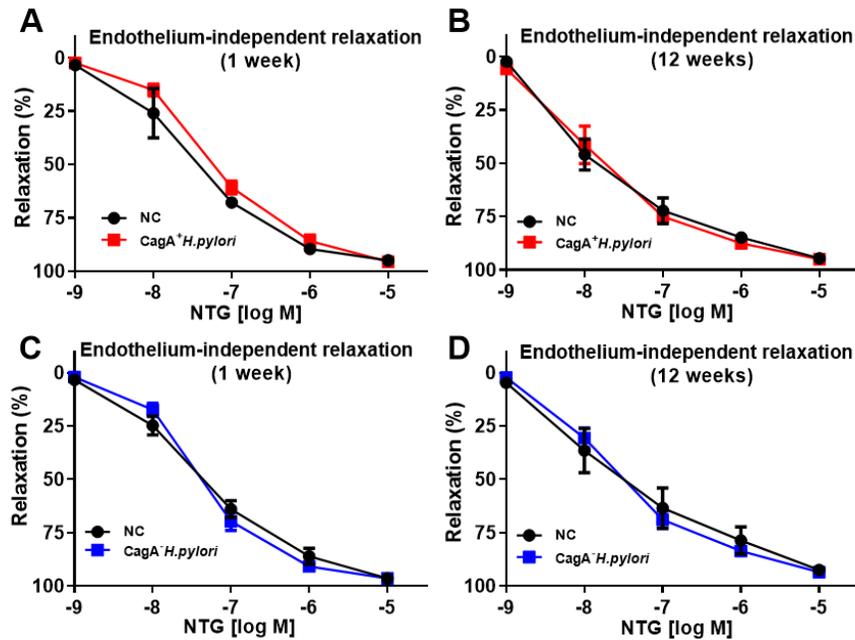
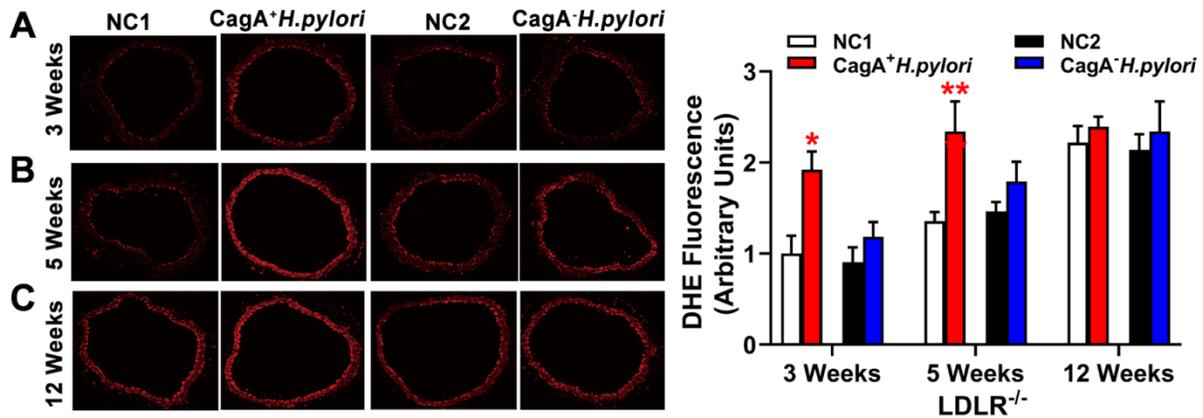


## Supplementary Material

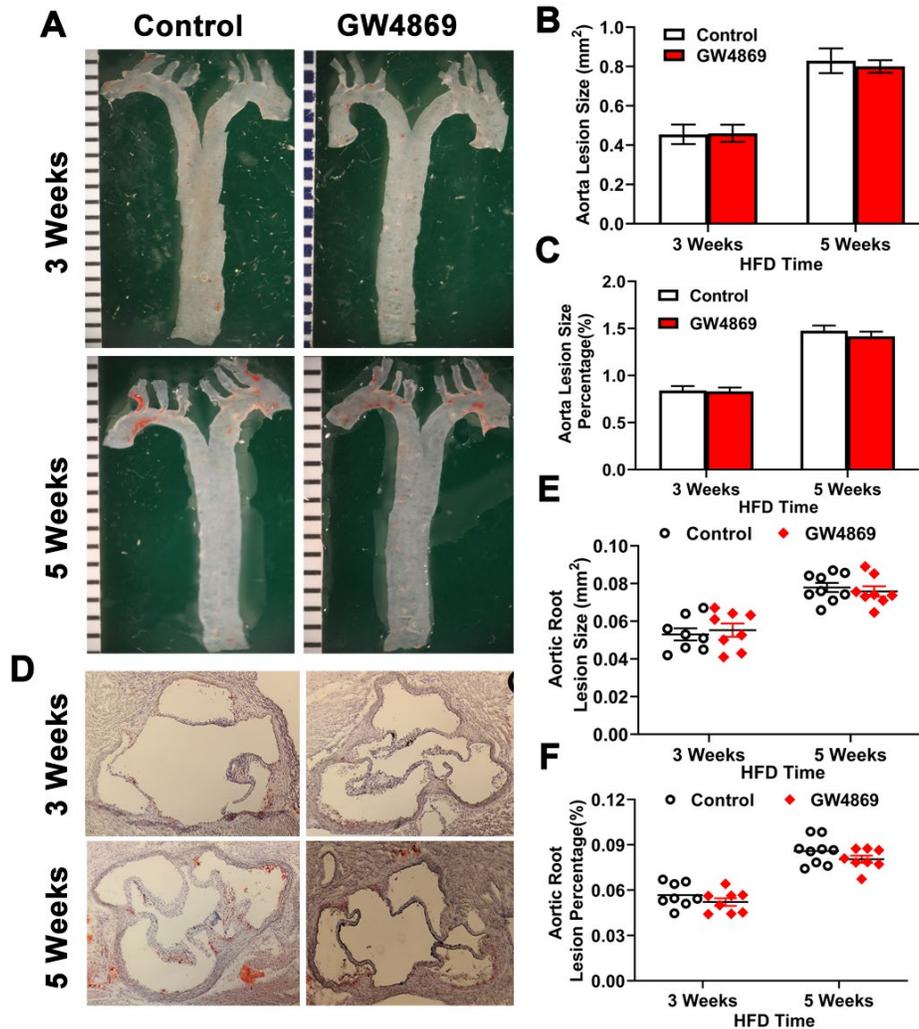
### Supplementary Figures



**Supplementary Figure 1. Infection with *H. pylori* had no effect on endothelium-independent relaxation.** Aortas from mice with one week or 12 weeks of CagA<sup>+</sup> *H. pylori* infection exhibited no change in nitroglycerin (NTG)-induced endothelium-independent relaxation responses compared with control (A, B). Similarly, there was no change in NTG-induced endothelium-independent relaxation of aortas from mice with one week or 12 weeks of infection with CagA<sup>-</sup> *H. pylori* compared with control (C, D). NC(1/2): normal control; NTG: nitroglycerin. Data are presented as mean±SEM, N=8-10 mice for each group at each time point.



**Supplementary Figure 2. CagA<sup>+</sup> *H. pylori*, not CagA<sup>-</sup> *H. pylori* infection, increased ROS production in LDLR<sup>-/-</sup> mice.** Representative fluorescent images and quantification of ROS formation in the aorta of male LDLR<sup>-/-</sup> mice with CagA<sup>+</sup> *H. pylori*, CagA<sup>-</sup> *H. pylori* or PBS gavage. CagA<sup>+</sup> *H. pylori*, not CagA<sup>-</sup> *H. pylori* infection significantly increased aortic ROS production in LDLR<sup>-/-</sup> mice with three or five weeks of HFD compared with their controls (A, B). There was no significant difference in aortic ROS production in LDLR<sup>-/-</sup> mice with CagA<sup>+</sup> *H. pylori* infection, or with CagA<sup>-</sup> *H. pylori* infection after 12 weeks of HFD (C). NC(1/2): normal control. Data are presented as mean±SEM; \**P* < 0.05, \*\**P* < 0.01 by t-test, *N*=8-10 mice for each group at each time point.



**Supplementary Figure 3. Treatment with GW4869 had no effect on atherosclerosis in mice without *H. pylori* infection.** After 3 or 5 weeks of high-fat diet (HFD), treatment of LDLR<sup>-/-</sup> mice with GW4869 had no effect on early atherosclerotic plaque formation in the aorta (A-C) and aortic root (D-F) compared with control mice. Control: LDLR<sup>-/-</sup> mice without *H. pylori* infection on HFD without GW4869 treatment; GW4869: LDLR<sup>-/-</sup> mice without *H. pylori* infection on HFD treated with GW4869. Data are presented as mean ± SEM. N=8-10 mice for each group at each time point.