

Supplementary Information

Developmental differences in the Intestinal Microbiota of Chinese 1-year-old Infants and 4-year-old children

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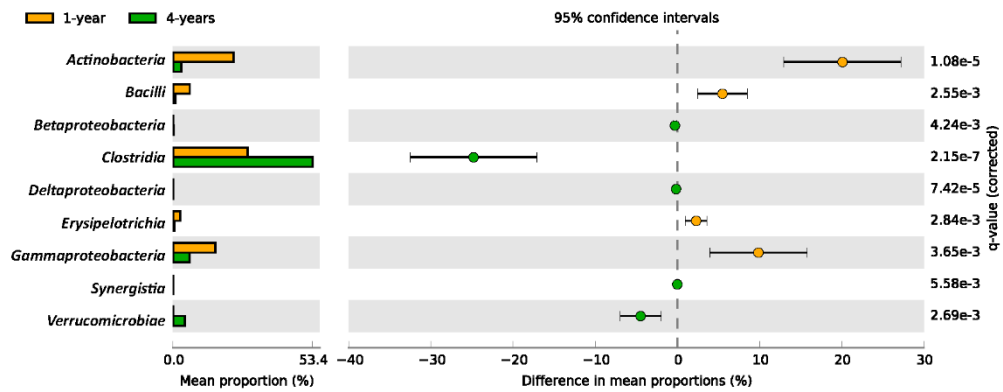


Figure S1. Significant difference of gut microbiota between 1-year and 4-years old children at class level.

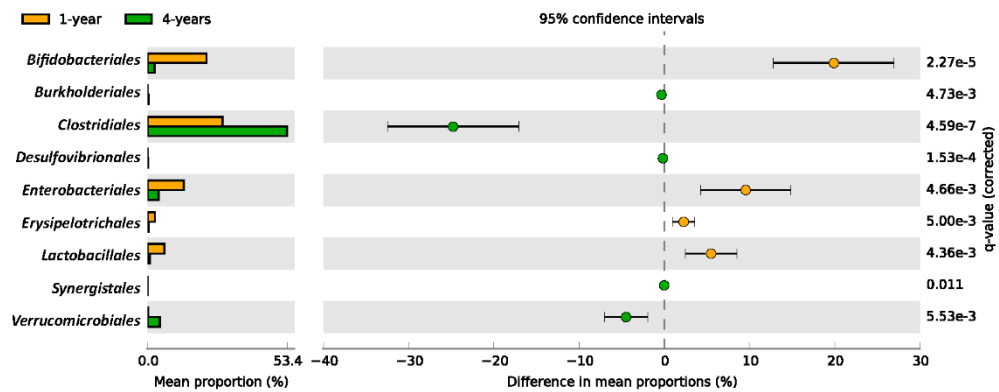


Figure S2. Significant difference of gut microbiota between 1-year and 4-years old children at order level.

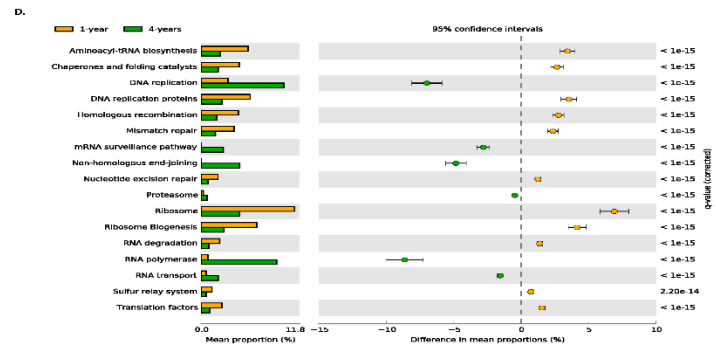
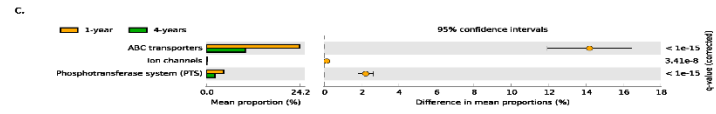
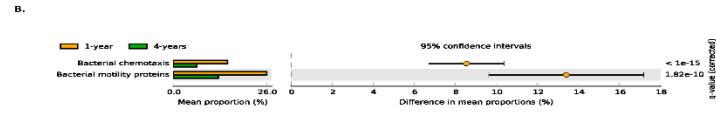
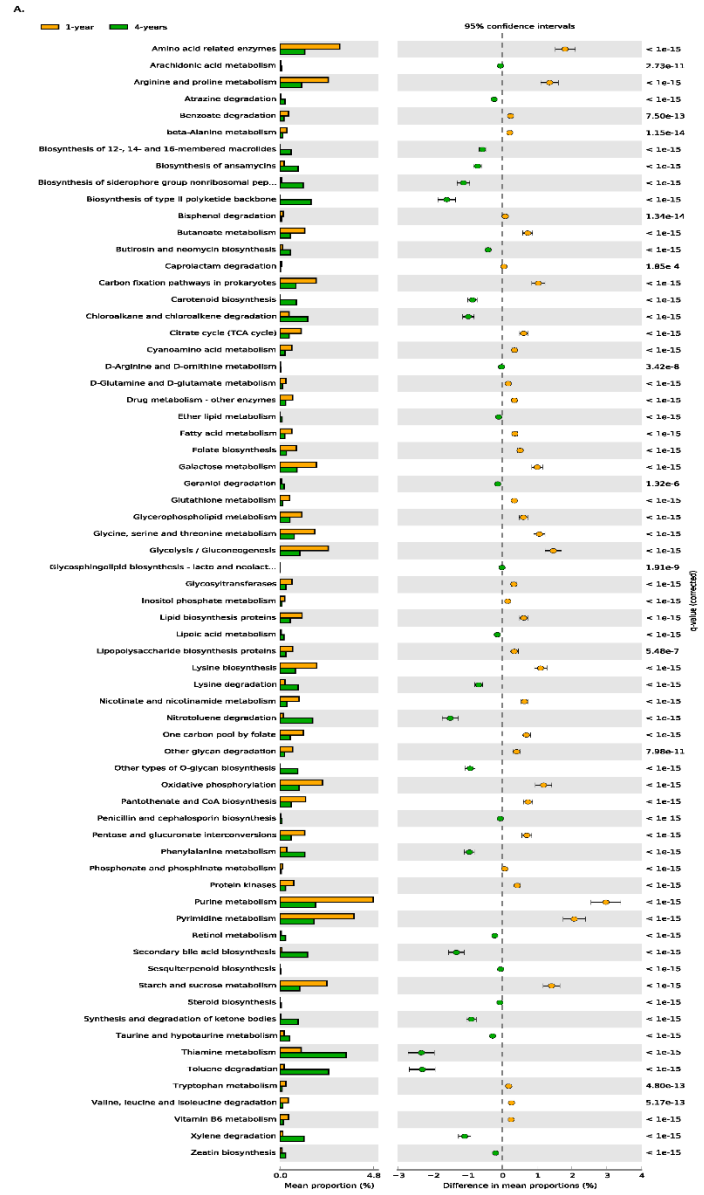


Figure S3: Significantly different pathways based on PICRUSt prediction. A: metabolism, B: Cellular Processes, C: Environmental Information Processing, D: Genetic Information Processing.

Table S1. Dominant species and significant differences between 1-year old and 4-years old children.

species	taxonomy	1-year: mean rel. freq. (%)	1-year: std. dev. (%)	4- years: mean rel. freq. (%)	4- years: std. dev. (%)	q- values	enriched in
<i>Akkermansia muciniphila</i>	<i>Verrucomicrobia;Verrucomicrobiae;Verrucomicrobiales;Verrucomicrobiaceae; Akkermansia</i>	0.1365	0.7081	4.2467	12.5290	0.0006	4-years
<i>Bacteroides uniformis</i>	<i>Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides</i>	0.7229	2.1046	2.3728	4.8382	0.0015	4-years
<i>Bacteroides xylanisolvens</i>	<i>Bacteroidetes;Bacteroidia;Bacteroidales;Bacteroidaceae;Bacteroides</i>	0.2455	0.7294	0.9195	2.5747	0.0036	4-years
<i>Bifidobacterium breve</i>	<i>Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium</i>	5.4473	13.5277	0.0833	0.4174	0.0038	1-year
<i>Bifidobacterium longum</i>	<i>Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium</i>	8.7024	13.6215	0.7241	1.8352	0.0006	1-year
<i>Bifidobacterium pseudocatenulatum</i>	<i>Actinobacteria;Actinobacteria;Bifidobacteriales;Bifidobacteriaceae;Bifidobacterium</i>	3.6506	7.2775	1.1687	2.8872	0.0084	1-year
<i>Blautia wexlerae</i>	<i>Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;Blautia</i>	2.7893	3.5496	1.1586	1.6920	0.0024	1-year
<i>Dialister invisus</i>	<i>Firmicutes;Negativicutes;Selenomonadales;Veillonellaceae;Dialister</i>	0.4723	2.8018	4.3975	10.1129	0.0004	4-years
<i>Escherichia coli</i>	<i>Proteobacteria;Gammaproteobacteria;Enterobacteriales;Enterobacteriaceae;Escherichia/Shigella</i>	11.8918	14.1779	3.8256	10.3291	0.0010	1-year
<i>Faecalibacterium</i>	<i>Firmicutes;Clostridia;Clostridiales;Ruminococcaceae;Faecalibacterium</i>	2.4346	4.7598	9.3919	12.6895	0.0000	4-years

<i>prausnitzii</i>									
<i>Fusicatenibacter</i>	<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae; Fusicatenibacter</i>	0.8787	1.6513	0.5529	1.0605	0.0425	1-year		
<i>saccharivorans</i>									
<i>Gemmiger formicilis</i>	<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae; Fusicatenibacter</i>	0.3705	1.6513	1.4567	1.0605	0.0038	4-years		
<i>Romboutsia timonensis</i>	<i>Firmicutes; Clostridia; Clostridiales; Peptostreptococcaceae; Romboutsia</i>	1.5681	2.8120	0.3818	1.9485	0.0038	1-year		
<i>Roseburia faecis</i>	<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae; Roseburia</i>	0.2633	1.2861	1.9782	5.0183	0.0007	4-years		
<i>Roseburia</i>	<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae; Roseburia</i>	0.1667	0.6603	1.5116	5.6367	0.0037	4-years		
<i>inulinivorans</i>									
<i>Ruminococcus bromii</i>	<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae; Ruminococcus</i>	0.7746	2.1357	1.7286	5.1271	0.0200	4-years		
<i>Ruminococcus gnavus</i>	<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae; Mediterraneibacter</i>	4.5545	5.7721	2.1977	5.5324	0.0060	1-year		
<i>Streptococcus</i>	<i>Firmicutes; Bacilli; Lactobacillales; Streptococcaceae; Streptococcus</i>	2.9009	5.1649	0.5903	1.0974	0.0024	1-year		
<i>salivarius</i>									
<i>Veillonella dispar</i>	<i>Firmicutes; Negativicutes; Selenomonadales; Veillonellaceae; Veillonella</i>	3.6217	5.0458	0.8911	3.3873	0.0011	1-year		