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Cattle
Cost of
production O.S.

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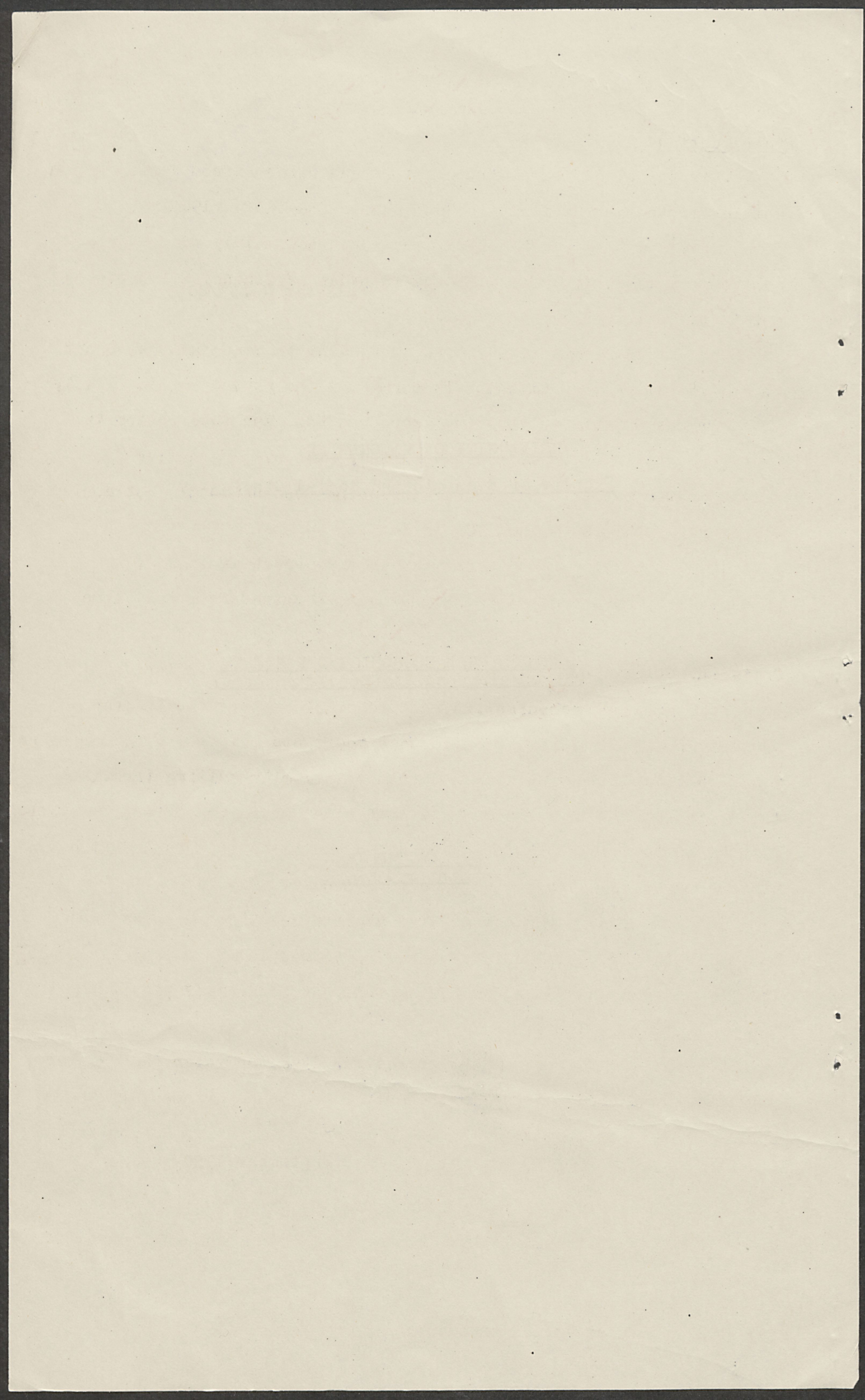
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FAT CATTLE COSTS
Winter 1949/50

September, 1950



FAT CATTLE COSTS

Introduction

This report deals with the cost of and returns from winter feeding cattle for beef on 20 farms in East Shropshire during 1949/50. The farms, averaging about 300 acres, are concerned mainly with arable cash crops, the chief of which are, in order of financial importance, potatoes, beet, barley and wheat.

On 5 of the farms it was more convenient to cost just one bunch of cattle but on the remaining 15 farms all the yarded cattle, likely to be graded out by early spring, were costed. For this reason the average costs in Table IV are unweighted. The average number of cattle costed per farm was 62 but including feeding cattle not costed the average would be around 70 per farm.

Home-grown foods have been charged throughout at cost of production. These costs were not however, obtained from the farms included in this survey but are those collected by way of the Milk Costs Investigation. On these feeding farms, with their larger acreages, greater mechanisation and technical superiority in crop production, it is highly probable that the costs of growing fodder crops would be less than those obtained from mainly milk selling farms. This point should be borne in mind when considering the overall results. Details of the costs of home-grown foods and the standards on which other charges are assessed will be found in Appendix I.

The food cost per beast and the average costs and returns per beast for the 20 individual farms are contained in Appendices II and III. The farms are arranged in descending order of profit per beast.

The Cost of Store Cattle

The total number of cattle costed was 1242, of which the greater part were home bred. A few of the cattle had been purchased in the spring of 1949 (a), but the general practice for winter feeding is to buy bunches of stores during October, November, and early December, for immediate entry into the yards. Details of the average costs per beast, estimated liveweights and costs per live hundredweight are given in Table 1.

(a) These were re-valued on entering the yards.

TABLE 1

Number, Average Cost and Weight per Store Beast on entering Yards

Class	Number	Cost per Beast (a)			Estimated weight per Beast Cwt.	Cost per L/Cwt.		
		£	s	d		£	s	d
Steers	836	53	3	8	9.77	5	8	10
Heifers	285	40	12	9	8.08	5	0	7
Cow Heifers	110	40	0	0	9.00	4	8	10
Cows	11	35	0	0	10.00	3	10	0
Total	1242	48	19	6	9.30	5	5	4

The figures of ingoing weights are estimates only, and as such, are liable to error. As, however, it is part of the cattle feeders stock in trade to make reasonably accurate liveweight estimates, it is assumed that their estimates made for costings purposes will be equally reliable. The average store cost was 7/-, and 21/- per live hundredweight below the average grading price for steers and heifers respectively. This suggests that the cattle, particularly heifers, were well bought, but in spite of this important fact, the majority were fed at a loss. The cow heifers, which appear particularly cheap, were home reared and priced into the yard at cost, less £5 each for their calf.

Grading Returns

The grading standard to which these store cattle were fed was particularly high. Sixty-one percent of the steers and 52% of the heifers graded out special or super special. Among individual farmer's grading returns, those of the older generation of farmers were outstanding in the proportion of specials and super specials. One such farmer from 72 'plain' stores graded 41 super specials and 27 specials. Full details for steers and heifers are given in Table 11.

TABLE 11

Grade Class of Graded Cattle

	<u>Steers</u>	<u>Heifers</u>
Super Specials	31	21
Specials	30	31
A+	22	33
A	13	13
A-	3	2
B+	1	-
B	-	-
	<u>100</u>	<u>100</u>

(a) Cost on farm, including transport, if any.

Disposals and Returns

Details of the manner of disposal and the average returns per beast and per net live hundredweight are given in Table 111. Included under the heading 'heifers' are 109 cow heifers. The retained cattle include 20 cattle turned out to grass and 4 heifers which proved to be in calf.

TABLE 111

Disposals and Returns

	No. of Cattle	Av: net live weight per beast Cwt.	Av:Return per beast			Av:Return per net live cwt.		
			£	s	d	£	s	d
Graded								
Steers	810	11.58	66	19	6	5	15	8
Heifers	388	9.66	58	11	10	6	1	4
Cows	11	11.25	39	5	8	3	9	10
Retained	24	-	46	13	9			
Casualties	7	-	48	3	10			
Deaths	2	-	2	0	0			
Total Graded Cattle	1209	10.96	64	0	8	5	16	10
Total All Cattle	1242	-	63	10	2			

Yard Feeding Costs

As already mentioned in the introduction these costs are calculated on an unweighted basis. That is to say, they are the average of 20 individual average costs, by which means equal importance is given to each farm, irrespective of the number of cattle fed or the proportion of these costed. By reason of employing this method, it will be found that the average store cost and return per beast in Table IV do not agree with those quoted in Tables 1 and 111, which are calculated on a weighted basis, i.e; from the total cattle costed.

TABLE IV

Costs, Returns and Profit per Beast (Average of 20 Farms)

	Cwt.	£	s	d
<u>Food Stuffs</u>				
Wet Beet Pulp	21.0	1	10	2
Roots (a)	39.0	3	13	2
Hay	12.0	2	18	0
Straw	7.2	1	1	10
Dried Grass	0.2		4	10
Corn and Pulses	4.1	2	8	10
Purchased Cake and Meal	1.3	1	9	2
Dry Beet Pulp	4.6	3	8	4
Grazing			2	4
<hr/>				
Total Foods		16	16	8
<u>Less</u> Manurial Residues			18	1
<hr/>				
Net Foods		15	18	7
<u>Labour</u>				
Manual		2	13	10
Horse			6	10
<u>Miscellaneous</u>				
			3	5
<u>Overheads</u>				
			15	11
<hr/>				
<u>Total Yarding Cost</u>		19	17	9
<u>Store Cost</u>		49	15	6
<hr/>				
<u>Total Cost</u>		69	13	3
<u>Return</u>		66	15	0
<hr/>				
<u>Loss</u>		2	18	3
<hr/>				
Average number of feeding days per beast.			132	
<hr/>				

(a) Mainly mangolds, but includes some swedes and beet tops.

Some General Observations

A result which shows an average loss of £2 18 3d per beast will not surprise winter cattle feeders. Their private opinion may be that this figure errs, if at all, on the low side. The average, however, covers a wide variation in individual farm results as will be seen from a study of the Table in Appendix III.

The romantic mysticism which appears to invest the practice of winter cattle feeding makes economic comment sound rather prosaic, but the hard facts would seem to be as follows. There is a substantial hard core of farmers in the arable district of Shropshire, mainly east of the Severn, who, with their very high standard of farming, have as yet no financial inducement to question the wisdom of maintaining soil fertility by means of a particular branch of farming which fails to show a profit on its own account. To the older generation of farmers, however ill the economic winds may blow, yard feeding will remain an indispensable part of good farming. The question of whether they can afford to winter feed cattle is ruled out by the prior conviction that they cannot afford not to winter feed. The younger generation of cattle feeders, not so steeped in tradition or so financially strong, express occasional misgivings. But beyond threats to rear their own stores or to feed a few less next year, there are as yet no very obvious signs that a change in policy is impending.

If these losses on the cattle are in fact the price paid for the excellent crop yields which are characteristic of these farms, then it is money well spent. It is probably true however that the foods consumed by these yarded cattle would produce more human food and more direct farming profit if fed through dairy cows, with little reduction in the value of the manure made if serious efforts were made to conserve it. The one sound objection to this proposal is that summer milking and summer arable work would not, or at least might not, integrate. Other objections are purely personal and much less likely to be overcome.

subject

The recent increase in prices for wet and dry beet pulp was a considerable blow to the Shropshire cattle feeders. The financial advantage of feeding wet pulp at cost ex factory (a) over feeding mangolds at cost of production has largely disappeared, but this does not appear to have materially affected the demand for wet pulp. Dry pulp, even at £14 10 Od. per ton still remains an economic proposition if oats can be sold at around £20 per ton.

(a) Transport is not generally important as most purchasers have their own lorries on regular runs to the factory with beet.

APPENDIX 1

Notes on Compilation of Costs

Home Grown Foods

The following charges have been made for home grown foods. These are based on 'Provincial' average production costs for 1949.

	<u>Per Ton</u>		
	£	s	d
Meadow Hay	5	4	0
Seeds Hay	4	17	4
Oats Grain	11	12	0
Straw	3	0	10
Mixed Corn Grain	11	5	8
Straw	3	1	3
Mangolds	1	15	6
Swedes	2	16	7
Grazing	6d per beast per day.		

Other home grown foods have been charged as follows:-

	<u>Per Ton</u>		
	£	s	d
Beans	20	0	0
Dried Grass	20	0	0
Beet Tops	1	17	10
Potatoes	4	5	3

N.B. No charge is included for litter straw.

Purchased Foods

Charged at cost on farm

Labour

Manual - Stockmen were charged at the actual rates paid on the co-operating farms. Other labour was charged at 2/6d per hour for ordinary time and 3/- per hour for overtime in the case of males 21 years and over, and other categories at the appropriate rates.

Horse - Charged at 1/2d per hour.

Miscellaneous

This charge includes transport to the grading centre, veterinary costs and other incidentals.

Overheads

Charged at 6/- per £1 spent on direct manual labour.

Manurial Residues

Charged in accordance with the recommendations of the Scott Watson Committee.

APPENDIX 11

Food Cost per Beast

Wet Beet Pulp	Roots #	Hay	Straw	Dried Grass	Corn & Pulse	Dry Beet Pulp	Purchased Foods	Grazing			Gross Food Costs			Less Manurial Residues			Net Food Cost			Average Feeding Days
								£	s	d	£	s	d	£	s	d	£	s	d	
28.4	12.8	8.2	8.2	-	2.91	2.19	4.16		-		13	16	8	0	13	2	13	3	6	155
17.6	12.2	9.0	9.0	-	5.4	3.60	-		-		12	9	11	0	13	1	11	16	10	125
31.0	15.2	4.6	7.4	-	-	1.61	1.25	0	0	9	8	11	1	0	7	1	8	4	0	85
-	-	11.4	-	-	-	11.39	-		-		11	4	11	0	10	9	10	14	2	69
48.6	58.2	16.2	8.6	0.55	4.25	3.09	0.76	0	2	6	21	8	0	1	2	0	20	6	0	195
26.2	12.8	12.2	0.6	0.63	5.93	0.36	1.45	0	2	6	12	8	2	0	16	4	11	11	10	79
23.8	28.8	10.4	6.2	-	2.09	4.49	2.58		-		15	16	3	0	15	6	15	0	9	123
7.2	54.6	14.6	6.0	-	3.91	5.85	-		-		17	6	8	0	19	11	16	6	9	146
53.4	38.4	9.8	9.2	-	5.27	2.63	-		-		14	19	4	0	15	4	14	4	0	104
-	54.0	11.4	7.8	-	8.73	4.39	-	0	5	5	17	17	0	1	0	5	16	16	7	173
50.4	20.0	12.0	10.6	-	3.20	13.50	2.80		-		24	12	11	1	1	11	23	11	0	163
17.6	44.4	11.6	7.4	-	6.03	2.68	0.92	1	0	2	16	12	10	0	11	6	16	1	4	155
16.2	28.6	7.2	7.0	-	6.48	4.42	0.97		-		14	14	4	0	13	10	14	0	6	169
15.8	18.8	19.2	9.6	-	7.85	3.36	0.82		-		17	17	4	1	2	6	16	14	8	94
51.8	10.6	6.4	8.0	-	1.59	7.81	0.23		-		14	1	11	0	11	0	13	10	11	92
-	56.0	13.0	7.8	-	8.49	4.41	-		-		18	1	9	1	1	6	17	0	3	158
-	79.6	5.4	15.0	2.00	3.55	5.18	0.45		-		21	10	4	1	11	5	19	18	11	117
29.4	10.6	8.0	4.8	-	2.65	5.30	6.09		-		18	15	10	0	14	4	18	1	6	135
12.4	139.4	20.0	2.6	1.67	3.13	0.93	3.38	0	5	6	26	19	9	1	13	4	25	6	5	166
-	73.6	28.6	4.8	-	-	3.82	-	0	8	7	17	10	0	1	5	10	16	4	2	144
21.0	39.0	12.0	7.2	0.24	4.07	4.59	1.29	0	2	3	16	16	8	0	18	1	15	18	7	132

Including Sugar Beet Tops

APPENDIX 111

Average Costs and Returns per Beast

Store Cost			Disposal Price			Gross Feeders' Margin			Feeding Stuffs - net			Labour			Miscellaneous			Overtime			Total Yarding Cost			Profit or Loss			Total live-weight gain per beast (a)	Live-weight gain per day (a)	Cost per lb. live-weight (a)				
£	s	d	£	s	d	£	s	d	£	s	d	£	s	d	£	s	d	£	s	d	£	s	d	£	s	d	£	s	d	lbs.	lbs.	s	d
40	7	4	62	13	1	22	5	9	13	3	6	2	8	11	0	3	6	0	13	10	16	9	11	+5	15	10	209	1.35	1	7			
48	15	0	66	13	3	17	14	3	11	16	10	2	4	8	0	3	6	0	11	6	14	15	6	+2	18	9	245	1.96	1	3			
51	3	9	62	14	3	11	10	6	8	4	0	1	16	6	0	2	0	9	6	10	13	0	+0	17	6	94	1.11	2	3				
58	0	0	70	10	0	12	10	0	10	14	2	1	1	1	0	3	1	6	5	12	5	2	+0	4	11	168	2.43	1	5				
44	15	5	72	10	7	27	15	2	20	6	0	5	11	7	0	8	0	11	2	27	16	9	0	1	7	447	2.29	1	3				
53	3	8	66	15	1	13	11	5	11	11	10	1	17	7	0	0	0	10	1	13	19	5	0	8	0	226	2.86	1	3				
58	15	7	76	4	0	17	8	5	15	0	9	2	4	7	0	5	0	12	5	18	2	9	0	14	4	274	2.23	1	4				
53	13	6	71	6	2	17	12	8	16	6	9	2	11	11	0	4	2	6	8	19	9	6	-1	16	10	259	1.77	1	6				
57	10	0	73	10	8	16	0	8	14	4	0	2	16	0	0	4	8	0	14	6	17	19	2	-1	18	6	275	2.64	1	4			
45	8	5	65	3	7	19	15	2	16	16	7	3	19	10	0	3	0	1	2	22	1	7	-2	6	5	277	1.60	1	7				
34	8	0	58	11	11	24	3	11	23	11	0	3	8	2	0	0	11	1	18	0	27	18	1	-3	14	2	380	2.33	1	6			
51	7	2	68	1	6	16	14	4	16	1	4	3	13	0	1	1	0	18	0	20	14	6	-4	0	2	250	1.61	2	4				
47	0	4	61	11	4	14	11	0	14	0	6	3	9	2	0	1	2	19	6	18	13	4	-4	2	4	161	0.95	1	8				
50	5	8	67	4	8	16	19	0	16	14	8	3	14	0	0	8	6	19	7	21	16	9	-4	17	9	315	3.35	1	5				
52	15	11	64	7	5	11	11	6	13	10	11	2	4	10	0	2	10	12	4	16	10	11	-4	19	5	133	1.45	2	6				
43	3	4	59	8	4	16	5	0	17	0	3	4	3	8	0	2	7	1	3	22	9	10	-6	4	10	197	1.25	2	3				
57	0	0	73	16	5	16	16	5	19	18	11	2	16	1	0	4	0	12	11	23	11	11	-6	15	6	206	1.76	2	3				
44	8	10	58	11	9	14	2	11	18	1	6	2	4	8	0	3	7	0	12	8	21	2	5	-6	19	6	188	1.39	2	3			
49	7	9	72	2	11	22	15	2	25	6	5	3	13	11	0	2	10	0	17	5	30	0	7	-7	5	5	273	1.64	2	2			
54	3	5	63	6	6	9	3	1	16	4	2	3	17	10	0	1	11	1	0	11	4	11	-12	1	9	163	1.13	2	7				
49	15	6	66	15	0	16	19	6	15	18	7	2	19	10	0	3	5	0	15	11	19	17	9	-2	18	3	237	1.80	1	8			

(a) Calculated on Ministry of Food Weight plus one quarter (28 lbs.)

