INDEX

Introduction	19
1. Cheese production	21
1.1 Traditional Spanish cheeses	23
2. Biochemical changes during cheese ripening	26
2.1 Catabolism of citrate	27
2.2 Glycolysis of residual lactose and catabolism of lactate	28
2.3 Lipolysis and catabolism of free fatty acids	28
2.4 Proteolysis and catabolism of amino acids	29
3. Cheese microbiota	30
3.1 Starter bacteria	31
3.2 Non-starter lactic acid bacteria (NSLAB) and	31
propionic acid bacteria (PAB)	
3.3 Moulds	32
4. Yeast species diversity in cheese	32
4.1 Identification and genetic characterization of yeasts	33
4.1.1 Identification based on ribosomal DNA analysis	34
4.1.2 Genetic characterization of yeasts	36
4.2 Kluyveromyces spp.	41
4.3 Debaryomyces hansenii	42

INDEX

5. Biotechnological applications of non-conventional yeasts	44
5.1 Bioactive compounds: galactooligosaccharides	46
5.2 Food production: aroma development	50
References	54
Objectives	75
Objective I	79
Objective II	109
Objective III	139
Objective IV	169
General discussion	205
References	218
Conclusions	227
Annexes	231