Rosemary distillation residues reduce lipid oxidation, increase alpha-tocopherol content and improve fatty acid profile of lamb meat

Y. Yagoubi, M. Joy, G. Ripoll, M. Mahouachi, J.R. Bertolín, N. Atti

PII: S0309-1740(17)30162-6
DOI: doi:10.1016/j.meatsci.2017.10.007
Reference: MESC 7383

To appear in: *Meat Science*

Received date: 7 February 2017
Revised date: 20 September 2017
Accepted date: 10 October 2017

Please cite this article as: Y. Yagoubi, M. Joy, G. Ripoll, M. Mahouachi, J.R. Bertolín, N. Atti , Rosemary distillation residues reduce lipid oxidation, increase alpha-tocopherol content and improve fatty acid profile of lamb meat. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Mesc(2017), doi:10.1016/j.meatsci.2017.10.007

Rosemary distillation residues reduce lipid oxidation, increase alpha-tocopherol content and improve fatty acid profile of lamb meat

Y. Yagoubi[1, 2], M. Joy[3], G. Ripoll[3], M. Mahouachi[4], J. R. Bertolín[3], N. Atti[1,*]

[1] *University of Carthage, INRA-Tunisia, Laboratoire de Productions Animales et Fourragères, rue Hédi Karray, 2049 Ariana, Tunisia*

[2] *University of Carthage, INAT, 43 Avenue Charles Nicole, Tunis, Tunisia*

[3] *Centro de Investigación y Tecnología Agroalimentaria de Aragón (CITA).Instituto Agroalimentario de Aragón – IA2 (CITA-Universidad de Zaragoza).Avda. Montañana, 930, 50059, Zaragoza, Spain*

[4] *University of Jendouba, ESAK, Le Kef, Tunisia*

Abstract

Keywords

1. Introduction

post mortem

2. Material and Methods

2.1.

–

Longissimus thoracis *lumborum*

ACCEPTED MANUSCRIPT

□ □

□

□ □

□

3. Results and discussion

ACCEPTED MANUSCRIPT

□

□

□

□

□

□

??

post-mortem

Conclusion

Acknowledgements

References

Journal of Animal Science,

Meat Science,

□

Animal Science,

International Journal of Food Science and Nutrition.

Journal of Animal Science,

Meat Science.

□

Meat Science,

Analytical and Bioanalytical Chemistry,

Journal of Food Science,

. Journal of the Science of Food and Agriculture,

Food chemistry,

Cancer Research,

Journal of Food Composition and Analysis,

Meat science,

□

Meat Science,

Meat science,

□

Journal of Animal Science,

Meat Science,

longissimus dorsi

Food Research International,

□

Meat

Science,

Meat Science,

of Food Science,

□ □

Meat Science,

Poultry Science,

Journal of Animal Science,

Meat Science,

Meat Science,

Canadian Journal of Animal Science,

□ □

Journal of Food Composition and Analysis,

Intech

Meat Science,

Progress in Lipid Research,

Journal of Dairy Science,

Livestock Science,

□

Meat Science,

Animal Production Science,

□

MeatScience

Asia Pacific Journal of Clinical Nutrition .

Lipids,

Animal Production Science,

Meat Science,

Meat Science,

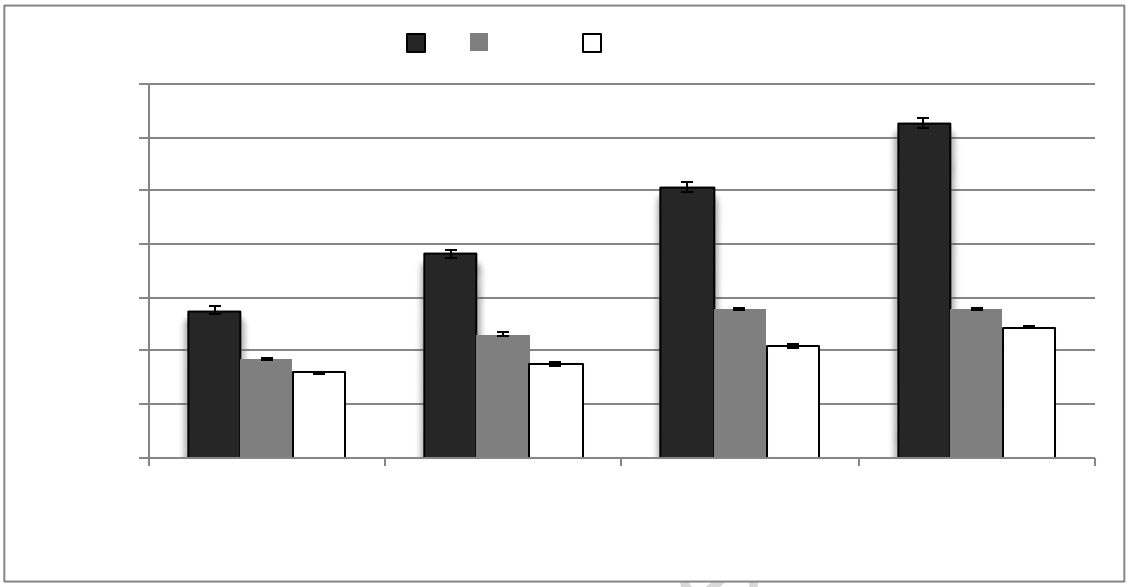
Small Ruminant Research,

Meat science,

The Lancet,

British Journal of Nutrition,

Meat Science,



a, b
x, y

Figure 1

C **RR60**

RR87

Table 1

	Concentrate	Oat Hay	RR60	RR87
Dry Matter				
Organic Matter				
Crude Protein				
Crude Fat				
TPC				
NDF				
	Fatty acid profile (% total FAMES)			
C14:0				
C16:0				
C16:1 n7				
C17:0				
C18:0				
C18:1n-9				
C18:2n-6				
C18:3 n-3				
SFA				
MUFA				
PUFA				
UFA				
n-6PUFA				
n-3PUFA				
n-6/n-3				

TPC **; NDF** **SFA** **MUFA**
PUFA
RR60
RR87

Table 2 *LTL*

	C	RR60	RR87	SEM	P
Dry Matter					
Ash					
Protein					
Fat					
Cholesterol (mg/g)					
α –tocopherol					
ϒ –tocopherol					

C **RR60** **RR87**

Table 3. □

	Diet (D)			Storage time (T)					P		
	C	RR60	RR87	0	3	6	9	SEM	D	T	D x T
pH											
L*											
a*											
b*											
C*											
H*											
MM b											
DMb											
OM b											

MMb: DMb: ; OMb:

C RR60 RR87

Table 4

Item	C	RR60	RR87	SEM	P
SFA					
MUFA					

PUFA

SFA **MUFA** **PUFA:**

C **RR60**
RR87

Table 5

Item	C	RR60	RR87	SEM	P
SFA					
MUFA					
PUFA					
UFA					
DFA					
n-6					
n-3					
n-6/n-3					

PUFA/SFA	
MUFA/SFA	
UFA/SFA	
CLA	
SI	

SFA **MUFA** **PUFA** **UFA**
CLA **SI** **DFA**

C **RR60**
RR87

-
-
-
-