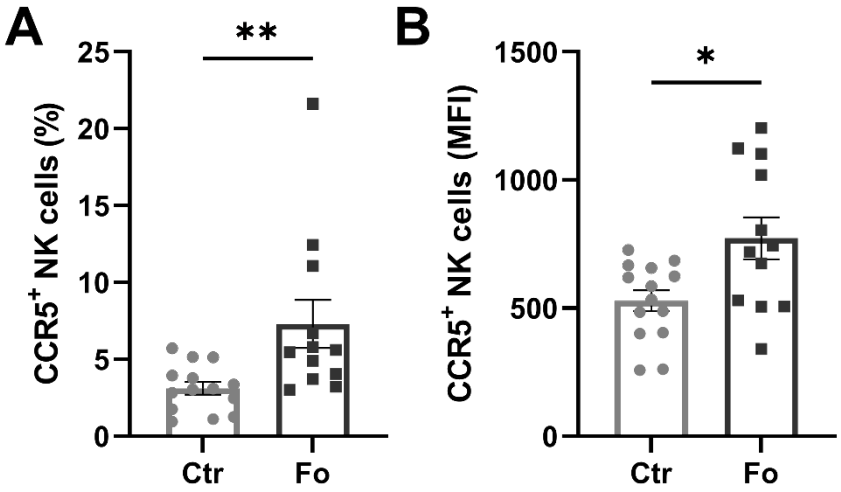
Supplementary figures

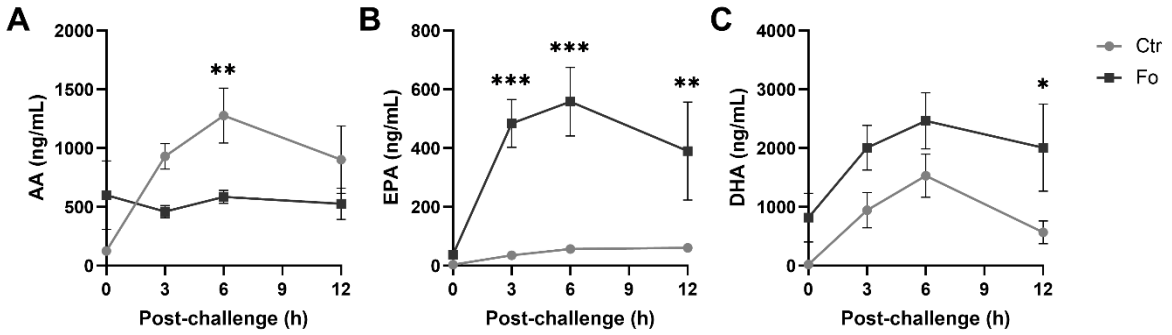


Supplementary figure 1. Mouse weight and diet consumption are similar for mice fed dietary fish oil and control diet. Mice were fed control (Ctr, grey lines with grey circles) or fish oil (Fo, black lines with black squares) diets for 5 weeks, starting at day -7. They were immunized with mBSA (day 0) and again two weeks later (day 14). On day 21 they were challenged intraperitoneally. Mouse bodyweight (**A**) and diet consumption of Ctr and Fo diet per cage containing 10 mice (**B**) were monitored prior to and until termination of the experiment. n = 60. Results are shown as mean ± standard error of the mean from data collected from at least six independent experiments.



Supplementary figure 2. Dietary fish oil enhances the proportion of NK cells expressing CCR5 and mean expression levels of CCR5 on NK cells 6 h following inflammation induction. Mice were fed control (Ctr, grey circles) or fish oil (Fo, black squares) diets for 5 weeks. They were immunized twice with mBSA with a two-week interval and subsequently challenged intraperitoneally. Peritoneal cells were stained with monoclonal antibodies against NK1.1, CD3, CD49b (DX5), and CCR5. NK cells were identified as $CD3^{-}NK1.1^{+}CD49b\ (DX5)^{+}$ lymphocytes and percentage of $CCR5^{+}$ NK cells (**A**) and mean

fluorescence intensity (MFI) of CCR5 on NK cells (**B**) were determined by flow cytometry. n = 12-14. Results are shown as mean ± standard error of the mean from data collected from at least two independent experiments.



Supplementary figure 3. Dietary fish oil decreases peritoneal concentration of AA whilst increasing concentrations of EPA and DHA. Mice were fed control (Ctr, grey lines with grey circles) or fish oil (Fo, black lines with black squares) diets for 5 weeks. They were immunized twice with mBSA with a two-week interval and subsequently challenged intraperitoneally. Peritoneal concentrations of AA (**A**), EPA (**B**), and DHA (**C**) were determined by tandem LC-MS/MS at 0, 3, 6, and 12 h following inflammation induction. *p < 0.05, **p < 0.01, ***p < 0.001, n = 6. Results are shown as mean ± standard error of the mean from data collected from at least two independent experiments.