



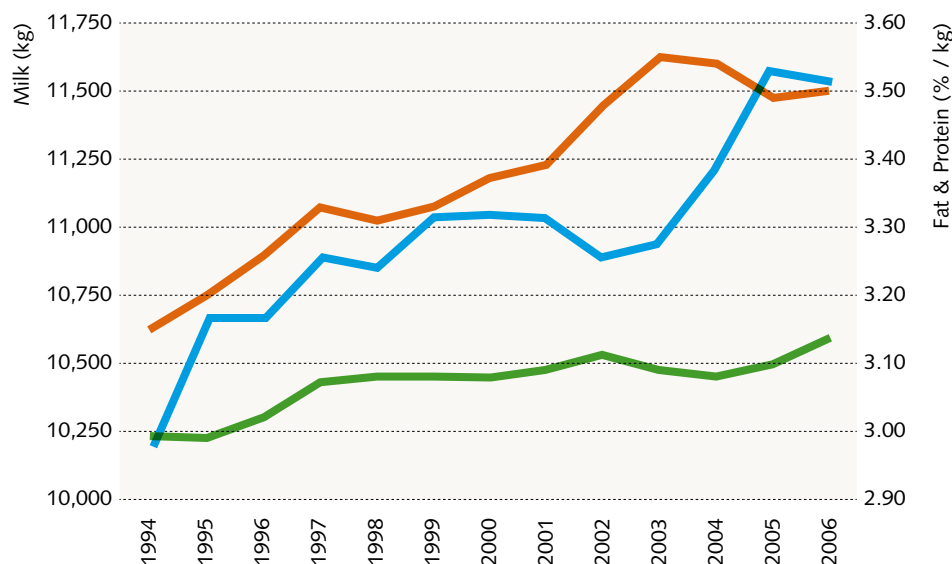
Table 3.1 & Fig. 3.1

Production averages of Israeli-Holstein cows, by calving year

305-day adjusted lactations (1-5)

Calving year	No. of cows	Milk, kg	Fat, %	Protein, %
1994	80,525	10,195	3.15	2.99
1995	83,696	10,665	3.20	2.99
1996	81,477	10,665	3.26	3.02
1997	81,507	10,887	3.33	3.07
1998	82,004	10,850	3.31	3.08
1999	81,742	11,029	3.33	3.08
2000	81,622	11,048	3.37	3.08
2001	80,787	11,031	3.39	3.09
2002	86,554	10,890	3.48	3.11
2003	84,696	10,938	3.55	3.09
2004	84,694	11,200	3.54	3.08
2005	83,456	11,565	3.49	3.10
2006	77,334	11,506	3.52	3.14

■ Milk
■ Fat (%)
■ Protein (%)



In 1991, the milk payment formula was changed in order to promote an increase in milk fat and protein content. Since then, steady progress has been achieved: fat and protein concentration rose 0.62 % and

0.20 %, respectively. Until the year 2000 there was a constant increment of average annual milk yield per cow, then a slight decline and in the last two years a renewed increase.



Table 3.2

**Production averages
in 2006, by parity
number**

	1st lactation cows	2nd lactation cows	Adult cows	Total
Complete lactations				
No.	22,918	16,855	22,336	62,109
Milk yield, kg	11,228	12,977	13,370	12,471
ECM* yield, kg	11,389	13,057	13,239	12,506
Fat yield, kg	409	464	472.8	446.9
Fat, %	3.64	3.58	3.54	3.58
Protein yield, kg	359	412.2	415.5	393.7
Protein, %	3.20	3.18	3.11	3.16
Adjusted 305-d lactations				
No.	22,174	16,283	21,600	60,057
305-d adjusted ECM, kg	11,474	11,793	11,684	11,636
Days in milk	357	353	350	353
Milk yield, kg/day in milk	31.5	36.8	38.2	35.3
Feed days	420	416	414	417
ECM yield, kg/cow in herd-day	27.1	31.4	32	30
Dry period, days	63	62	63	63
Days open	144	139	138	140
Calvings				
Total No. of calvings	31,121	23,165	39,576	93,862
Calves born	31,408	24,128	42,289	97,825
Age at calving, months	24	38	66	45
Normal calvings	27,833	21,955	37,408	87,196
Normal calvings, %	89.4	94.8	94.5	92.9
Premature calvings	622	459	829	1910
Premature calvings, %	2.0	2.0	2.1	2.0
Abortions, %	10.1	10.6	9.0	9.8
Stillborn calves, %	7.9	5.9	7.0	7.0

* ECM = Economic Corrected Milk, according to the formula for milk payment:
up to 3.779% Milk Fat: $0.1 * \text{kg Milk} + 7.67 * \text{kg Fat} + 20.21 * \text{kg Protein}$
over 3.779% Milk Fat, the index for kg Fat is 3.56



Table 3.3

20 cooperative herds with highest average annual milk yield per cow (3x milkings) in 2006

No.	Herd	ECM kg	Milk kg	Fat %	Protein %	F+P kg	SCC x1000	No. of cows in herd
1	Habonim	14,497	14,280	3.56	3.18	962	172	203
2	Sa'ad	14,167	13,525	3.61	3.32	937	211	261
3	Carmiya	13,704	13,350	3.65	3.21	915	175	290
4	Shadma (Dorot)	13,609	13,511	3.59	3.14	907	198	356
5	Shutfut Ran	13,489	13,105	3.60	3.24	895	138	809
6	Nachal Oz	13,434	13,059	3.58	3.24	890	117	272
7	Yavne	13,412	13,114	3.65	3.19	896	108	356
8	Carmel Ma'on	13,350	13,000	3.67	3.21	893	135	386
9	Alumim	13,309	12,946	3.67	3.22	890	149	264
10	P.R.Ch.	13,271	12,967	3.61	3.21	883	170	441
11	Tze'elim	13,207	12,922	3.59	3.21	877	139	237
12	Horshim	13,195	13,205	3.51	3.12	875	209	227
13	Hof HaSharon	13,174	13,150	3.45	3.16	868	153	773
14	Refet Ma'ale	13,140	12,927	3.66	3.16	881	190	455
15	Migdal Oz	13,069	12,829	3.60	3.18	870	185	219
16	Ma'ale HaKamisha	13,067	12,900	3.62	3.15	872	120	236
17	Refet Darom	13,060	12,987	3.58	3.13	870	143	512
18	Nir Yitzhak	13,037	12,845	3.55	3.19	864	195	265
19	Kefar Gil'adi	13,024	13,042	3.50	3.13	863	129	252
20	Nitzanim	13,021	12,784	3.53	3.21	861	155	251





Table 3.4

20 Family herds with highest average annual milk yield per cow (2x + 3x milkings) in 2006



No.	Village	Herd	ECM kg	Milk kg	Fat %	Protein %	F+P kg	SCC x1000	No. of cows in herd
1	Givat Yoav	Eliezer Farm	13,179	12,843	3.84	3.20	904	104	41
2	Givat Yoav	Sofer Farm	13,118	13,042	3.56	3.14	872	181	40
3	Havat HaShkafim	Havat HaShkafim	12,739	12,624	3.56	3.16	846	118	63
4	Kfar Haro'eh	Peleg Farm	12,718	12,464	3.55	3.21	842	86	80
5	Amatz	Sahar Farm	12,713	12,567	3.51	3.18	840	285	70
6	Sde Ya'akov	Baranawski Farm	12,691	12,357	3.50	3.27	835	164	121
7	Amatz	Israel Farm	12,691	12,417	3.60	3.20	844	210	85
8	Neot Golan	Cohen Farm	12,649	12,638	3.52	3.13	839	129	38
9	Ramat Tzvi	Landau Farm	12,553	12,889	3.23	3.11	815	111	63
10	Be'er Tuvia	Golan Farm	12,546	12,443	3.48	3.18	828	116	136
11	Kefar Vitkin	Preker Farm	12,523	12,347	3.78	3.15	854	157	42
12	Shfeyia Ag. School	Shfeyia Ag. School	12,501	12,069	3.83	3.25	854	178	74
13	Nir Banim	Strashnov Farm	12,489	12,119	3.65	3.23	832	162	74
14	Kefar Yehezkel	Gafni Farm	12,485	12,615	3.52	3.07	831	129	59
15	Kefar Vitkin	Boltiansky Farm	12,353	12,594	3.62	2.99	832	177	116
16	Beit Itzhak	Mayer Farm	12,331	12,157	3.81	3.14	844	593	60
17	Kefar Yehezkel	Vered Farm	12,282	12,508	3.46	3.06	814	126	59
18	Tzipori	Shmueli Bros. Farm	12,267	12,003	3.70	3.19	826	125	130
19	Kefar Yehoshua	Agmon-Israel Farm	12,244	12,210	3.47	3.16	808	192	43
20	Neot Golan	Refet Association	12,235	12,255	3.64	3.08	821	206	102

* x3 milkings/day



Table 3.5

20 cows with highest adjusted ECM yield in 2006

No.	Herd	Cow No.	Sire	Lact. No.	Milk kg	Fat %	Protein %	ECM kg
1	Sofer Farm	703	Teva	6	18,723	4.49	3.55	20,696
2	Refet HaNegev	4477	Kapel	4	17,979	3.93	3.04	17,990
3	Alumim	2157	Geoffry	4	17,171	4.15	3.17	17,626
4	Refet Darom	4044	Scorer	4	18,725	3.23	2.92	17,470
5	Refet Ma'ale	3837	Glenwood	4	17,027	3.95	3.16	17,442
6	Nahal Oz	4398	Meidan	4	16,944	4.23	3.17	17,404
7	Nitzanim	4555	Marcie	2	17,836	3.70	2.94	17,351
8	Habonim	5542	Avsha	2	17,304	3.64	3.11	17,337
9	Alumim	450	Avsha	2	18,116	3.50	2.94	17,335
10	Heftzibah	2153	Gabon	3	18,026	3.33	3.00	17,259
11	Tze'elim	4974	Sefel	2	17,865	3.44	2.99	17,220
12	Nir Itzhak	4490	Scorer	2	17,909	3.37	2.94	16,984
13	Gan Shmuel	2189	Manof	3	16,300	3.81	3.25	16,968
14	Alumim	498	Avsha	2	17,769	3.35	2.98	16,968
15	Habonim	5533	Avsha	2	17,441	3.33	3.08	16,965
16	Refet Darom	4236	Arrow	4	16,542	3.64	3.22	16,944
17	Habonim	5006	Scorer	5	16,021	4.09	3.31	16,899
18	Sa'ad	4851	Avsha	2	17,546	3.46	2.97	16,856
19	Carmiya	5724	Mo'ed	4	16,495	3.61	3.21	16,848
20	Gan Shmuel	2363	Avsha	2	18,154	3.44	2.81	16,833



No.	Herd	Cow No.	Sire	Lact. No.	Days in milk	Milk kg	Average milk yield kg/day	Fat %	Protein %	Culling date
1	Ma'ale Gilboa	6492	Lasso	12	4,588	186,988	40.8	3.24	2.88	
2	Maoz Haiym	3405	Ginat	12	3,634	156,212	43.0	3.32	2.82	
3	Givat HaShelosha	3284	Boteach	9	4,043	154,510	38.2	3.42	2.72	05/09/06
4	Hof HaSharon	1201	Amzar	11	3,670	154,447	42.1	3.43	2.83	
5	Alumim	1299	Tamim	9	3,484	150,829	43.3	3.46	3.02	
6	Ma'ale Hagilboa	6817	Boteach	9	3,669	149,839	40.8	3.32	3.16	
7	Givat HaShelosha	3405	Ginat	9	3,494	147,460	42.2	3.58	2.94	15/02/06
8	Ramat Hakovesh	4844	La'am	8	3,278	145,407	44.4	3.78	3.15	17/12/06
9	Refet Hanegev	5572	Lime	8	2,939	142,020	48.3	3.60	3.06	
10	Gazit	3044	Ginat	12	3,753	141,704	37.8	3.09	2.86	
11	O.To.To. Halav	659	Boteach	9	3,547	141,585	39.9	3.43	3.17	02/06/06
12	Refet Hatabor	3501	Ginat	9	3,806	140,737	37.0	3.50	3.30	14/09/06
13	Shluchot	4131	Bosna	13	3,701	140,167	37.9	3.25	2.86	
14	Yagur	9449	Pitzpon	11	3,726	139,547	37.5	3.27	3.04	
15	Neveh Eitan	3671	Boteach	8	4,022	138,914	34.5	3.25	2.95	19/05/06
16	Refet Tefen	998	Bum	9	3,246	138,113	42.5	3.10	3.09	
17	Refet Hof Hasharon	16420	Boteach	11	4,304	137,787	32.0	3.65	3.14	
18	Kvutzat Schiller	3599	Pitzpon	10	3,436	137,111	39.9	3.69	3.15	22/03/06
19	Refet Arava Halav	3090	Pitzpon	12	3,667	136,768	37.3	3.07	2.90	27/03/06
20	Refet Dan	290	Boteach	11	4,147	136,376	32.9	3.27	3.02	19/11/06



Table 3.6

20 cows with highest lifetime yield, producing in 2006

