

## Hy-Line Brown Capabilities—Alternative Systems

<b>Growing Period (to 17 weeks):</b>	
Livability	97%
Feed Consumed	5.62 kg (12.4 lb)
Body Weight at 17 Weeks	1.36 kg (3.00 lb)
<b>Laying Period (to 110 weeks):</b>	
Percent Peak	94-96%
Hen-Day Eggs to 60 Weeks	241-259
Hen-Day Eggs to 80 Weeks	350-371
Hen-Housed Eggs to 60 Weeks	237-255
Hen-Housed Eggs to 80 Weeks	341-361
Livability to 60 Weeks	97%
Livability to 80 Weeks	94%
Days to 50% Production (from hatch)	142
Egg Weight at 26 Weeks	58.5 g/egg (46.4 lb/case)
Egg Weight at 32 Weeks	61.4 g/egg (48.7 lb/case)
Egg Weight at 70 Weeks	66.1 g/egg (52.5 lb/case)
Total Egg Mass per Hen-Housed (18–80 weeks)	21.6 kg (47.6 lb)
Body Weight at 32 Weeks	1.87 kg (4.12 lb)
Body Weight at 70 Weeks	1.98 kg (4.37 lb)
Freedom From Egg Inclusions	Excellent
Shell Strength	Excellent
Shell Color at 38 Weeks	87
Shell Color at 56 Weeks	85
Shell Color at 70 Weeks	81
Haugh Units at 38 Weeks	90
Haugh Units at 56 Weeks	84
Haugh Units at 70 Weeks	81
Average Daily Feed Consumption (18–80 weeks)	107 g/day per bird (23.6 lb/day per 100 birds)
Feed Conversion Rate, kg Feed/kg Eggs or lb Feed/lb Eggs (20-60 weeks)	2.06
Feed Conversion Rate, kg Feed/kg Eggs or lb Feed/lb Eggs (20–80 weeks)	2.08
Feed Utilization, kg Egg/kg Feed or lb Egg/lb Feed (20-60 weeks)	0.485
Feed Utilization, kg Egg/kg Feed or lb Egg/lb Feed (20-80 weeks)	0.481
Feed per Dozen Eggs (20-60 Weeks)	1.54 kg (3.39 lb)
Feed per Dozen Eggs (20-80 weeks)	1.58 kg (3.49 lb)
Skin Color	Yellow
Condition of Droppings	Dry

The genetic potential of Hy-Line varieties can only be realized if good poultry husbandry practices and management are used. The above information is based on field experience compiled by Hy-Line, extensive commercial flock records cataloged by Hy-Line from all parts of the world and principles taken from industry technical literature. It should be used for guidance and educational purposes only, recognizing that local environmental and disease conditions may vary and a handout cannot cover all possible circumstances.

Hy-Line Brown Target Weights Alternative Systems		
—Growing Period—		
Age in Weeks	Body Weight*	
	g	lb
1	70	0.15
2	120	0.26
3	180	0.40
4	250	0.55
5	335	0.74
6	430	0.95
7	525	1.16
8	620	1.37
9	725	1.60
10	830	1.83
11	925	2.04
12	1020	2.25
13	1100	2.43
14	1160	2.56
15	1220	2.69
16	1280	2.82
17**	1360	3.00
18	1440	3.17

\* Pullets grown on the floor, or in a tropical climate, can be 50 g (0.1 lb) lighter than shown.

\*\* Move to Lay House

Hy-Line Brown Feed Consumption* Alternative Systems				
—Growing Period—				
Age in weeks	Daily		Cumulative	
	g/day per bird	lb/day per 100 birds	g to date	lb to date
1	10	2.20	70	0.15
2	18	3.97	196	0.43
3	21	4.63	343	0.76
4	27	5.95	532	1.17
5	30	6.61	742	1.64
6	36	7.94	994	2.19
7	40	8.82	1274	2.81
8	43	9.48	1575	3.47
9	49	10.80	1918	4.23
10	54	11.90	2296	5.06
11	58	12.79	2702	5.96
12	62	13.67	3136	6.91
13	65	14.33	3591	7.92
14	68	14.99	4067	8.97
15	70	15.43	4557	10.05
16	75	16.53	5082	11.20
17	77	16.98	5621	12.39

\* Pullets feed consumption varies with feed formulation and environmental temperatures.

Hy-Line Brown Growing Period Nutritional Recommendations—Alternative Systems					
Item <sup>1</sup>	Starter 1	Starter 2	Grower	Developer	Pre-lay <sup>5</sup>
Feed to a body weight of	200 g	450 g	1070 g	1260 g	1400 g
Approximate age	0–3 weeks	4–6 weeks	7–12 weeks	13–15 weeks	16–17 weeks
<b>Recommended concentration<sup>2</sup></b>					
Metabolizable energy, kcal/lb	1275–1325	1275–1325	1265–1315	1230–1280	1240–1330
Metabolizable energy, kcal/kg	2811–2922	2811–2922	2789–2900	2712–2822	2734–2933
Metabolizable energy, MJ/kg	11.77–12.23	11.77–12.23	11.68–12.14	11.35–11.81	11.44–12.28
<b>Minimum recommended concentration</b>					
<b>Standardized (true) ileal digestible amino acids</b>					
Lysine, %	0.99	0.90	0.80	0.65	0.70
Methionine, %	0.45	0.41	0.38	0.31	0.34
Methionine + cystine, %	0.75	0.70	0.65	0.57	0.63
Threonine, %	0.63	0.59	0.54	0.44	0.48
Tryptophan, %	0.18	0.17	0.17	0.14	0.15
Arginine, %	1.06	0.96	0.86	0.70	0.75
Isoleucine, %	0.69	0.65	0.59	0.49	0.56
Valine, %	0.71	0.67	0.62	0.52	0.60
<b>Total amino acids<sup>3</sup></b>					
Lysine, %	1.08	0.99	0.88	0.71	0.77
Methionine, %	0.48	0.45	0.40	0.33	0.37
Methionine + cystine, %	0.85	0.79	0.73	0.65	0.71
Threonine, %	0.75	0.69	0.63	0.52	0.57
Tryptophan, %	0.21	0.20	0.20	0.17	0.18
Arginine, %	1.14	1.04	0.92	0.75	0.81
Isoleucine, %	0.75	0.70	0.64	0.52	0.60
Valine, %	0.79	0.73	0.69	0.57	0.66
Crude protein (nitrogen × 6.25), <sup>3</sup> %	20.00	18.25	17.50	16.00	16.50
Calcium, <sup>4</sup> %	1.00	1.00	1.00	1.40	2.50
Phosphorus (available), %	0.45	0.44	0.43	0.45	0.48
Sodium, %	0.18	0.17	0.17	0.18	0.18
Chloride, %	0.18	0.17	0.17	0.18	0.18
Linoleic acid (C18:2 n-6), %	1.00	1.00	1.00	1.00	1.00

<sup>1</sup> Change diets at the recommended target body weight—the approximate age is a guide only.

<sup>2</sup> Differences in the metabolizable energy value assigned to feed ingredients of the same name can differ substantially; in some cases, the recommended dietary energy content may have to be adjusted accordingly (see Hy-Line Online Management Guide for additional information).

<sup>3</sup> The minimum recommendations for total amino acids and crude protein are only appropriate with a corn and soybean meal diet; please formulate the diet on digestible amino acid basis instead.

<sup>4</sup> Calcium should be supplied as a fine calcium carbonate source (mean particle size less than 2 mm).

<sup>5</sup> Do not feed the pre-lay diet beyond the first egg as it does not contain sufficient calcium to sustain egg production.

## Hy-Line Brown Laying Period Nutritional Recommendations—Alternative Systems

Item <sup>1</sup>	Peaking Point of lay to 32 weeks	Above 93% to 89% egg production 33–44 weeks	88 to 85% egg production 45–58 weeks	Less than 85% egg production 59+ weeks
<b>Recommended concentration<sup>2</sup></b>				
Metabolizable energy, kcal/lb	1260–1300	1240–1300	1215–1300	1160–1285
Metabolizable energy, kcal/kg	2778–2867	2734–2867	2679–2867	2558–2833
Metabolizable energy, MJ/kg	11.63–12.00	11.44–12.00	11.21–12.00	10.71–11.86
<b>Minimum recommended concentration</b>				
<b>Standardized (true) ileal digestible amino acids</b>				
Lysine, mg/day	850	840	800	750
Methionine, mg/day	417	412	392	368
Methionine + cystine, mg/day	714	722	688	645
Threonine, mg/day	595	588	560	525
Tryptophan, mg/day	179	176	168	158
Arginine, mg/day	910	899	856	803
Isoleucine, mg/day	672	664	632	593
Valine, mg/day	765	756	720	675
<b>Total amino acids<sup>3</sup></b>				
Lysine, mg/day	931	920	876	821
Methionine, mg/day	448	443	422	395
Methionine + cystine, mg/day	805	815	776	727
Threonine, mg/day	700	692	659	618
Tryptophan, mg/day	213	211	201	188
Arginine, mg/day	978	966	920	863
Isoleucine, mg/day	722	714	680	637
Valine, mg/day	844	834	794	744
Crude protein (nitrogen × 6.25), <sup>3</sup> g/day	17.00	16.75	16.00	15.50
Calcium, <sup>4</sup> g/day	4.00	4.40	4.70	4.90
Phosphorus (available), mg/day	440	400	360	350
Sodium, mg/day	180	180	180	180
Chloride, mg/day	180	180	180	180
Linoleic acid (C18:2 n-6), g/day	1.00	1.00	1.00	1.00
Choline, mg/day	100	100	100	100

<sup>1</sup> Consumption of amino acids, fat, linoleic acid, and/or energy may be changed to optimize egg size.

<sup>2</sup> The recommended energy range is based on the energy values shown in the Hy-Line Online Management Guide. Differences in the metabolizable energy value assigned to feed ingredients of the same name can differ substantially; in some cases, the recommended dietary energy content may have to be adjusted accordingly (see Hy-Line Online Management Guide for additional information).

<sup>3</sup> Total amino acids are only appropriate with a corn and soybean meal diet; please formulate the diet on digestible amino acid basis if a substantial amount of other protein-supplying ingredients are used.

<sup>4</sup> Approximately 65% of the added calcium carbonate (limestone) should be in particle sizes of 2–4 mm.

Hy-Line Brown Laying Period Nutritional Recommendations—Alternative Systems																				
Item <sup>1</sup>	Peaking					Above 93% to 89% egg production					88% to 85% egg production					Less than 85% egg production				
	Point of lay to 32 weeks					33–44 weeks					45–58 weeks					59+ weeks				
<b>Recommended concentration<sup>2</sup></b>																				
Metabolizable energy, kcal/lb	1260–1300					1240–1300					1215–1300					1160–1285				
Metabolizable energy, kcal/kg	2778–2867					2734–2867					2679–2867					2558–2833				
Metabolizable energy, MJ/kg	11.63–12.00					11.44–12.00					11.21–12.00					10.71–11.86				
<b>Feed consumption</b>																				
g/day per hen	93	98	<b>103*</b>	108	113	100	105	<b>110*</b>	115	120	100	105	<b>110*</b>	115	120	99	104	<b>109*</b>	114	119
lb/day per 100 hens	20.5	21.6	<b>22.7</b>	23.8	24.9	22.1	23.2	<b>24.3</b>	25.4	26.5	22.1	23.2	<b>24.3</b>	25.4	26.5	21.8	22.9	<b>24.0</b>	25.1	26.2
<b>Standardized (true) ileal digestible amino acids</b>																				
Lysine, %	0.91	0.87	<b>0.83</b>	0.79	0.75	0.84	0.80	<b>0.76</b>	0.73	0.70	0.80	0.76	<b>0.73</b>	0.70	0.67	0.76	0.72	<b>0.69</b>	0.66	0.63
Methionine, %	0.45	0.43	<b>0.40</b>	0.39	0.37	0.41	0.39	<b>0.37</b>	0.36	0.34	0.39	0.37	<b>0.36</b>	0.34	0.33	0.37	0.35	<b>0.34</b>	0.32	0.31
Methionine + cystine, %	0.77	0.73	<b>0.69</b>	0.66	0.63	0.72	0.69	<b>0.66</b>	0.63	0.60	0.69	0.66	<b>0.63</b>	0.60	0.57	0.65	0.62	<b>0.59</b>	0.57	0.54
Threonine, %	0.64	0.61	<b>0.58</b>	0.55	0.53	0.59	0.56	<b>0.53</b>	0.51	0.49	0.56	0.53	<b>0.51</b>	0.49	0.47	0.53	0.50	<b>0.48</b>	0.46	0.44
Tryptophan, %	0.19	0.18	<b>0.17</b>	0.17	0.16	0.18	0.17	<b>0.16</b>	0.15	0.15	0.17	0.16	<b>0.15</b>	0.15	0.14	0.16	0.15	<b>0.14</b>	0.14	0.13
Arginine, %	0.98	0.93	<b>0.88</b>	0.84	0.81	0.90	0.86	<b>0.82</b>	0.78	0.75	0.86	0.82	<b>0.78</b>	0.74	0.71	0.81	0.77	<b>0.74</b>	0.70	0.67
Isoleucine, %	0.72	0.69	<b>0.65</b>	0.62	0.59	0.66	0.63	<b>0.60</b>	0.58	0.55	0.63	0.60	<b>0.57</b>	0.55	0.53	0.60	0.57	<b>0.54</b>	0.52	0.50
Valine, %	0.82	0.78	<b>0.74</b>	0.71	0.68	0.76	0.72	<b>0.69</b>	0.66	0.63	0.72	0.69	<b>0.65</b>	0.63	0.60	0.68	0.65	<b>0.62</b>	0.59	0.57
<b>Total amino acids<sup>3</sup></b>																				
Lysine, %	1.00	0.95	<b>0.90</b>	0.86	0.82	0.92	0.88	<b>0.84</b>	0.80	0.77	0.88	0.83	<b>0.80</b>	0.76	0.73	0.83	0.79	<b>0.75</b>	0.72	0.69
Methionine, %	0.48	0.46	<b>0.43</b>	0.41	0.40	0.44	0.42	<b>0.40</b>	0.39	0.37	0.42	0.40	<b>0.38</b>	0.37	0.35	0.40	0.38	<b>0.36</b>	0.35	0.33
Methionine + cystine, %	0.87	0.82	<b>0.78</b>	0.75	0.71	0.82	0.78	<b>0.74</b>	0.71	0.68	0.78	0.74	<b>0.71</b>	0.67	0.65	0.73	0.70	<b>0.67</b>	0.64	0.61
Threonine, %	0.75	0.71	<b>0.68</b>	0.65	0.62	0.69	0.66	<b>0.63</b>	0.60	0.58	0.66	0.63	<b>0.60</b>	0.57	0.55	0.62	0.59	<b>0.57</b>	0.54	0.52
Tryptophan, %	0.23	0.22	<b>0.21</b>	0.20	0.19	0.21	0.20	<b>0.19</b>	0.18	0.18	0.20	0.19	<b>0.18</b>	0.17	0.17	0.19	0.18	<b>0.17</b>	0.16	0.16
Arginine, %	1.05	1.00	<b>0.95</b>	0.91	0.87	0.97	0.92	<b>0.88</b>	0.84	0.81	0.92	0.88	<b>0.84</b>	0.80	0.77	0.87	0.83	<b>0.79</b>	0.76	0.73
Isoleucine, %	0.78	0.74	<b>0.70</b>	0.67	0.64	0.71	0.68	<b>0.65</b>	0.62	0.60	0.68	0.65	<b>0.62</b>	0.59	0.57	0.64	0.61	<b>0.58</b>	0.56	0.54
Valine, %	0.91	0.86	<b>0.82</b>	0.78	0.75	0.83	0.79	<b>0.76</b>	0.73	0.70	0.79	0.76	<b>0.72</b>	0.69	0.66	0.75	0.72	<b>0.68</b>	0.65	0.63
Crude protein (nitrogen x 6.25), <sup>3</sup> %	18.28	17.35	<b>16.50</b>	15.74	15.04	16.75	15.95	<b>15.23</b>	14.57	13.96	16.00	15.24	<b>14.55</b>	13.91	13.33	15.66	14.90	<b>14.22</b>	13.60	13.03
Calcium, <sup>4</sup> %	4.30	4.08	<b>3.88</b>	3.70	3.54	4.40	4.19	<b>4.00</b>	3.83	3.67	4.70	4.48	<b>4.27</b>	4.09	3.92	4.95	4.71	<b>4.50</b>	4.30	4.12
Phosphorus (available), %	0.47	0.45	<b>0.43</b>	0.41	0.39	0.40	0.38	<b>0.36</b>	0.35	0.33	0.36	0.34	<b>0.33</b>	0.31	0.30	0.35	0.34	<b>0.32</b>	0.31	0.29
Sodium, %	0.19	0.18	<b>0.17</b>	0.17	0.16	0.18	0.17	<b>0.16</b>	0.16	0.15	0.18	0.17	<b>0.16</b>	0.16	0.15	0.18	0.17	<b>0.17</b>	0.16	0.15
Chloride, %	0.19	0.18	<b>0.17</b>	0.17	0.16	0.18	0.17	<b>0.16</b>	0.16	0.15	0.18	0.17	<b>0.16</b>	0.16	0.15	0.18	0.17	<b>0.17</b>	0.16	0.15
Linoleic acid (C18:2 n-6), %	1.08	1.02	<b>0.97</b>	0.93	0.88	1.00	0.95	<b>0.91</b>	0.87	0.83	1.00	0.95	<b>0.91</b>	0.87	0.83	1.01	0.96	<b>0.92</b>	0.88	0.84

\*Typical feed consumption for the age based on available data.

<sup>1</sup> Consumption of amino acids, fat, linoleic acid, and/or energy may be changed to optimize egg size.  
<sup>2</sup> The recommended energy range is based on the energy values shown in the Hy-Line Online Management Guide. Differences in the metabolizable energy value assigned to feed ingredients of the same name can differ substantially; in some cases, the recommended dietary energy content may have to be adjusted accordingly (see Hy-Line Online Management Guide for additional information).  
<sup>3</sup> Total amino acids are only appropriate with a corn and soybean meal diet; please formulate the diet on digestible amino acid basis if a substantial amount of other protein-supplying ingredients are used.  
<sup>4</sup> Approximately 65% of the added calcium carbonate (limestone) should be in particle sizes of 2–4 mm.

Hy-Line Brown Performance Table—Alternative Systems

Age in Weeks	% Hen-Day Curr.		Mortality Cum.	Hen-Day Eggs		Hen-Housed Eggs		Body Weight		Average Egg Weight*		Feed Consumption		Hen-Housed Egg Mass Cum.		Egg Quality		
	Curr. under Opt. Conditions	Curr. under Avg. Conditions		% Cum.	Cum. under Opt. Conditions	Cum. under Avg. Conditions	Cum. under Opt. Conditions	Cum. under Avg. Conditions	kg	lb	g/egg	Net lb/30 doz case	g/day per bird	lb/day per 100 birds	kg	lb	Haugh Units	Breaking Strength
18	0	0	0.0	0.0	0.0	0.0	0.0	1.44	3.18	50.0	39.7	78	17.2	0.0	0.0	98.2	4620	90
19	9	1	0.1	0.6	0.1	0.6	0.1	1.49	3.29	50.6	40.2	80	17.6	0.0	0.0	98.0	4610	90
20	31	11	0.1	2.8	0.8	2.8	0.8	1.61	3.55	51.2	40.6	89	19.6	0.0	0.1	97.8	4605	89
21	71	32	0.2	7.8	3.1	7.8	3.1	1.68	3.70	53.2	42.2	93	20.5	0.2	0.4	97.2	4595	89
22	90	58	0.3	14.1	7.1	14.0	7.1	1.74	3.84	54.4	43.2	96	21.2	0.4	0.8	97.0	4590	89
23	92	72	0.3	20.5	12.2	20.5	12.2	1.78	3.92	55.5	44.0	100	22.1	0.7	1.5	96.5	4585	89
24	94	83	0.4	27.1	18.0	27.0	17.9	1.80	3.97	56.6	44.9	103	22.6	1.0	2.2	96.0	4580	89
25	94	90	0.4	33.7	24.3	33.6	24.2	1.81	3.99	57.7	45.8	104	22.9	1.4	3.0	95.5	4575	88
26	95	91	0.5	40.3	30.7	40.2	30.5	1.82	4.01	58.5	46.4	105	23.1	1.7	3.8	95.1	4570	88
27	95	92	0.6	47.0	37.1	46.8	36.9	1.83	4.04	58.7	46.6	106	23.4	2.1	4.6	94.7	4565	88
28	95	93	0.6	53.6	43.6	53.4	43.4	1.84	4.06	58.9	46.7	108	23.7	2.5	5.5	94.2	4560	88
29	95	93	0.7	60.3	50.1	60.0	49.9	1.85	4.08	59.8	47.5	108	23.8	2.9	6.3	93.7	4550	88
30	95	93	0.7	66.9	56.6	66.6	56.3	1.86	4.10	60.2	47.8	108	23.9	3.3	7.2	93.3	4540	88
31	95	92	0.8	73.6	63.1	73.2	62.7	1.86	4.10	61.2	48.6	109	24.0	3.6	8.0	92.8	4525	88
32	95	92	0.9	80.2	69.5	79.8	69.1	1.87	4.12	61.4	48.7	109	24.1	4.0	8.9	92.2	4515	88
33	95	92	0.9	86.9	76.0	86.4	75.5	1.87	4.12	61.6	48.9	110	24.2	4.4	9.8	92.0	4505	88
34	95	91	1.0	93.5	82.3	92.9	81.8	1.88	4.15	62.0	49.2	110	24.3	4.8	10.6	91.5	4490	88
35	94	91	1.1	100.1	88.7	99.4	88.1	1.88	4.15	62.2	49.4	110	24.3	5.2	11.5	91.1	4475	87
36	94	91	1.1	106.7	95.1	106.0	94.4	1.89	4.17	62.4	49.5	110	24.3	5.6	12.4	90.6	4450	87
37	94	91	1.2	113.3	101.4	112.4	100.7	1.89	4.17	62.6	49.7	110	24.3	6.0	13.2	90.4	4440	87
38	94	91	1.3	119.8	107.8	118.9	107.0	1.90	4.19	62.8	49.8	110	24.3	6.4	14.1	90.0	4425	87
39	94	91	1.4	126.4	114.2	125.4	113.2	1.90	4.19	63.0	50.0	110	24.3	6.8	15.0	89.6	4415	87
40	93	90	1.5	132.9	120.5	131.8	119.4	1.91	4.21	63.1	50.1	110	24.3	7.2	15.8	89.3	4405	87
41	93	90	1.5	139.4	126.8	138.2	125.6	1.91	4.21	63.2	50.2	110	24.3	7.6	16.7	88.9	4390	87
42	93	90	1.6	146.0	133.1	144.6	131.8	1.91	4.21	63.3	50.2	110	24.3	8.0	17.6	88.5	4375	87
43	93	89	1.7	152.5	139.3	151.0	138.0	1.92	4.23	63.4	50.3	110	24.3	8.4	18.4	88.0	4365	87
44	92	89	1.8	158.9	145.5	157.4	144.1	1.92	4.23	63.5	50.4	110	24.2	8.7	19.3	87.8	4355	87
45	92	88	1.9	165.3	151.7	163.7	150.1	1.92	4.23	63.6	50.5	110	24.2	9.1	20.1	87.4	4340	87
46	92	88	2.0	171.8	157.9	170.0	156.2	1.93	4.26	63.7	50.6	110	24.2	9.5	21.0	87.1	4320	87
47	91	88	2.1	178.2	164.0	176.2	162.2	1.93	4.26	63.8	50.6	110	24.2	9.9	21.8	86.7	4310	87
48	91	87	2.2	184.5	170.1	182.5	168.1	1.93	4.26	63.9	50.7	110	24.2	10.3	22.7	86.4	4305	87
49	91	87	2.3	190.9	176.2	188.7	174.1	1.94	4.28	64.0	50.8	110	24.2	10.7	23.5	86.1	4295	86
50	90	86	2.4	197.2	182.2	194.8	180.0	1.94	4.28	64.1	50.9	110	24.2	11.0	24.3	85.6	4280	86
51	90	86	2.5	203.5	188.2	201.0	185.8	1.94	4.28	64.2	51.0	110	24.2	11.4	25.2	85.0	4265	86
52	90	86	2.6	209.8	194.3	207.1	191.7	1.95	4.30	64.3	51.0	110	24.2	11.8	26.0	85.0	4250	86
53	89	85	2.7	216.0	200.2	213.2	197.5	1.95	4.30	64.4	51.1	110	24.2	12.2	26.8	84.8	4240	86
54	89	85	2.8	222.3	206.2	219.2	203.3	1.95	4.30	64.5	51.2	110	24.2	12.5	27.6	84.6	4225	86
55	88	84	2.9	228.4	212.0	225.2	209.0	1.96	4.32	64.6	51.3	110	24.2	12.9	28.4	84.3	4210	86
56	88	84	3.0	234.6	217.9	231.2	214.7	1.96	4.32	64.7	51.3	110	24.2	13.3	29.3	84.0	4190	85
57	88	84	3.1	240.7	223.8	237.1	220.4	1.96	4.32	64.8	51.4	110	24.2	13.6	30.1	83.8	4180	85
58	87	83	3.3	246.8	229.6	243.0	226.0	1.97	4.34	64.9	51.5	110	24.2	14.0	30.9	83.1	4170	85
59	87	83	3.4	252.9	235.4	248.9	231.6	1.97	4.34	65.0	51.6	110	24.2	14.4	31.7	82.8	4160	85
60	86	82	3.5	258.9	241.2	254.7	237.1	1.97	4.34	65.1	51.7	110	24.1	14.7	32.5	82.6	4150	85

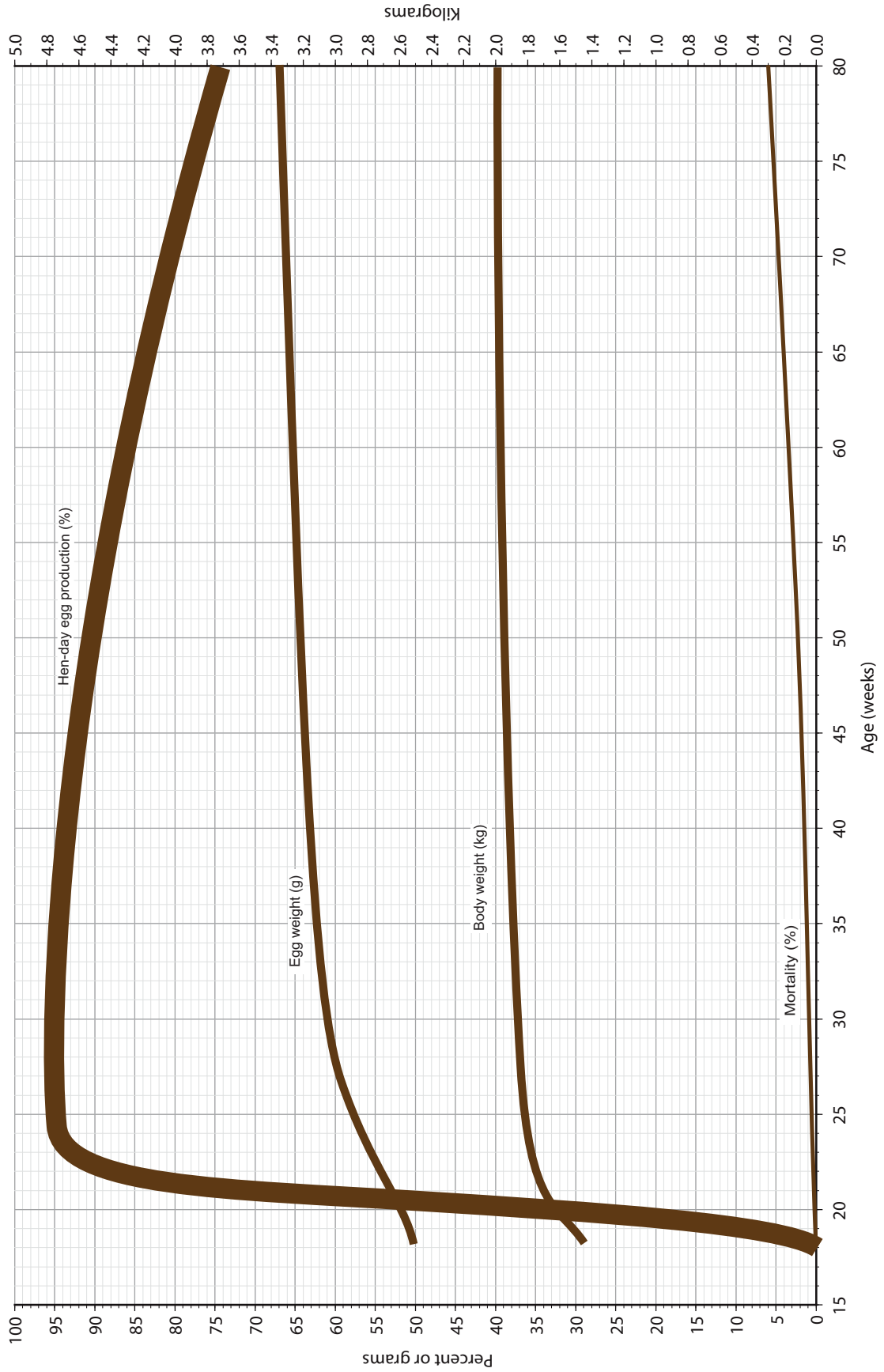
\* Egg weights after 40 weeks of age assume phase feeding of protein to limit egg size.

Hy-Line Brown Performance Table—Alternative Systems

Age in Weeks	% Hen-Day Curr.		Mortality Cum.	Hen-Day Eggs		Hen-Housed Eggs		Body Weight		Average Egg Weight*		Feed Consumption		Hen-Housed Egg Mass Cum.		Egg Quality		
	Curr. under Opt. Conditions	Curr. under Avg. Conditions		% Cum.	Cum. under Opt. Conditions	Cum. under Avg. Conditions	Cum. under Opt. Conditions	Cum. under Avg. Conditions	kg	lb	g/egg	Net lb/30 doz case	g/day per bird	lb/day per 100 birds	kg	lb	Haugh Units	Breaking Strength
61	86	82	3.6	265.0	246.9	260.5	242.7	1.98	4.37	65.2	51.7	110	24.1	15.1	33.3	82.4	4140	84
62	85	82	3.7	270.9	252.6	266.2	248.2	1.98	4.37	65.3	51.8	110	24.1	15.4	34.1	82.2	4130	84
63	85	81	3.9	276.9	258.3	272.0	253.6	1.98	4.37	65.4	51.9	110	24.1	15.8	34.9	82.0	4120	84
64	84	81	4.0	282.7	264.0	277.6	259.1	1.98	4.37	65.5	52.0	110	24.1	16.2	35.6	81.9	4110	83
65	83	80	4.1	288.5	269.6	283.2	264.4	1.98	4.37	65.6	52.1	110	24.1	16.5	36.4	81.8	4095	83
66	83	80	4.2	294.4	275.2	288.7	269.8	1.98	4.37	65.7	52.1	109	24.1	16.9	37.2	81.6	4080	83
67	82	80	4.3	300.1	280.8	294.2	275.2	1.98	4.37	65.8	52.2	109	24.1	17.2	38.0	81.5	4070	82
68	82	79	4.5	305.8	286.3	299.7	280.4	1.98	4.37	65.9	52.3	109	24.1	17.6	38.7	81.5	4060	82
69	81	79	4.6	311.5	291.8	305.1	285.7	1.98	4.37	66.0	52.4	109	24.1	17.9	39.5	81.3	4050	82
70	80	78	4.7	317.1	297.3	310.4	290.9	1.98	4.37	66.1	52.5	109	24.1	18.3	40.3	81.1	4040	81
71	80	78	4.8	322.7	302.8	315.8	296.1	1.98	4.37	66.2	52.5	109	24.1	18.6	41.0	81.1	4030	81
72	79	77	5.0	328.2	308.1	321.0	301.2	1.98	4.37	66.3	52.6	109	24.1	18.9	41.8	81.0	4020	81
73	79	77	5.1	333.8	313.5	326.3	306.3	1.98	4.37	66.4	52.7	109	24.1	19.3	42.5	80.9	4010	80
74	78	76	5.2	339.2	318.9	331.4	311.4	1.98	4.37	66.5	52.8	109	24.1	19.6	43.3	80.8	4000	80
75	77	76	5.4	344.6	324.2	336.5	316.4	1.98	4.37	66.6	52.9	109	24.1	20.0	44.0	80.7	3995	80
76	77	75	5.5	350.0	329.4	341.6	321.4	1.98	4.37	66.7	52.9	109	24.1	20.3	44.7	80.5	3990	80
77	76	74	5.7	355.3	334.6	346.7	326.3	1.98	4.37	66.8	53.0	109	24.1	20.6	45.4	80.4	3985	80
78	75	74	5.8	360.6	339.8	351.6	331.1	1.98	4.37	66.9	53.1	109	24.0	20.9	46.2	80.2	3980	80
79	75	73	6.0	365.8	344.9	356.5	335.9	1.98	4.37	67.0	53.2	109	24.0	21.3	46.9	80.1	3975	80
80	74	73	6.1	371.0	350.0	361.4	340.7	1.98	4.37	67.0	53.2	109	24.0	21.6	47.6	80.0	3970	80

\* Egg weights after 40 weeks of age assume phase feeding of protein to limit egg size.

Hy-Line Brown Performance Graph—Alternative Systems



Egg Size Distribution—E.U. Standards					
Age in Weeks	Average Egg Weight (g)	Very Large Over 73 g	Large 63–73 g	Medium 53–63 g	Small 43–53 g
20	51.2	0.0	0.5	34.3	65.2
22	54.4	0.0	3.7	57.8	38.5
24	56.6	0.1	10.4	65.5	24.0
26	58.5	0.3	19.5	65.2	15.0
28	58.9	0.4	21.6	64.8	13.3
30	60.2	0.7	28.8	62.2	8.3
32	61.4	1.0	36.4	57.9	4.7
34	62.0	1.2	40.7	54.8	3.3
36	62.4	1.5	43.6	52.1	2.8
38	62.8	1.5	46.8	49.8	1.9
40	63.1	2.0	48.9	47.4	1.8
42	63.3	2.2	50.3	45.9	1.6
44	63.5	2.6	51.4	44.3	1.6
46	63.7	2.9	52.8	42.9	1.5
48	63.9	3.4	53.7	41.4	1.5
50	64.1	3.8	55.0	40.0	1.3
52	64.3	4.4	55.7	38.6	1.3
54	64.5	4.8	56.8	37.2	1.2
56	64.7	5.5	57.3	36.0	1.2
58	64.9	6.0	58.3	34.6	1.1
60	65.1	6.8	58.7	33.5	1.1
62	65.3	7.3	59.5	32.2	1.0
64	65.5	7.9	60.0	31.1	1.0
66	65.7	8.8	60.3	29.9	0.9
68	65.9	9.4	60.9	28.7	0.9
70	66.1	10.5	61.1	27.7	0.8
72	66.3	11.2	61.4	26.7	0.8
74	66.5	11.9	61.6	25.7	0.8
76	66.7	13.0	61.7	24.6	0.7
78	66.9	13.8	61.9	23.7	0.7
80	67.0	14.6	62.1	22.6	0.7

Egg Size Distribution—U.S. Standards							
Age in Weeks	Average Egg Weight (lb/case)	Jumbo Over 30 oz/doz	Extra Large 27–30 oz/doz	Large 24–27 oz/doz	Medium 21–24 oz/doz	Small 18–21 oz/doz	Peewee Under 18 oz/doz
20	40.6	0.0	0.3	11.3	52.0	33.4	3.0
22	43.2	0.0	2.5	29.1	52.5	15.2	0.7
24	44.9	0.3	7.7	41.3	42.3	8.2	0.3
26	46.4	1.0	14.9	47.4	32.1	4.5	0.1
28	46.7	1.2	16.6	48.3	29.9	3.9	0.1
30	47.8	2.0	22.5	50.5	23.0	2.0	0.0
32	48.7	2.9	28.7	51.0	16.5	0.9	0.0
34	49.2	3.5	32.3	50.3	13.4	0.6	0.0
36	49.5	4.2	34.7	48.9	11.8	0.5	0.0
38	49.8	4.3	37.4	48.6	9.5	0.3	0.0
40	50.1	5.3	39.0	46.6	8.9	0.2	0.0
42	50.2	5.7	40.2	45.6	8.3	0.2	0.0
44	50.4	6.6	41.0	44.1	8.0	0.2	0.0
46	50.6	7.1	42.1	43.0	7.6	0.2	0.0
48	50.7	8.1	42.7	41.6	7.3	0.2	0.0
50	50.9	8.8	43.7	40.6	6.8	0.2	0.0
52	51.0	9.9	44.3	39.2	6.5	0.2	0.0
54	51.2	10.6	45.0	38.2	6.1	0.2	0.0
56	51.3	11.7	45.4	36.8	5.9	0.2	0.0
58	51.5	12.5	45.9	35.8	5.6	0.2	0.0
60	51.7	13.8	46.2	34.4	5.5	0.2	0.0
62	51.8	14.6	46.6	33.6	5.1	0.2	0.0
64	52.0	15.5	46.8	32.5	5.0	0.1	0.0
66	52.1	16.9	47.0	31.4	4.6	0.1	0.0
68	52.3	17.8	47.2	30.4	4.4	0.1	0.0
70	52.5	19.2	47.3	29.2	4.2	0.1	0.0
72	52.6	20.3	47.4	28.4	3.9	0.1	0.0
74	52.8	21.3	47.5	27.4	3.6	0.1	0.0
76	52.9	22.8	47.6	26.1	3.5	0.1	0.0
78	53.1	23.9	47.7	25.0	3.3	0.1	0.0
80	53.2	24.5	47.7	24.5	3.2	0.1	0.0



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**[www.hyline.com](http://www.hyline.com)**

**[info@hyline.com](mailto:info@hyline.com)**

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