# Midwest Dairy ASSOCIATION

# ANIMAL CARE FACT SHEET

A cow's health is of utmost importance to dairy farmers. Dairy farmers know that healthy, comfortable, and well-treated animals produce high-quality, wholesome dairy foods for people around the world.

Proper animal care leads to the production of high-quality milk.<sup>1</sup> Nutritious diets, healthy living conditions, and good veterinary care are all essential for a healthy herd, and these are among the many animal care practices routinely used by dairy farmers.<sup>2</sup> Animal scientists and dairy farmers continually explore different ways to improve the comfort of dairy cows.<sup>3,4</sup> In addition to their commitment to their cows, dairy farmers and the dairy community have created FARM (Farmers Assuring Responsible Management), a nationwide, verifiable animal well-being program that brings consistency and uniformity to on-farm animal care and production practices. The FARM platform provides farmers with education on animal care and provides the public with added assurance of appropriate animal care.<sup>5</sup>

### **Shelter**

- Dairy cows always have access to clean water while in the housing area. Many of today's dairy farms use "free-stall housing," a type of barn that allows cows the freedom to move about at will and eat and sleep whenever and wherever they choose. In this housing configuration, feed for the animals is available in a feed alley (a clean, impervious surface), which cows can access 24 hours a day. In addition, the barns are designed to provide sunshine and fresh air.
- Many dairy farmers also have installed rubber or other non-slip flooring in their barns to make it easier for the cows to move around.<sup>7</sup>
- Cows need to lay down or rest 12-14 hours a day. Cows may sleep on sand beds or bedded mattresses filled with rubber, foam, or a combination of these two materials.<sup>8</sup>
- Most dairy barns have advanced ventilation systems to assure air quality. On warm days, farmers use fans and water misters to keep cows cool and comfortable.<sup>9</sup>

# **Feeding and Grazing**

- Farmers often employ professional nutritionists to develop scientifically formulated, balanced, and nutritious diets for their cows. A typical diet may include hay and hay silage, corn silage, or other available forages, grains, protein sources (such as soy) and other vitamins and minerals. <sup>10</sup>
- A cow has four stomachs; the first three stomachs process feed in a way that people cannot. Because of this
  unique digestive system, cows have the ability to convert plants that humans cannot eat into nutritious
  foods like milk.
- Access to pasture is determined mainly by geography, herd size, availability of land suitable for grazing, and
  weather conditions. Many factors affect the type of environment available to dairy cows. In all cases, the wellbeing, protection and comfort of their cows are dairy farmers' main concerns.

## **Health and Veterinary Attention**

- Dairy cows interact every day with farm employees during their regularly scheduled milkings. 11
- Cows receive regular veterinary care, such as periodic check-ups, preventative vaccinations, and prompt treatment of illness. 12
- It is important to note that dairy cows are not routinely treated with antibiotics. When illness requires that cows be treated, antibiotics are administered according strict FDA guidelines, which include withholding milk from sale. When a cow's milk is withheld, she is given special care and attention separate from the rest of milking herd until her milk tests free of antibiotics. <sup>13</sup>

Example of a free-stall barn

- Every tanker load of milk is strictly tested for antibiotics. During 2010, nearly four million tests (3,892,196) were conducted on milk samples to detect antibiotic or other drug residues. Inspectors found less than 0.03% positive (1,245) for residues. In the extremely rare event that milk tests positive, it is disposed of immediately and never reaches the public. <sup>14</sup> Farmers are financially liable if antibiotics are found in their milk. <sup>15</sup>
- Dairy farmers may choose to use recombinant bovine somatotropin (rbST) to help the cow produce more milk. If rbST is used, then farmers are advised to adjust the nutritional diet of the cow to meet her needs due to the increased production.

### **Calf Care**

- Cows produce milk once they deliver a calf. About 10 to 12 months after calving, the amount of milk the cow gives naturally decreases substantially. Cows will undergo a dry or non-lactating period for 45-60 days prior to calving. During this time, milking is ceased and cows receive special diets and housing to properly prepare for calving. About 12 to 14 months after the birth of her previous calf, a cow will calve again, thus providing the next cycle of milk production.
- Dairy farmers provide a clean, dry, well-lit, and well-ventilated separate calving area to ensure comfortable, safe and hygienic conditions for both mother and calf. <sup>16</sup>



Observation is important to ensure quality animal care

• Separate living quarters are provided immediately after the birth of a calf to protect its health and ensure the best individual care. Because newborn calves need time to build up their immune systems, it is better that they are not exposed to germs in the environment or germs that can be passed on from older animals. Another way farmers ensure the health of their calves is by feeding newborns two to four quarts of colostrum—the first milk the mother produces after giving birth. This special milk is usually delivered by bottle. Colostrum is high in fat and protein and contains antibodies that help build the calf's immune system.

Also refer to Midwest Dairy Association "Dairy Food Safety" and "Milk and Hormones" fact sheets.

This fact sheet was reviewed by John Fetrow, VMD, MBA; Mike Hutjens, PhD; Lloyd Metzger, PhD; JW Schroeder, PhD; and Leo Timms, PhD, in November 2011 for its content and accuracy.

- <sup>1</sup> Rodriguez, ACO, Caraviello PZ, and Ruegg PL. 2005. Management of Wisconsin dairy herds enrolled in milk quality teams. J Dairy Sci. 88:2660.
- <sup>2</sup> Hoe, FGH, Ruegg, PL. 2006. Opinions and practices of Wisconsin dairy producers about biosecurity and animal well-being. J Dairy Sci. 89:2297-2308.
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- <sup>4</sup> Tucker, CB, Weary, DM. 2004. Bedding on geotextile mattresses: How much is needed to improve cow comfort? J. Dairy Sci. 87: 2889-2895.
- <sup>5</sup> Farmers Assuring Responsible Management. <a href="http://nationaldairyfarm.com/">http://nationaldairyfarm.com/</a>.
- <sup>6</sup> Bewley, J, Palmer, RW, Jackson-Smith, DB. 2001. A comparison of free-stall barns used by modernized Wisconsin dairies. J Dairy Sci. 84: 528-541.
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- 14 USDHHS/FDA/CFSN. 2010. National milk drug residue data base. <a href="http://www.fda.gov/downloads/Food/FoodSafety/Product-SpecificInformation/MilkSafety/MiscellaneousMilkSafetyReferences/UCM244299.pdf">http://www.fda.gov/downloads/Food/FoodSafety/Product-SpecificInformation/MilkSafety/MiscellaneousMilkSafetyReferences/UCM244299.pdf</a>. Accessed 2011 November.
- 15 Hoe, FGH, Ruegg, PL. 2006. Opinions and practices of Wisconsin dairy producers about biosecurity and animal well-being. J Dairy Sci. 89:2297-2308.
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