Supplementary Materials:

Table S1a. Means of enrofloxacin- resistant *E. coli* isolates from cloacal swab and manure samples from turkeys.

Time of sample collection*		Enrofloxacin					
		cloacal swabs (n=24)			manure (n=6)		
		BT	AT	ET	BT	AT	ET
T1	G1	$1.42^{A,b}$	$1.83^{A,a}$	$2.00^{A,a}$	$1.33^{A,a}$	$1.33^{B,a}$	$1.33^{B,a}$
	G2	$1.42^{A,b}$	$2.00^{A,a}$	$2.04^{A,a}$	$2.00^{A,a}$	$2.00^{A,a}$	$2.67^{A,a}$
	G3	$1.42^{A,b}$	$1.92^{A,a}$	$2.46^{A,a}$	$1.67^{A,a}$	$2.33^{A,a}$	$1.33^{B,a}$
	G4	$1.42^{A,b}$	$2.17^{A,a}$	$2.29^{A,a}$	$2.00^{A,a}$	$2.33^{A,a}$	$1.33^{B,a}$
T2	G1	$1.00^{A,b}$	$3.00^{A,a}$	$2.96^{A,a}$	$1.00^{A,b}$	$2.17^{A,a}$	$2.83^{A,a}$
	G2	$1.00^{A,b}$	$3.00^{A,a}$	$3.00^{A,a}$	$1.00^{A,b}$	$2.67^{A,a}$	$2.83^{A,a}$
	G3	$1.00^{A,c}$	$2.58^{B,b}$	$3.00^{A,a}$	$1.00^{A,b}$	$2.67^{A,a}$	$3.00^{A,a}$
	G4	$1.00^{A,b}$	$3.00^{A,a}$	$3.00^{A,a}$	$1.00^{A,b}$	$3.00^{A,a}$	$3.00^{A,a}$
T3	G1	$1.00^{A,a}$	$1.00^{A,a}$	$1.00^{B,a}$	$1.00^{A,a}$	$1.00^{A,a}$	$1.00^{A,a}$
	G2	$1.00^{A,a}$	$1.00^{A,a}$	$1.00^{A,a}$	$1.00^{A,a}$	$1.00^{A,a}$	$1.00^{A,a}$
	G3	$1.00^{A,a}$	$1.00^{A,a}$	$1.00^{B,a}$	$1.00^{A,a}$	$1.00^{A,a}$	$1.00^{A,a}$
	G4	$1.00^{A,a}$	$1.00^{A,a}$	$1.00^{B,a}$	$1.00^{A,a}$	$1.17^{A,a}$	$1.00^{A,a}$

[a, b, c] means in the same row differ significantly between sampling days at group level ($p < 0.05$);
[A, B] means in the same column differ significantly between groups on level of sampling day ($p < 0.05$);
*BT = before treatment; AT = after treatment; ET = end of trial;
T1 = untreated antibiotic trial, T2 = treated antibiotic trial, T3 = trial with simulated water spillage containing antibiotic.
G1 = entire floor pen covered with litter; G2 = floor pen covered with litter and having floor heating; G3 = partially (50:50) slatted flooring including an area that was littered; G4 = fully slatted flooring with a sand bath (900 cm^2).

Table S1b. Means of ampicillin-resistant *E. coli* isolates from cloacal swab and manure samples from turkeys.

Time of sample collection*		cloacal swab (n=24)			manure (n=6)		
		BT	AT	ET	BT	AT	ET
T1	G1	1.33[A,b]	2.08[A,a]	1.50[A,b]	1.33[A,b]	2.33[A,a]	1.00[A,b]
	G2	1.33[A,a]	1.75[AB,a]	1.75[A,a]	1.33[A,a]	1.00[B,a]	1.00[A,a]
	G3	1.33[A,a]	1.50[B,a]	1.33[A,a]	1.33[A,a]	1.00[B,a]	1.00[A,a]
	G4	1.33[A,a]	1.88[AB,a]	1.50[A,a]	1.67[A,a]	1.00[B,a]	1.00[A,a]
T2	G1	1.00[A,b]	1.92[A,a]	2.08[AB,a]	1.00[A,a]	1.67[A,a]	1.67[A,a]
	G2	1.00[A,b]	1.17[B,b]	2.25[A,a]	1.00[A,b]	2.33[A,a]	1.67[A,ab]
	G3	1.00[A,b]	1.08[B,b]	2.08[AB,a]	1.00[A,b]	2.50[A,a]	2.00[A,a]
	G4	1.00[A,b]	1.08[B,b]	1.58[B,a]	1.00[A,b]	2.00[A,a]	1.33[A,ab]
T3	G1	1.00[A,c]	2.5[A,a]	1.50[A,b]	1.00[A,a]	1.33[A,a]	1.67[A,a]
	G2	1.00[A,b]	1.92[B,a]	1.75[A,a]	1.00[A,b]	1.00[A,b]	2.33[A,a]
	G3	1.00[A,b]	1.92[B,a]	1.75[A,a]	1.33[A,a]	1.00[A,a]	1.67[A,a]
	G4	1.00[A,b]	2.00[AB,a]	1.92[A,a]	1.67[A,a]	1.33[A,a]	1.67[A,a]

[a, b, c] means in the same row differ significantly between sampling days at group level ($p < 0.05$);
[A, B] means in the same column differ significantly between groups on level of sampling day ($p < 0.05$);
*BT = before treatment; AT = after treatment; ET = end of trial;
T1 = untreated antibiotic trial, T2 = treated antibiotic trial, T3 = trial with simulated water spillage containing antibiotic.
G1 = entire floor pen covered with litter; G2 = floor pen covered with litter and having floor heating; G3 = partially (50:50) slatted flooring including an area that was littered; G4 = fully slatted flooring with a sand bath (900 cm^2).