

Effects of Dietary Pomegranate Peel on Antioxidant Gene Expression and DJ-1 Protein Abundance in Ram Testes

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Fig.S1: Fatty acid chromatogram of pomegranate peel sample.



Fig.S2: Fatty acid chromatogram of pomegranate seed sample.

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Fig.S3: Comparison of *Gpx4* gene expression in control and fed groups with pomegranate seed and pomegranate peel using One Way-ANOVA (Post-hoc test: Tukey's range test). Data represented as mean values \pm SEM.



Fig.S4: Comparison of *Prdx4* gene expression in control and fed groups with pomegranate seed and pomegranate peel using One Way-ANOVA (Post-hoc test: Tukey's range test). Data represented as mean values \pm SEM.

Table S1: Fatty acid profiles of peel and seed samples (% of total fatty acids)

Fatty acids	Peel	Seed
C8:0	0.54	ND
C14:0	0.27	ND
C16:0	16	3.61
C16:1	0.61	ND
C18:0	5.91	2.28
C18:1	23.8	6.90
C18:2	24	6.63
C18:3	ND	6.53
C18:3 (punicic acid)	ND	65
C20:0	3.12	0.63
C22:0	0.80	ND
C24:0	0.30	ND
Other fatty acids	31.84	8.48

ND; Not detectable.

 Table S2: Ingredients (g/kg of dietary dry matter) and chemical composition of the experimental diets

Ingredients	Experimental diets		
	Control	Peel	Seed
Alfalfa hay	320	120	210
Corn grain	600	540	410
Wheat bran	70	54	56
Dried pomegranate seed	-	-	315
Pomegranate peel silage	-	275	-
Minerals and vitamins mix	10	11	9
Chemical composition (%)			
Dry matter	89	64	93
Crude protein	12	12	12
Neutral detergent fiber	38	45	46
Ash	6	5	5.5
Growth energy (Mcal/kg)	2.67	2.60	2.68
Calcium	0.63	0.46	0.47
Phosphorous	0.52	0.36	0.41