

RIGHT FROM THE START



Body Condition Scoring For Dairy Replacement Heifers

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RIGHT FROM THE START

The body condition of dairy replacement heifers is just as important as that of dairy cows. A heifer that grows too slowly will join the milking herd late, becoming a costly drain on the operation. Also, a heifer that's underconditioned at calving will not have the fat reserves needed for optimum milk production. During early lactation, energy output is greater than input, so the animal quickly finds itself in a negative energy balance.

On the other hand, a heifer that grows too quickly may lay down excessive fat tissue which can alter development of the mammary gland and reduce milk production potential. An over-conditioned animal often experiences calving difficulty, as well as health problems associated with calving. These can include metabolic disorders that sharply decrease milk production.

Managing heifer growth and helping them maintain proper body condition is important for any dairy operation. For under-conditioned animals, you'll want to increase the energy in their diets. Overconditioned animals will benefit from either decreased dietary energy or increasing dietary protein. The key to making these adjustments is learning how to recognize the growth characteristics of heifers, including evaluating each animal's body condition score.

This brochure has been prepared by Elanco Animal Health in an effort to help you learn to use body condition scoring in your daily operation.



BODY CONDITION SCORING

12 months



2.5



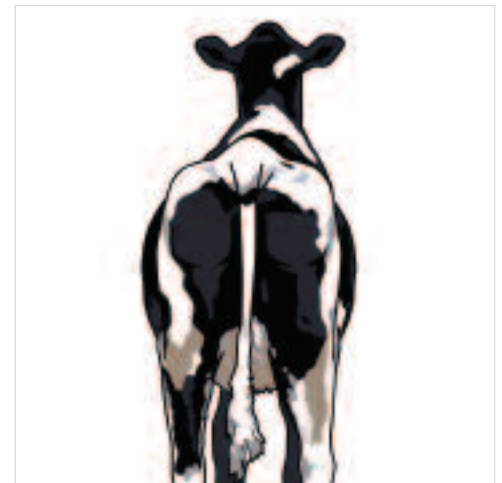
3.0

At 12 months of age, replacement heifers in high-producing dairy herds average a condition score of 3.0. The animal on the left, scoring 2.5, is slightly underconditioned, while the animal on the far right, scoring 3.5, is slightly over-conditioned for its age.

24 months



3.0



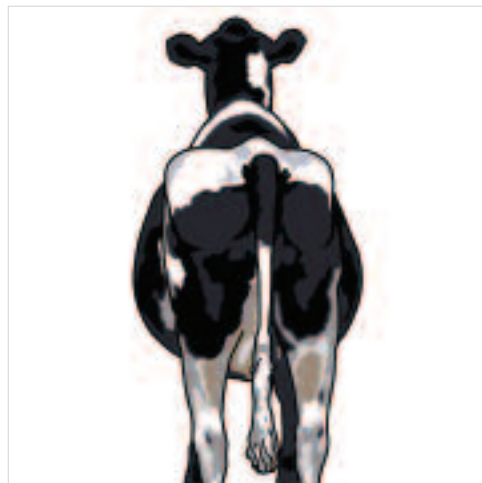
3.5

Among high-producing dairy herds, replacement heifers aged 24 months average a condition score of 3.5. The animal on the left, at a score of 3.0, is slightly underconditioned and may not have the energy reserves necessary to achieve optimum milk production. The animal on the far right scores a 4.0. This heifer may suffer from metabolic problems when calving, which can translate into decreased milk production.



3.5

At a body condition score of 3.0, there is only a slight cavity around the tailhead, and fatty tissues can be easily felt over the whole area. The pelvis can be felt with slight pressure. A thick layer of tissue covering the top of the short ribs can be felt with pressure.



4.0

At a body condition score of 3.5, there is no cavity around the tailhead and fatty tissues can be easily felt over the whole area. The pelvis can be felt with medium pressure. A thick layer of tissue covering the top of the short ribs can still be felt with pressure.

RIGHT FROM THE START

TOOLS FOR MANAGING HEIFER GROWTH

CHART 1

Body size criteria for Holstein replacement heifers under ideal management

Age	UPPER RANGE					LOWER RANGE				
	BW	ADG	WH	BL	BCS	BW	ADG	WH	BL	BCS
0	93	-	30	32	-	93	-	30	32	-
1 mo.	139	1.5	32	34	-	139	1.5	32	34	-
2	185	1.5	34	37	-	185	1.5	34	37	-
3	242	1.8	36	39	2.2	236	1.7	36	39	2.2
4	298	1.8	39	41	-	287	1.7	38	41	-
5	355	1.8	40	43	-	339	1.7	40	43	-
6	410	1.8	41	46	2.3	390	1.7	41	45	2.3
7	467	1.8	43	48	-	441	1.7	42	47	-
8	522	1.8	44	50	-	491	1.7	43	48	-
9	580	1.8	44	52	2.4	544	1.7	44	50	2.4
10	635	1.8	46	53	-	595	1.7	45	52	-
11	692	1.8	46	55	-	646	1.7	46	54	-
12	747	1.8	47	56	2.8	696	1.7	46	55	2.8
13	804	1.8	48	58	-	749	1.7	47	56	-
14	860	1.8	49	59	-	800	1.7	48	58	-
15	917	1.8	50	61	3.0	851	1.7	49	59	3.0
16	972	1.8	50	62	-	901	1.7	50	60	-
17	1029	1.8	51	63	-	952	1.7	50	61	-
18	1084	1.8	52	64	3.2	1005	1.7	51	62	3.2
19	1142	1.8	52	65	-	1056	1.7	52	63	-
20	1197	1.8	53	65	-	1106	1.7	52	64	-
21	1254	1.8	54	66	3.4	1157	1.7	53	65	3.4
22	1309	1.8	54	67	-	1210	1.7	53	66	-
23	1366	1.8	55	67	-	1261	1.7	54	66	-
24	1422	1.8	56	68	3.5	1311	1.7	54	67	3.5

7-days postpartum BW Upper range: 1281 Lower range: 1181
 30-days postpartum BW Upper range: 1192 Lower range: 1102

BW = body weight, lbs ADG = average daily gain, lbs WH = wither height, in.
 BL = body length from point of shoulder to ischium, in. BCS = body condition score

Source: Pat Hoffman, University of Wisconsin-Madison

Recent research allows for a greater degree of accuracy in defining replacement heifer growth. In the past, growth was limited to weight gain per day, but now other body size criteria such as wither height, hip height, body condition scoring, body length and pelvic area are available to aid growth definitions (see Chart 1).

Goals for Heifer Growth

Targets for heifer rearing in intensive management conditions are:

- Age at first calving: 22 to 24 months
- Body weight after calving: 1,250 lbs
- Height at calving: at least 54 inches at withers
- Body condition score at calving: about 3.5
- Growth rate from 3 to 10 months of age: 1.7 to 2.0 lbs per day

Source: Michael J. VandeHaar, Michigan State University

CHART 2

Hip Height by Month of Age
U.S. Holsteins

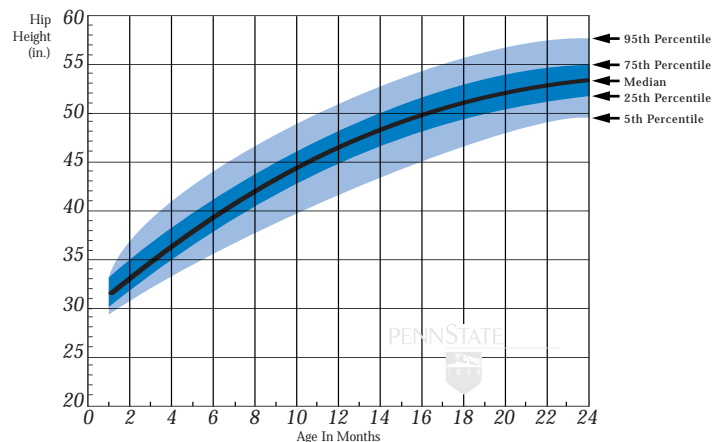
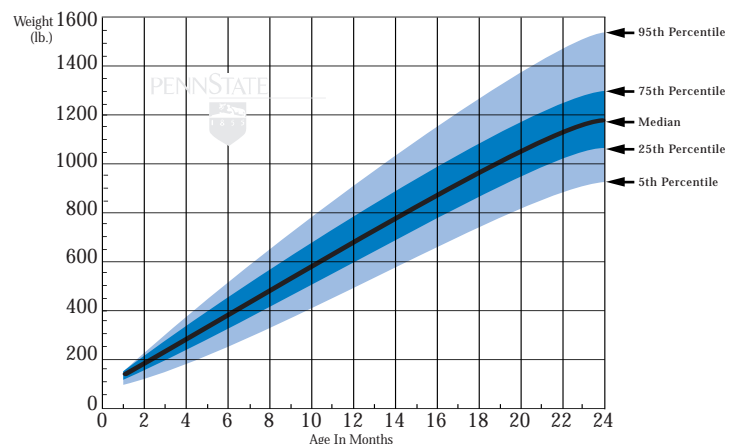


CHART 3

Weight by Month of Age
U.S. Holsteins



Source: Heinrichs, Jud. 1998. Monitoring dairy heifer growth. College of Agriculture Sciences, Penn State University.

In addition to body condition scoring, growth charts 2 and 3 are often used to effectively track heifer growth. By utilizing these charts as guides or benchmarks, producers can better evaluate the total performance of a heifer management program and can more easily pinpoint a deficient area, such as identifying when a group of animals has missed their target for weight or height.

RIGHT FROM THE START

Produce a well-grown heifer with Rumensin® in your feeding program.

Get your heifers milking sooner.

- When used in heifer programs, Rumensin increases average daily gain resulting in:
 - Reduced age at first calving
 - Fewer heifers required in inventory
 - Improved lifetime profitability
- Rumensin prevents and controls coccidiosis by killing the organism at three different stages within its life cycle. Other coccidiostatic products simply control the development of the coccidiosis organism by placing it in a “hold-ing pattern.”

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Rumensin, call:

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