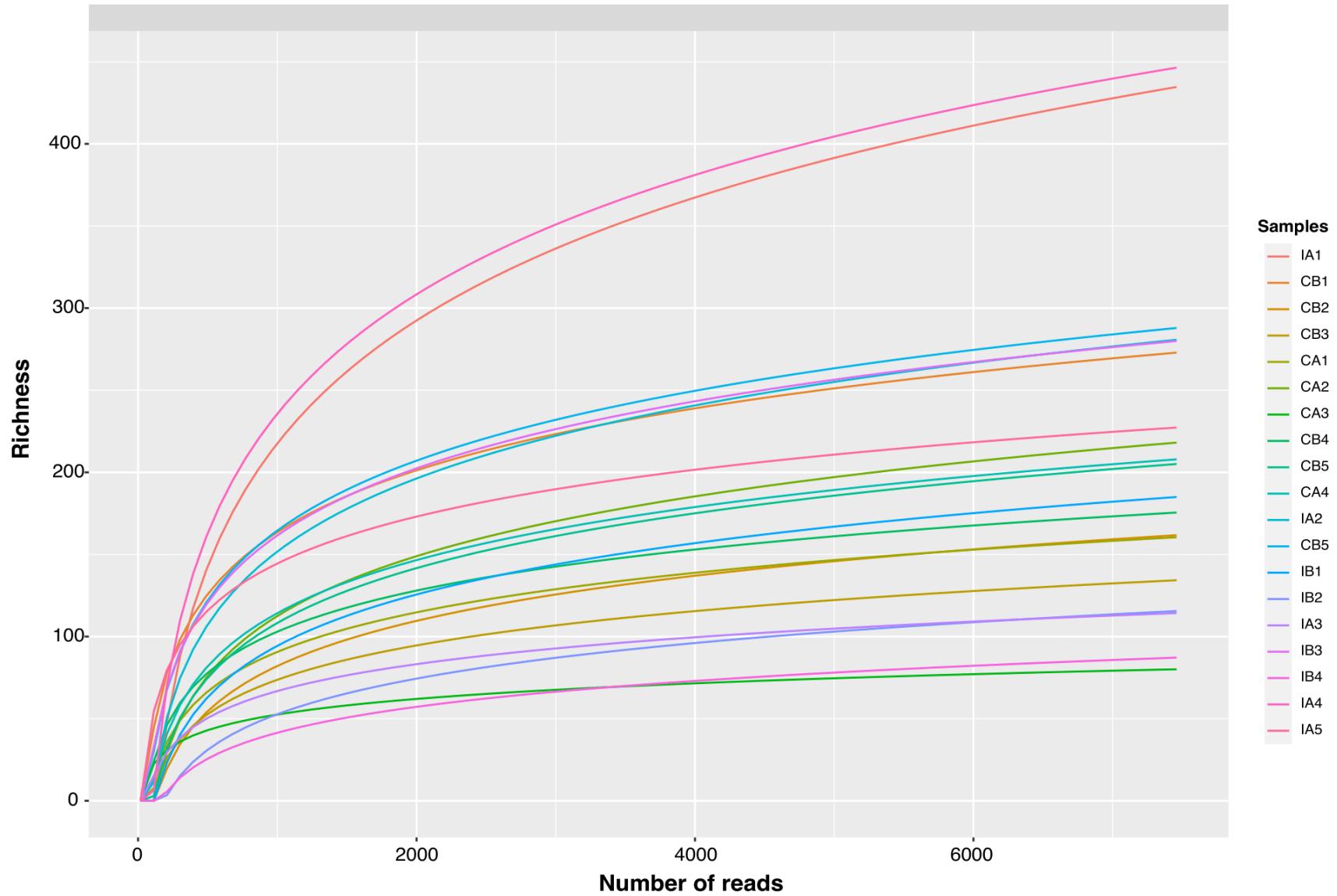


**Figure S1.** Species richness rarefaction curves show sequencing depth of 18S data obtained from fungi from gut samples.



**Figure S2.** Species richness rarefaction curves show sequencing depth of 18S data obtained from protist from gut samples.

**Table S1.** Ooquistes per gram of feces (OPG) in 2-month-old alpacas with and without diarrhea infected with *Eimeria lamae*.

Age	Health Condition	ID	Parasite	Ooquistes per gram of feces (OPG)
2 months	with diarrhea	IB1	<i>E. lamae</i>	15750
		IB2	<i>E. lamae</i>	22450
		IB3	<i>E. lamae</i>	34800
		IB4	<i>E. lamae</i>	12750
	without diarrhea	CB1	<i>E. lamae</i>	0
		CB2	<i>E. lamae</i>	0
		CB3	<i>E. lamae</i>	0
		CB4	<i>E. lamae</i>	0
		CB5	<i>E. lamae</i>	0
		CB6	<i>E. lamae</i>	0

**Table S2.** Biochemical parameters of alpacas in relation to their health status. H: Hemoglobin; L: Leukocyte; HR: Heart Rate; BF: Respiratory Rate.

Samples	Health Condition	H (g/dL)	L (mm <sup>3</sup> )	HR (bpm)	BF (bpm)
IA1	<i>Giardia sp.</i> positive	34.69	7950	172	42
IA2	<i>Giardia sp.</i> positive	36.36	9150	96	34
IA3	<i>Giardia sp.</i> positive	38.46	9425	138	48
IA4	<i>Giardia sp.</i> positive	38.46	6000	116	28
IA5	<i>Giardia sp.</i> positive	37.25	11850	96	38
IB1	<i>Eimeria lamae</i> positive	31.63	11500	110	28
IB2	<i>Eimeria lamae</i> positive	34	8000	126	36
IB3	<i>Eimeria lamae</i> positive	32.71	9200	134	34
IB4	<i>Eimeria lamae</i> positive	38.46	22100	116	34
CA1	<i>Giardia sp.</i> negative	30	6350	152	48
CA2	<i>Giardia sp.</i> negative	31.58	8750	128	34
CA3	<i>Giardia sp.</i> negative	30	8500	132	28
CA4	<i>Giardia sp.</i> negative	34.29	7850	100	26
CB1	<i>Eimeria lamae</i> negative	34.69	7950	172	42
CB2	<i>Eimeria lamae</i> negative	33.33	18400	148	26
CB3	<i>Eimeria lamae</i> negative	35	1750	148	40
CB4	<i>Eimeria lamae</i> negative	35.85	12800	130	15
CB5	<i>Eimeria lamae</i> negative	31	1550	142	26
CB6	<i>Eimeria lamae</i> negative	39.22	9550	188	44