A COMPARISON OF SELECTED NUTRITIONAL PARAMETERS BETWEEN WILD AND DOMESTIC MEATS.

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Abstract

Many dietary factors, especially fat, are likely to influence the risk of cardiovascular disease by, amongst others, their effects on blood cholesterol concentration. The aim of this study was to analyse the lipid, energy and protein concentrations of local South African game in comparison to domestic meats. Fatty acid profiles were determined by chloroform-methanol extraction and gas chromatographic analysis. Total protein concentrations were determined by the Lowry Method. Energy analysis was performed using bomb calorimetry. Although no consistent, distinct differences between all the wild and domestic South African meats were found, individual differences were noted within and between species. Therefore, no general consumption recommendations can be made, but some wild meats appear to be more in line with general health recommendations than domestic meats.
Declaration

I declare that this dissertation is my own, unaided work. It is being submitted for the Degree of Master of Science in the University of the Witwatersrand, Johannesburg. It has not been submitted for any degree or examination in any other university.

_______________________
Lauri-Beth Fine
(Signature of candidate)

____________ day of __________________ 2008
Contents

Abstract ii
Declaration iii
Contents iv
List of Abbreviations viii
Description of References viii
List of Tables ix
Dedication xi
Acknowledgements xii

1. Introduction 1
   1.1 Dietary Lipid 1
   1.2 Dietary History 3
   1.3 Dietary Lipid Categories 5
      1.3.1 Total Fat 5
      1.3.2 Saturated Fat 6
      1.3.3 Monounsaturated Fat 7
      1.3.4 Trans- Unsaturated Fat 7
      1.3.5 Polyunsaturated Fat 7
         1.3.5.1 N9 PUFA 8
         1.3.5.2 N6 PUFA 8
         1.3.5.3 N3 PUFA 9
   1.4 Lipids of Meat 10

2. Materials and Methods 13
   2.1 Samples 13
2.2 Lipid Analysis

2.3 Protein and Energy Analysis
   2.3.1 Protein Analysis
   2.3.2 Energy Analysis

2.4 Data Analysis
   2.4.1 Lipid
   2.4.2 Protein and Energy

2.5 Ethics

3. Results and Discussion

3.1 Individual Domestic Species
   3.1.1 Pig
      3.1.1.1 Lipids
      3.1.1.2 Protein
      3.1.1.3 Energy
   3.1.2 Rabbit
      3.1.2.1 Lipids
      3.1.2.2 Protein
      3.1.2.3 Energy
   3.1.3 Goat
      3.1.3.1 Lipids
      3.1.3.2 Protein
      3.1.3.3 Energy

3.2 Comparison between Domestic Species
   3.2.1 Lipids
      a) Pig and Rabbit
b) Pig and Goat 26

c) Rabbit and Goat 26

3.2.2 Protein 27

3.2.3 Energy 28

3.3 Individual Wild Species 29

3.3.1 Impala 29

3.3.1.1 Lipids 29

3.3.1.2 Protein 31

3.3.1.3 Energy 32

3.3.2 Wildebeest 32

3.3.2.1 Lipids 32

3.3.2.2 Protein 34

3.3.2.3 Energy 35

3.3.3 Springbok 35

3.3.3.1 Lipids 35

3.3.3.2 Protein 36

3.3.3.3 Energy 37

3.4 Comparison between Wild Species 37

3.4.1 Lipids 37

a) Impala and Wildebeest 37

3.4.2 Protein 38

3.4.3 Energy 39

3.5 Comparison of Domestic and Wild Species 39

3.5.1 Lipids 39

3.5.2 Protein 40
3.5.3 Energy

4. General Discussion

5. Conclusion

6. References
List of Abbreviations

**TS**: total saturated fatty acids

**TM**: total monounsaturated fatty acids

**18:2**: linoleic acid (18:2n6)

**20:4**: arachidonic acid (20:4n6)

**22:4**: adrenic acid (22:4n6)

**22:5**: gamma-docosapentaenoic acid (22:5n6)

**TN6**: total omega-6 fatty acids

**18:3**: alpha-linolenic acid (18:3n3)

**20:5**: eicosapentaenoic acid (20:5n3)

**22:5**: alpha-docosapentaenoic acid (22:5n3)

**22:6**: docosahexaenoic acid (22:6n3)

**TN3**: total omega-3 fatty acids

**TP**: total polyunsaturated fatty acids

**Dry**: lipid dry weight

**S:P**: saturated fatty acid to polyunsaturated fatty acid ratio

**N6:N3**: omega-6 fatty acid to omega-3 fatty acid ratio

Description of References

First mention of reference uses all author’s names, subsequently only first author and *et al* is stated.
**List of Tables**

**Table 1:** Modifications in American Dietary Guidelines from 1980 to 2000

**Table 2:** Equations used to estimate cholesterol change resulting from dietary fat and cholesterol modifications

**Table 3:** Fatty acid profile of various muscle sites of pig

**Table 4:** Protein concentrations of various muscle sites of pig

**Table 5:** Energy concentrations of various muscle sites of pig

**Table 6:** Fatty acid profile of various muscle sites of rabbit

**Table 7:** Protein concentrations of various muscle sites of rabbit

**Table 8:** Energy concentrations of various muscle sites of rabbit

**Table 9:** Fatty acid profile of various muscle sites of goat

**Table 10:** Protein concentrations of various muscle sites of goat

**Table 11:** Energy concentrations of various muscle sites of goat

**Table 12:** Fatty acid profile of domestic species

**Table 13:** Protein concentrations of various muscle sites of domestic species

**Table 14:** Comparison of the statistical variation between protein concentrations in domestic species

**Table 15:** Energy concentrations of various muscle sites of domestic species

**Table 16:** Comparison of the statistical variation between energy concentrations in domestic species

**Table 17:** Fatty acid profile of various muscle sites of impala

**Table 18:** Protein concentrations of various muscle sites of impala

**Table 19:** Energy concentrations of various muscle sites of impala

**Table 20:** Fatty acid profile of various muscle sites of wildebeest
Table 21: Protein concentrations of various muscle sites of wildebeest
Table 22: Energy concentrations of various muscle sites of wildebeest
Table 23: Fatty acid profile of various muscle sites of springbok
Table 24: Protein concentrations of various muscle sites of springbok
Table 25: Energy concentrations of various muscle sites of springbok
Table 26: Fatty acid profile of wild species
Table 27: Protein concentrations of various muscle sites of wild species
Table 28: Comparison of the statistical variation between protein concentrations in wild species
Table 29: Comparison of the statistical variation between protein concentrations in domestic and wild species
Table 30: Energy concentrations of various muscle sites of wild species
Table 31: Comparison of the statistical variation between energy concentrations in wild species
Table 32: Fatty acid profile of domestic and wild species
Table 33: Protein analysis of domestic and wild species
Table 34: Energy analysis of domestic and wild species
Table 35: Comparison of the statistical variation between energy concentrations in domestic and wild species
This Dissertation is dedicated to my Parents

MOM AND DAD

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