

**Supplemental Table 1.** Bacterial phyla correlated by Pearson's correlation to gestation stage and DF level.

	Stage		DF	
	Coefficient	P-value	Coefficient	P-value
Firmicutes	-0.691	<0.01	-0.017	0.890
Bacteroidetes	0.681	<0.01	0.031	0.795
Euryarchaeota	0.177	0.137	-0.141	0.236
Proteobacteria	0.450	<0.01	0.153	0.200
Spirochaetes	0.242	0.040	-0.264	0.025
Tenericutes	-0.576	<0.01	-0.090	0.454
Cyanobacteria	0.363	<0.01	-0.253	0.032
Actinobacteria	0.458	<0.01	0.157	0.187
Acidobacteria	0.328	<0.01	0.167	0.161
Planctomycetes	0.369	<0.01	-0.103	0.392
Verrucomicrobia	0.227	0.055	0.291	0.013
Fibrobacteres	0.448	<0.01	0.071	0.554
Saccharibacteria	-0.056	0.638	0.034	0.775
Chloroflexi	0.252	0.033	0.155	0.193
Synergistetes	0.417	<0.01	0.130	0.277
Firmicutes/Bacteroidetes	-0.698	<0.01	-0.003	0.983

DF, total dietary fiber, sum of soluble and insoluble fiber.

**Supplemental Table 2.** Bacterial genera correlated by Pearson's correlation to gestation stage and DF level.

Phyla	Genera	Stage		DF	
		Coefficient	P-value	Coefficient	P-value
Firmicutes	<i>Clostridium_sensu_stricto_1</i>	-0.536	<0.01	0.208	0.080
	<i>Streptococcus</i>	0.078	0.516	-0.263	0.026
	<i>Ruminococcaceae_NK4A214_group</i>	-0.493	<0.01	0.010	0.935
	<i>Ruminococcaceae_UCG-002</i>	-0.394	<0.01	-0.017	0.885
	<i>Ruminococcaceae_UCG-005</i>	-0.269	0.023	-0.073	0.542
	<i>Ruminococcaceae_UCG-010</i>	-0.531	<0.01	0.050	0.678
	<i>Ruminococcaceae_UCG-014</i>	-0.484	<0.01	-0.080	0.506
	<i>Turicibacter</i>	-0.559	<0.01	0.063	0.601
	<i>Terrisporobacter</i>	-0.494	<0.01	0.003	0.980
	<i>[Eubacterium]_coprostanoligenes_group</i>	-0.416	<0.01	-0.158	0.184
	<i>Romboutsia</i>	-0.531	<0.01	-0.036	0.763
	<i>Oscillospira</i>	0.346	<0.01	0.228	0.055
	<i>Ruminococcus_1</i>	0.326	<0.01	0.025	0.835
	<i>Sarcina</i>	0.322	<0.01	0.025	0.835
	<i>Anaerotruncus</i>	-0.242	0.041	-0.059	0.625
	<i>Blautia</i>	0.281	0.017	-0.096	0.425
	<i>Ruminiclostridium_6</i>	0.428	<0.01	0.214	0.071
	<i>[Anaerorhabdus]_furcosa_group</i>	-0.574	<0.01	0.039	0.745
Bacteroidetes	<i>Subdoligranulum</i>	0.395	<0.01	-0.177	0.136
	<i>Quinella</i>	0.412	<0.01	0.182	0.126
	<i>Oscillibacter</i>	-0.429	<0.01	-0.034	0.778
	<i>Prevotellaceae_NK3B31_group</i>	0.584	<0.01	-0.250	0.034
	<i>Prevotellaceae_UCG-001</i>	0.08	0.502	0.252	0.033
	<i>Prevotella_1</i>	0.488	<0.01	-0.303	0.010
	<i>Prevotella_9</i>	0.508	<0.01	-0.293	0.013
	<i>Prevotellaceae_UCG-003</i>	0.546	<0.01	-0.123	0.303
Proteobacteria	<i>Parabacteroides</i>	0.489	<0.01	0.008	0.949
	<i>Alloprevotella</i>	0.654	<0.01	-0.012	0.919
	<i>Desulfovibrio</i>	0.441	<0.01	0.097	0.417
	<i>Succinivibrio</i>	0.408	<0.01	-0.307	<0.01
Fibrobacteres	<i>Escherichia-Shigella</i>	0.411	<0.01	-0.001	0.995
	<i>Fibrobacter</i>	0.448	<0.01	0.066	0.584
Actinobacteria	<i>Bifidobacterium</i>	0.344	<0.01	-0.011	0.926

DF, total dietary fiber, sum of soluble and insoluble fiber.