

1 **Gut microbiota can transfer fiber characteristics and lipid metabolic profile of**  
2 **skeletal muscle from pigs to germ free mice**

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## Supporting information

Table S1 Raw reads, sequences and OTUs among four groups

Group	Raw reads	High quality sequences	OTUs
YP	289739	281318	1224
RP	294033	287930	1381
YM	5521883	5138823	3138
RM	5538960	5291622	3382

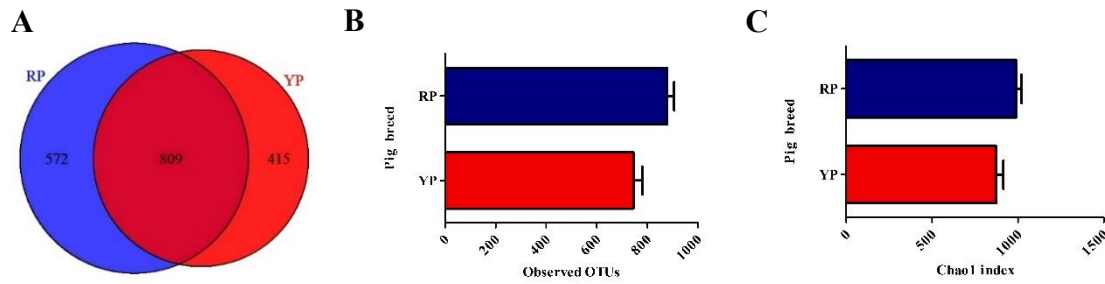
YP, Yorkshire pigs; RP, Rongchang pigs. YM, Yorkshire pig fecal microbiota-associated mice; RM, Rongchang pig fecal microbiota-associated mice; OTUs, operational taxonomic units.

Table S2 Feed ingredients and nutrient content of diet

Ingredients, %	content	Nutrient level <sup>a</sup>	content
Corn	78.20	Digestible energy, Mcal/kg	3.40
Soybean meal	14.60	Crude protein, %	15.74
Soybean oil	1.00	Ca, %	0.52
Fish meal	4.50	Total P, %	0.50
Limestone	0.35	Available P, %	0.32
Dicalcium phosphate	0.27	Digestible lysine, %	0.98
Salt	0.25	Digestible Met, %	0.35
<i>L</i> -Lys HCl	0.34	Digestible Met + Cys, %	0.55
<i>DL</i> -Met	0.10	Digestible Thr, %	0.59
Thr (98.5%)	0.07	Digestible Trp, %	0.17
Trp(98.00%)	0.02		
Chloride choline	0.05		
Vitamin and mineral premix <sup>b</sup>	0.20		

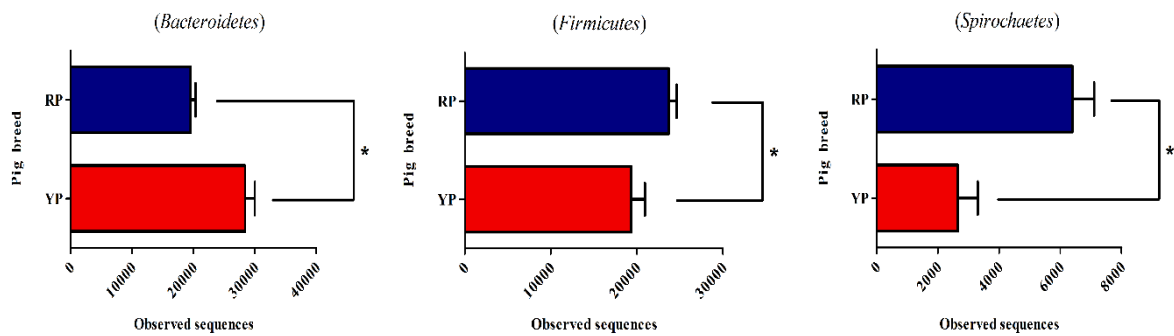
<sup>a</sup> All data were calculated values.

<sup>b</sup> Provided the following (mg/kg diet): Fe, 120 mg; Cu, 17 mg; Zn, 120 mg; Mn, 25 mg; Se, 0.20 mg; I, 0.30 mg; vitamin A, 5512 IU; vitamin D<sub>3</sub>, 2250 IU; vitamin E, 24 IU; vitamin K<sub>3</sub>, 3 IU; vitamin B<sub>12</sub>, 0.02 mg; folic acid, 1.20 mg; riboflavin, 6 mg; nicotinic acid, 20 mg; pantothenic acid, 15 mg; biotin, 0.15 mg.

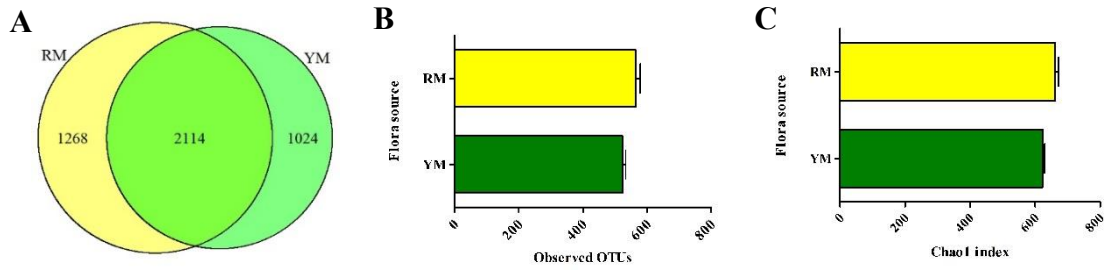


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33 Fig. S1 comparison of the OTUs in the two pig breed. The number of observed OTUs sharing  $\geq 97\%$   
 34 sequence similarity. (A) A Venn diagram was generated to describe the common and unique OTUs  
 35 between the two pig breed. (B) From the numbers of OTUs in the two pig breed, there was no  
 36 difference between YP and RP. (C) The bacterial abundance is reflected in Chao1 index; there was  
 37 no difference in Chao1 between pig breeds. YP, Yorkshire pigs; RP, Rongchang pigs.

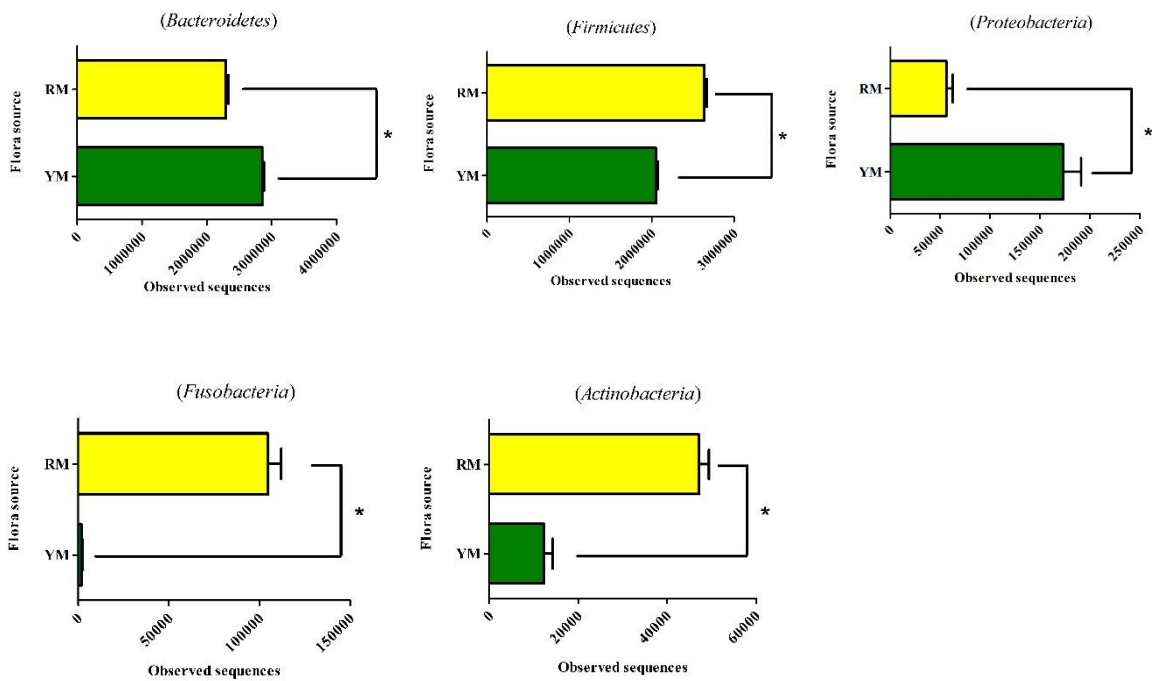


38 Fig. S2 The bacterial abundances of 3 distinct phyla significantly differ between the two pig breeds.  
 39 YP, Yorkshire pigs; RP, Rongchang pigs. \*  $P < 0.05$ .



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41 Figure S3. comparison of the OTUs between YP flora-associated mice (YM) and RP flora-associated mice (RM). The number of observed OTUs sharing  $\geq 97\%$  sequence similarity. (A) A Venn diagram was generated to describe the common and unique OTUs between YM and RM. (B) From the numbers of OTUs in the two groups, there was no difference between YM and RM. (C) The bacterial abundance is reflected in Chao1 index; there was no difference in Chao1 between mice recipients.



47 Figure S4. The bacterial abundances of 5 distinct phyla significantly differ between mice recipients.

48 YM, YP flora-associated mice; RM, RP flora-associated mice. \*  $P < 0.05$ .

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