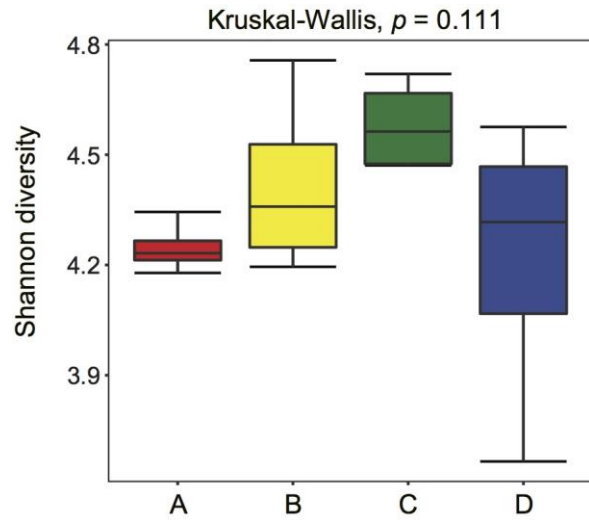


**Supplementary Table 1.** General situation of patients in each group (M ± SD, N (%))

	NE group	NS group	RS group	<i>P</i> -value
Gender (male)	56 (59.57)	170 (59.44)	74 (61.16)	0.95
Age (years)	68.81 ± 9.39	68.58 ± 9.85	68.38 ± 10.46	0.95
Smoking	44 (46.81)	141 (49.30)	51 (42.15)	0.42
Control diet	84 (89.36)	261 (91.26)	111 (91.74)	0.81
History of hypertension	52 (55.32)	149 (52.10)	59 (48.76)	0.77
History of diabetes	48 (51.06)	170 (59.44)	69 (57.02)	0.36
Atorvastatin	55 (58.51)	172 (60.14)	70 (57.85)	0.90
Resting heart rate (bpm)	71.93 ± 4.51	72.80 ± 4.26	72.41 ± 4.11	0.21
Exercise heart rate (bpm)	/	77.76 ± 4.97	89.62 ± 5.68	< 0.01

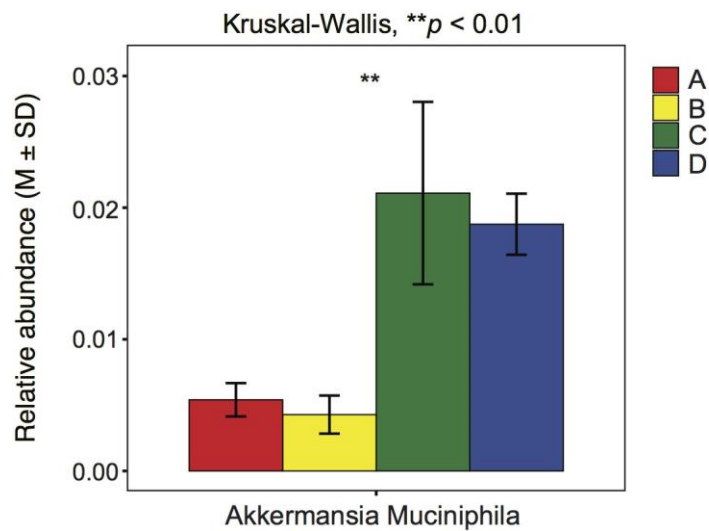
Note: NE:no exercise group;NS:not reached the exercise standard group ;RS:reached the exercise standard group.

**Supplementary Figure 1. Shannon index ( $\alpha$ -diversity) for the different groups of rats.**



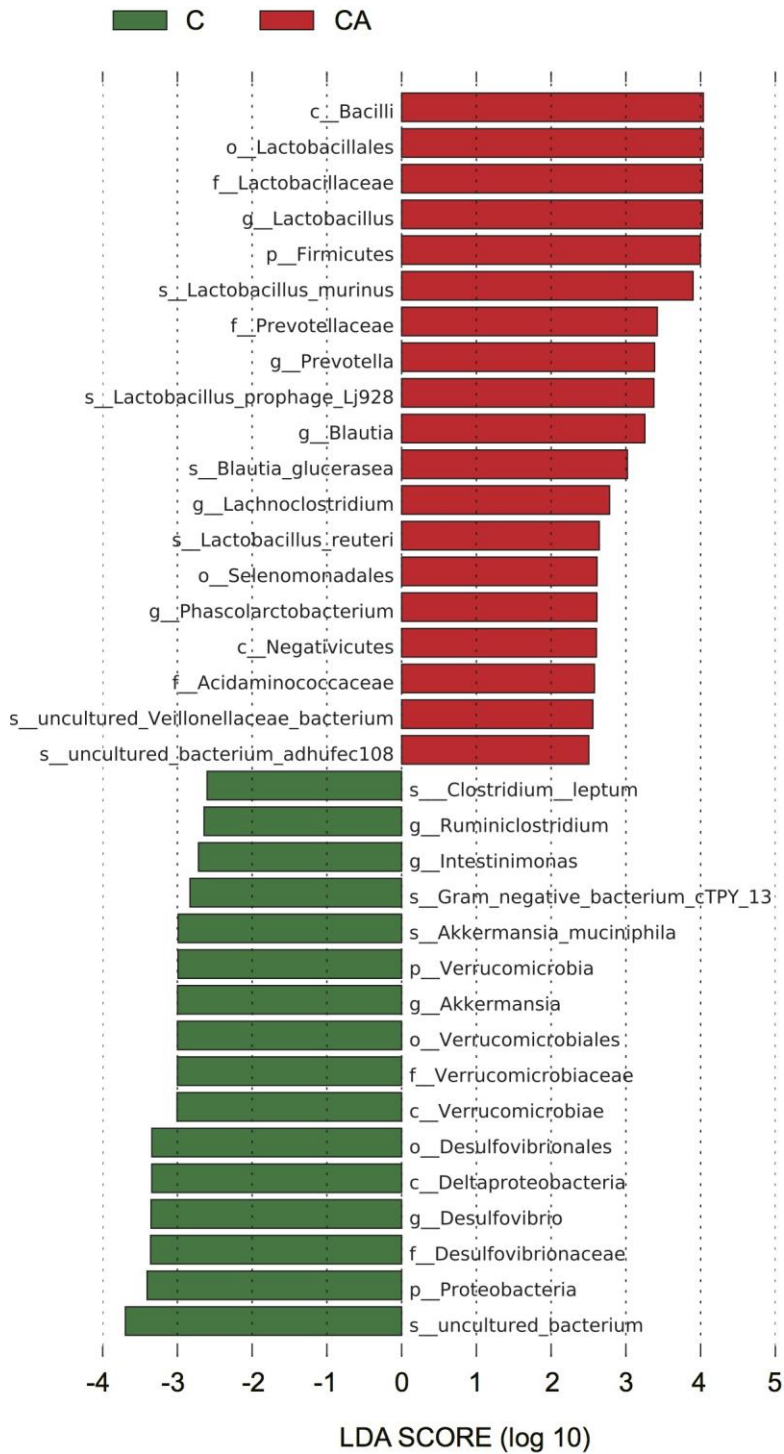
Note: A:Control group;B:Statins group;C: Exercise and statins group;D:Exercise group

**Supplementary Figure 2. Relative abundance of *Akkermansia muciniphila* in the intestinal flora of the four groups of rats after 5 weeks of statin treatment.**



Note: A:Control group;B:Statins group;C: Exercise and statins group;D:Exercise group

**Supplementary Figure 3. LEfSe analysis of the intestinal microbiota of rats in the group C before and after stopping exercise for 5 weeks.**



Note: C:Exercise and statins group( group C);CA: group C stopping exercise for 5 weeks