

1            **SUPPLEMENTARY FIGURE 1: BF and HF fecal bacteria communities profile before**  
2 **and after dietary fiber supplementation with cellulose.** Fecal bacteria communities were  
3 profiled using high depth sequencing of amplicons of 16S rRNA. Prior to dietary modification all  
4 animals contained similar gut bacterial communities. After 2 weeks on different diets we observed  
5 a shift in the composition of the intestinal microbiota in HF-fed mice characterized by a decline in  
6 the relative abundance of a family of Bacteroidales, *Lactobacillus* and Clostridiales and by a  
7 significant increase in *Akkermansia* and Lachnospiraceae members. LEfSe was used to identify  
8 biomarkers ( $P \leq 0.05$ ) for either the initial, BF and HF sample groups. Taxa displayed here are  
9 those with high relative abundance across sample groups ( $> 0.01$ ).

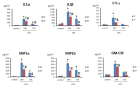


Fig. 1