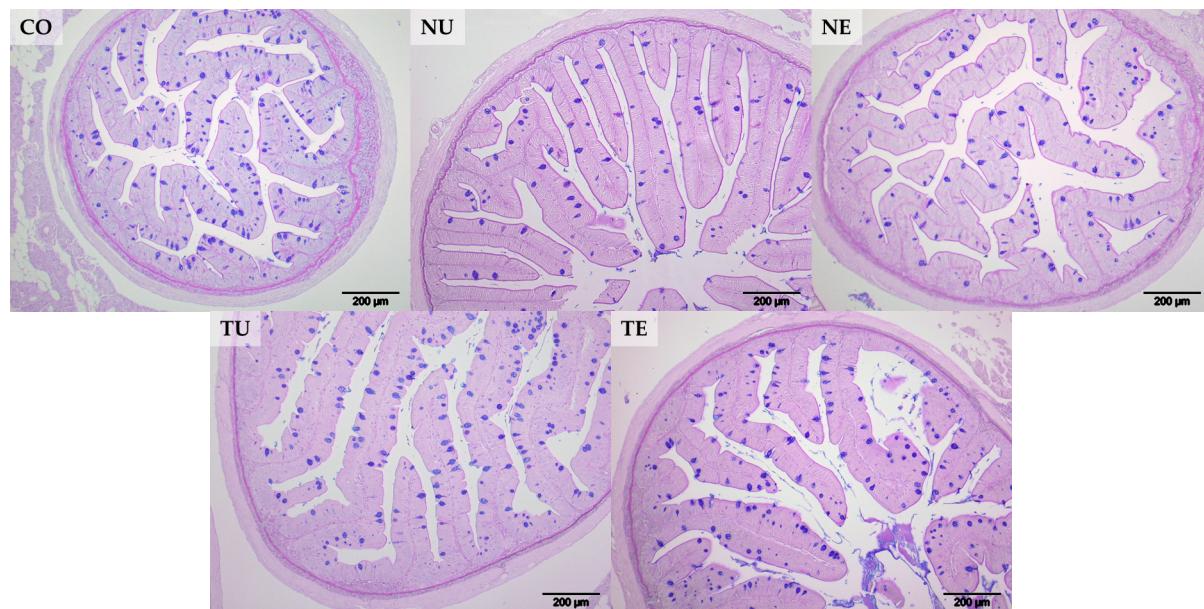
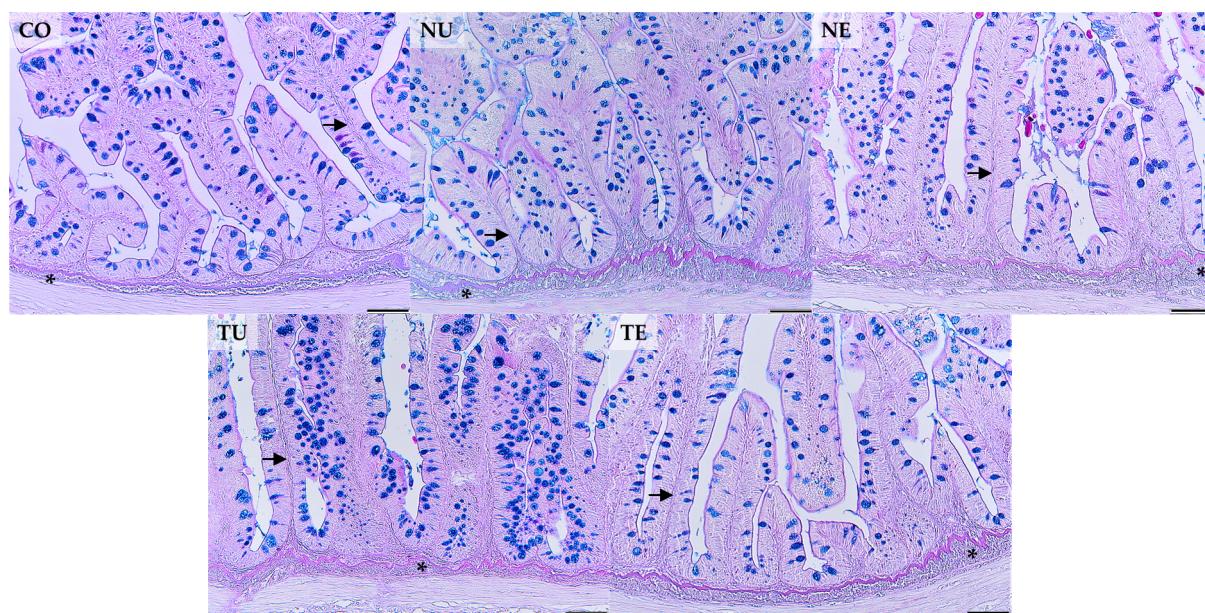


## Supplementary Materials

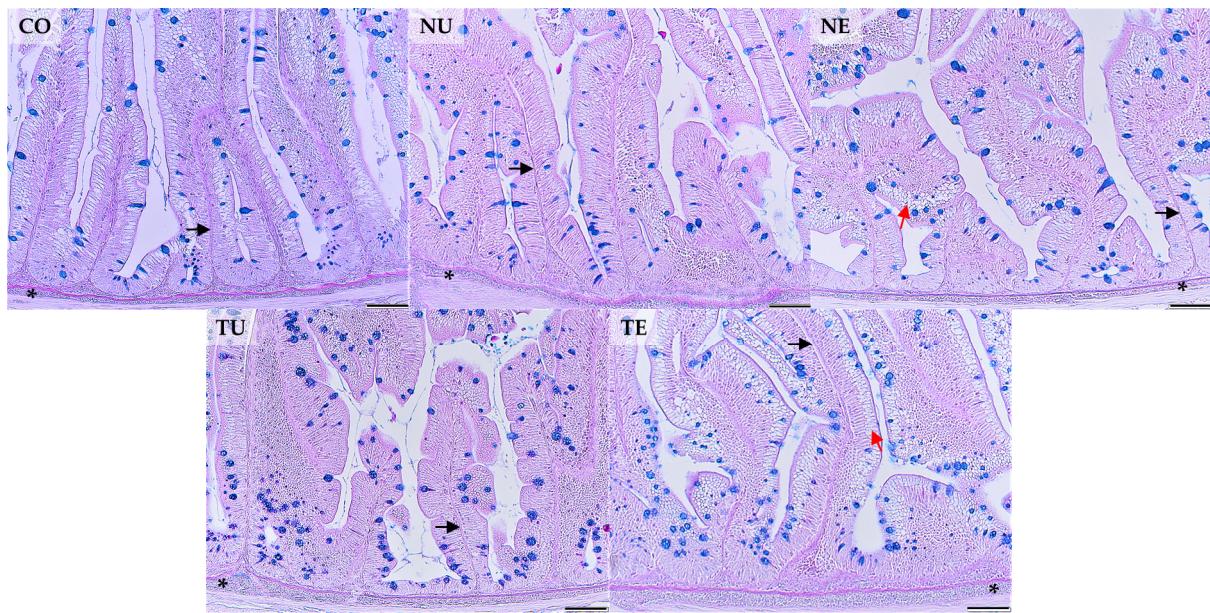
Figures S1, S2, S3 and S4 shows photomicrographs of pyloric caeca, mid intestine, distal intestine, and liver, respectively, of Atlantic salmon fed control feed or algae-containing diets.



**Figure S1.** Comparison of the photomicrographs of the pyloric caeca from Atlantic salmon fed control feed (CO) or algae-containing diets (NU, NE, TU, TE). Scale bar: 200  $\mu\text{m}$ .

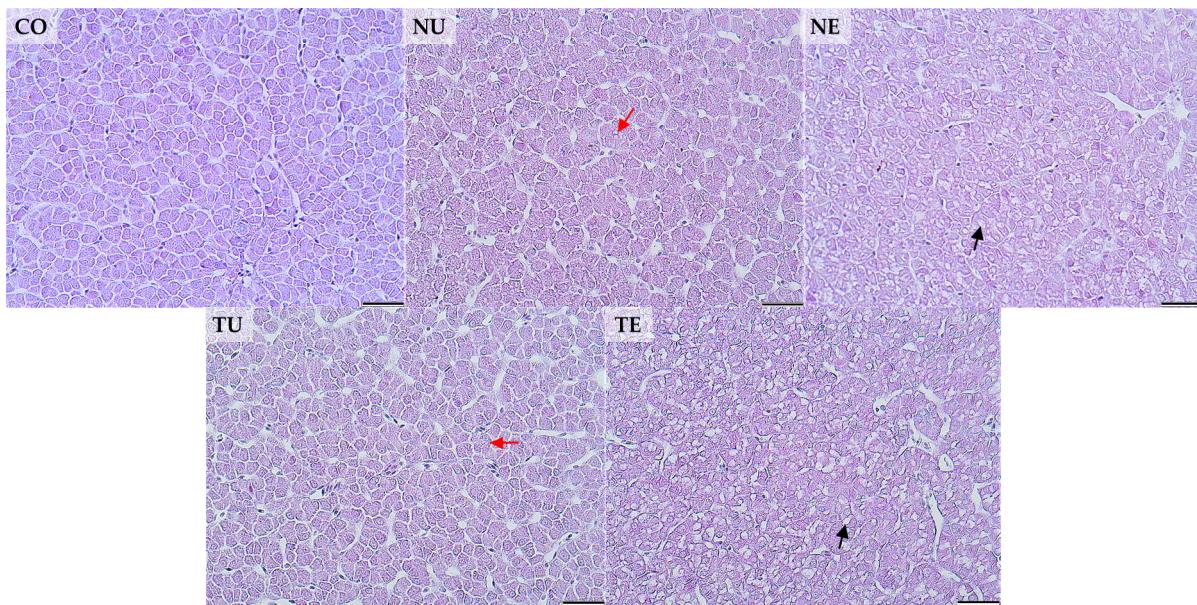


**Figure S2.** Comparison of the photomicrographs of the mid intestine from Atlantic salmon fed control feed (CO) or algae-containing diets (NU, NE, TU, TE). Black arrow: Lamina propria. Asterisk: Stratum granulosum. Scale bar: 100  $\mu\text{m}$ .

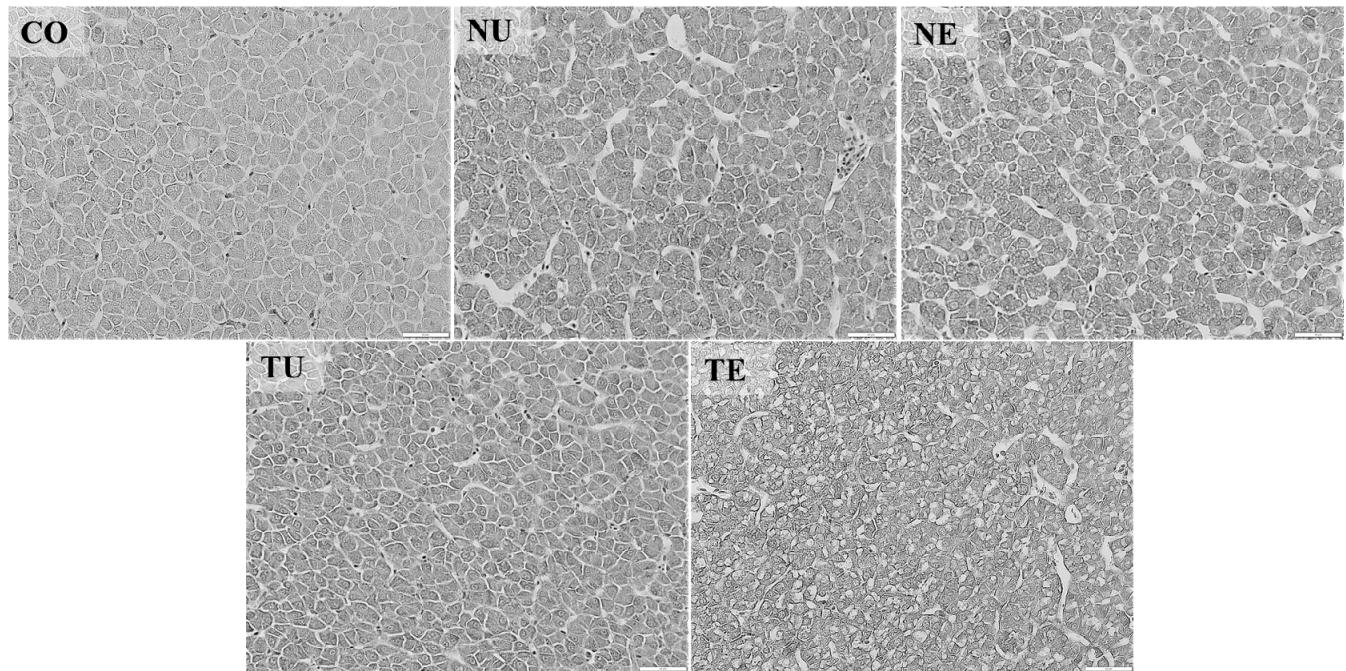


**Figure S3.** Comparison of the photomicrographs of the distal intestine from Atlantic salmon fed control feed (CO) or alga-containing diets (NU, NE, TU, TE). Black arrow: Lamina propria. Asterisk: Stratum granulosum. Red arrow: Supra-nuclear vacuolization. Scale bar: 100  $\mu$ m.

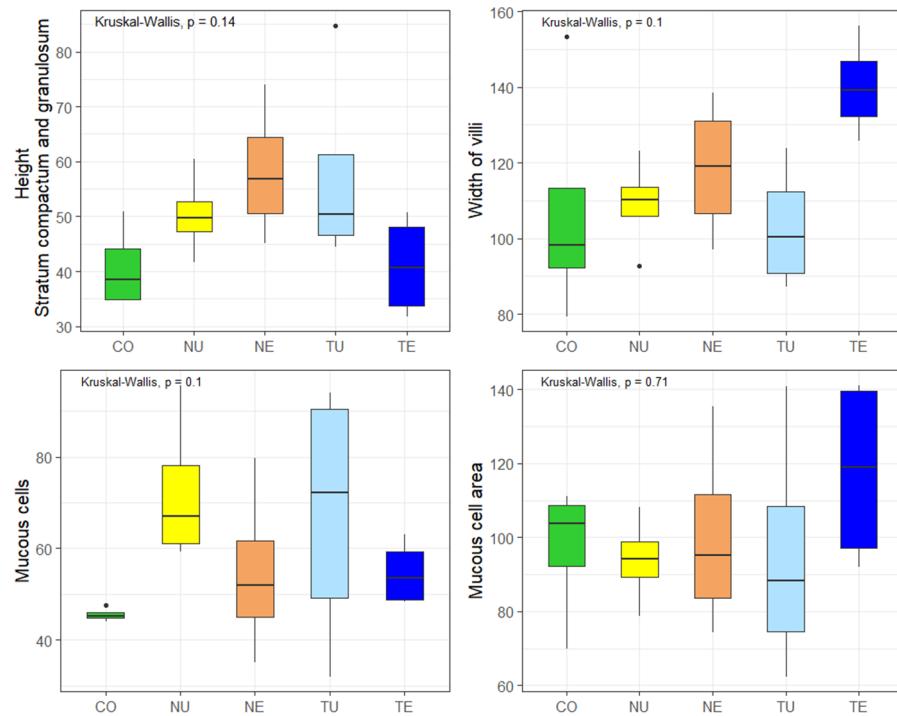
A



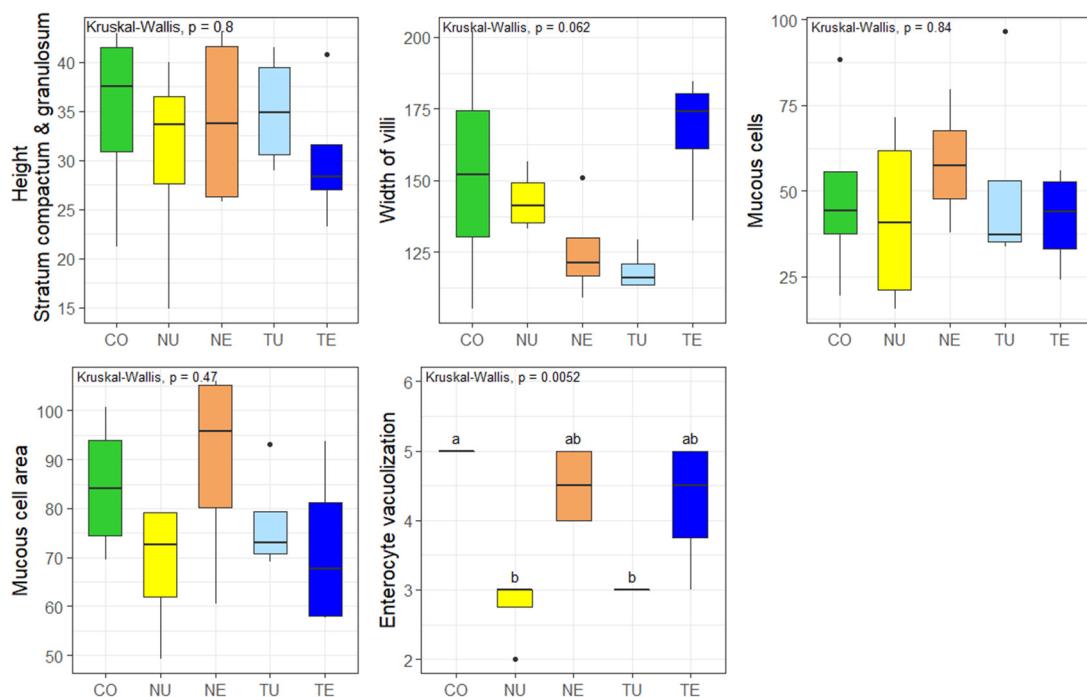
B



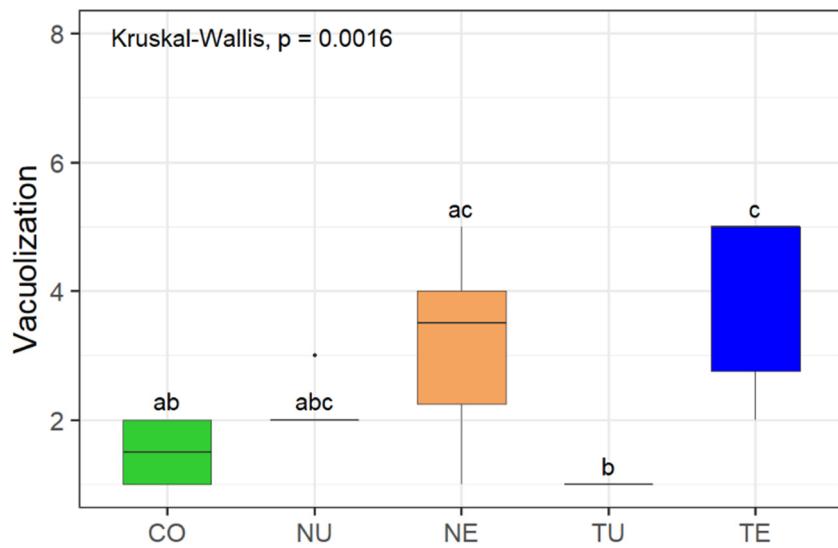
**Figure S4.** Comparison of the photomicrographs of the liver from Atlantic salmon fed control feed (CO) or algae-containing diets (NU, NE, TU, TE). A. Original images. B. Green channel of the original image. Red arrow: Small vacuoles. Black arrow: Large vacuoles. Scale bar: 50  $\mu$ m.



**Figure S5.** Comparison of the histological parameters that were assessed in the mid-intestine of Atlantic salmon fed control feed (CO) or algae-containing diets (NU, NE, TU, TE).



**Figure S6.** Comparison of the histological parameters that were assessed in the distal intestine of Atlantic salmon fed control feed (CO) or algae-containing diets (NU, NE, TU, TE).



**Figure S7.** Comparison of vacuolization in the liver of Atlantic salmon fed control feed (CO) or algae-containing diets (NU, NE, TU, TE).