

Contents

Chapter 1. Introduction	1
1. Goat milk production and quality.....	3
1.1. Goat milk and dairy products.....	3
1.2. Goat milk quality.....	5
1.3. Characteristics and quality parameters of goat cheese	10
2. Use of antibiotics in dairy livestock	16
2.1. Classification of antibiotics	16
2.2. Use of antibiotics in veterinary medicine	19
2.3. Legal aspects. Maximum Residue Limits.....	21
3. Consequence of the presence of antibiotics in milk and dairy products	24
3.1. General considerations	24
3.2. Effect of antibiotics in milk for the dairy industry	26
3.3. Repercussion in public health.....	30
4. References	32
Chapter 2. Objectives	45
Chapter 3. Results	49
Study 1. <i>Evaluation of the characteristics of mature Tronchón cheese made from raw goat milk containing legally admissible amounts of antibiotics</i>	51
Study 2. <i>Influence of oxytetracycline in raw goat milk on the physicochemical characteristics of ripened cheese</i>	79
Study 2.1. Impact of the presence of oxytetracycline residues in milk destined for the elaboration of dairy products: the specific case of cured goat cheese	81
Study 2.2. Volatile profile of matured Tronchón cheese affected by oxytetracycline in raw goat milk.....	101
Study 3. <i>Effect of antibiotic residues in milk and cheeses after the off-label use of macrolides in dairy goats</i>	115
Study 4. <i>Food safety margin assessment of antibiotics in pasteurized goat milk and fresh cheese</i>	133
Chapter 4. General discussion	151
Chapter 5. Conclusions	169
Dissemination of Results and Predoctoral Stay	173