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114

187

73

%38.9

% 23.5

%15.4

%30 % 23.3

% 33.3

% 9.1

Detection of the Occurrence of Antibiotic Residues in Different Kinds of Milk

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ABSTRACT

The study detected the occurrence of antibiotic residues in (187) milk samples. The samples included 114 fresh raw milk of cows, buffaloes, ewes and goats and 73 milk samples of pasteurized liquid and dried powder intended for adult and for infant consumption, The samples were randomly collected from different regions and markets in Mosul city. The antibiotic residues were detected in 38.9%, 9.1% , 33.3% , 30 % in milk samples of cows, buffaloes, ewes, and goats, respectively. Antibiotic residues were found in 23.5% of pasteurized milk, and 23.3% in adult milk and 15.4% in infant milk. Results

showed a significant difference, in the occurrence of antibiotic residues between buffalo milk and cow, ewes and goats milk, and between infant and adult milk and also with pasteurized milk.

Keywords: Antibiotic Residues, milk, raw, dry, pasteurized.

)

(1991

.(Brady and Katz, 1988)

(Dayan, 1993)

.(Plumb, 2005)

(Mitchell *et al.*, 1998)

.(Seymour *et al.*, 1988)

.(Kangethe *et al.*, 2005)

.(Kloth *et al.*, 2009)

200

.(Arora and Chhabra, 2004 ; Al-Mohana *et al.*, 2010)

.....

114

187

/

.(1)

:1

/	-1	36
- /	-2	
.	/	-1
/ /	-2	22
/	-1	36
	-2	
/	-1	20

73

.(2)

:2

								17	
								30	
								26	

:

95 (Mohsenzadeh and Bahrainipour, 2008)

10

90

4 1N HCL pH meter 6.0 pH
 1
 (50 0.2) % 0.4 Chlorophenol red
 3 42

:

.

:

.

:

.

:

:

(Chi - square)

.(1980) (P < 0.05)

.....

%30 %33.3 %9.1 %38.9
 (% 13.9)
 (% 5.6)
 .(3) % 70 % 52.8 %90.9 % 55.5

: 3

n %	n %	n %		
20 ^a 55.5	2 ^a 5.6	14 ^a 38.9	36	
20 ^b 90.9	-	2 ^b 9.1	22	
19 ^a 52.8	5 ^a 13.9	12 ^a 33.3	36	
14 ^a 70	-	6 ^a 30	20	
73	7	34	114	
64.0	6.1	29.8		%

b a

.(Oliver *et al.*, 1990)

550

.(Plumb, 2005)

5

34

9

.(Xun *et al.*, 2009)

.(2004)

(FAO , 2005)

(Alsawaf and Hammed, 1994) %8.1

. (3) %9.1

(Najim *et al.*, 1988) %9.4-8.6

137

(2004) %30

% 36.50

% 29.8

(Khaskheli *et al.*, 2008)

. (3) % 64.0

%63.50

/

(Alsawaf and Hammed, 1994) %10.3

(Al-Mohana *et al.*, 2010) %15.1

%95

63

Lieb

(Claudia *et al.*, 2007)

% 73

216

(Antonio *et al.*, 2009)

%18.9 (Gonzalo *et al.*, 2009)

% 16

209

% 71.2

(Gonzalo *et al.*, 2010)

.....

22 43 (3)
 .(Comunian *et al.*, 2010) 21
 %3-1 Leon
 .(Linage *et al.*, 2007) 25 250
 %15.4 %23.3 %23.5
 %6.7 %11.6
 %70 %76.5
 .(4) %73
 : 4

n %	n %	n %		
13 ^a 76.5	-	4 ^a 23.5	17	
21 ^a 70.0	2 ^a 6.7	7 ^a 23.3	30	
19 ^a 73.0	3 ^a 11.6	4 ^b 15.4	26	
53	5	15	73	
72.6	6.8	20.6		%

b,a

(Apollo, 2003)

.(4) %6 .(2004)

(Rey *et al.*, 2005)

%50 – %44.7 4 (96)

8 (140)

(Kamhaeng *et al.*, 1997) %38.6

F.D.A

W.H.O

0.2

.(Samanidou and Nisyriou, 2008)

.(2004)

" .(1980)

.387-354

" .(1991)

.40-15

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