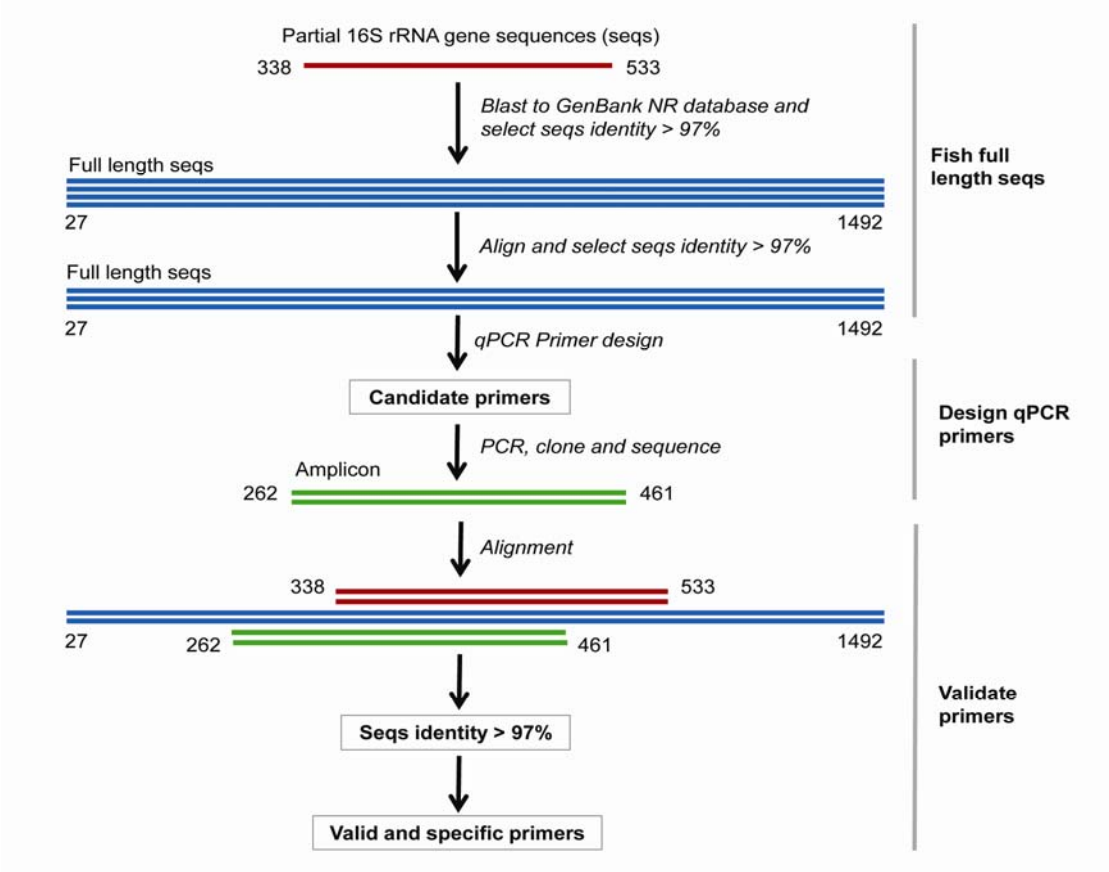
Appendix A. Ingredient and nutrient composition of the diets

Item	Treatments	
	MF	CSA
Ingredients		
Alfalfa	17.3	-
Corn silage	18.8	-
Corn stover	-	36.1
Soybean meal	11.3	11.3
Rapeseed meal	4.2	4.2
Cottonseed meal	2.1	2.1
Extruded soybean	2.1	2.1
Beet pulp	4.2	4.2
Whole cotton	10.4	10.4
Corn	25.6	25.6
Premix[1)]	0.5	0.5
Chemical composition		
Dry matter (DM), %	93.1	93.2
Crude protein (CP), %DM	18.1	16.1
Ether Extract (EE), %DM	5.6	4.7
Starch, %DM	33.2	31.1
Neutral detergent fiber (NDF), %DM	35.9	47.6
Acid detergent fiber (ADF), %DM	25.2	29.3
Acid detergent lignin (ADL), %DM	12.0	10.8
Non-fiber carbohydrate (NFC), %DM	33.4	23.8

1) Premix: 1 kg premix contained: VA 770000 IU, VD 3 192500 IU, VE 7000 IU, niacin700 mg, Cu 2750 mg, Zn 10890 mg, Mn 4200 mg, I 110 mg, Se 132 mg and Co 88 mg.



Appendix B. Workflow of designing qPCR primers based on partial 16S rRNA gene sequences

Appendix C. Diversity index calculated from DGGE profiles

Index	Day	Time (h)[1)]	Diets		SEM[2)]	*P*
			MF	CSA		
Shannon	91	0	3.06[a]	2.91[b]	0.02	0.020
	91	2	2.98[a]	2.90[b]	0.01	0.016
Evenness	91	0	0.987	0.989	<0.001	0.604
	91	2	0.986[b]	0.989[a]	<0.001	0.003
Richness	91	0	0.049[b]	0.056[a]	0.001	0.019
	91	2	0.058[a]	0.053[b]	<0.001	0.011

[1)] 0 indicated 0 h before morning feeding, 2 indicated 2 h after morning feeding.

[2)] SEM, Standard error of least squares means.

[a,b,c] Values within a row with different superscripts differed significantly at $P<0.05$.