Supplementary Figure 1. Fluorescein angiography demonstrates retinal vascular leakage in animals exposed to high-fat diet (HFD). Sodium fluorescein (5mg/kg) was introduced intravenously. Two minutes after injection, live retinal images were captured using a fundus camera. Shown are initial angiographic frames from chow-fed animals at 6 months of age (A), chow-fed animals at 12 months of age (B), HFD animals at 6 months of age (C), and HFD-animals at 12 months of age (D). Fine capillaries are visible in both chow-fed groups and in the 6-month-old HFD-fed group, indicating intact retinal endothelial function. However, angiograms from 12-month-old HFD animals demonstrate diffuse leakage of dye, with resulting loss of capillary detail.
**Supplementary Figure 2.** Retinal microglial activation is induced by exposure to high-fat diet (HFD). Retinal sections from 12-month-old chow-fed (A and B) or age-matched HFD-fed animals (C and D) were stained with immunofluorescence against Iba1, a microglia-specific marker. In control animals, only sparse signal is recorded in central (A) or peripheral retina (B). Staining was strongest in the inner plexiform layer, where fine, elaborate processes can be seen (arrowheads). In contrast, retinas from HFD-fed animals showed increased Iba1 immunoreactivity in the central (C) and peripheral (D) retina. Compared to controls, thicker more retracted microglial processes are visible in the HFD group (arrows). OPL, outer plexiform layer; INL, inner nuclear layer; IPL, inner plexiform layer; RGCL, retinal ganglion cell layer. Scale bar represents 10 microns.