

# Ideas for Dairy Heifer Learning Activities

## Advanced Level

Need more ideas for your dairy heifer project? There are hundreds of things you can do! You are being asked to complete **at least five** activities each year. Use this list, the 4-H *Dairy Heifer Resource Handbook*, and your imagination, and then write your ideas in your *Dairy Heifer Project and Record Book*. Have fun!

- Help a new 4-H member select an animal for his or her dairy heifer project.
- List the top 10 milk production and cheese production states.
- Visit one of the following: milk processing, ice cream, or other dairy product manufacturing facility. Give a brief report to your club about your visit.
- Explain how fluid milk is processed from the cow to the grocery store shelf.
- List five common diseases in dairy heifers and for each provide a list of symptoms, treatment methods, and preventative measures.
- Name the six classes of nutrients and describe their roles in the dairy heifer diet.
- Explain why vitamins and minerals are important in a heifer's diet.
- Explain how the digestive system of a newborn calf differs from that of a mature animal. Tell how the differences influence what the animal is fed up to weaning.
- Demonstrate how to save and preserve colostrum using the method of your choice.
- Explain how and why antibiotics may be added to feed or milk replacer.
- Develop a ration for your heifer using a ration balancing computer program.
- Calculate how much energy (Mcal) your heifer is receiving in her ration.
- Demonstrate how to determine forage quality.
- Learn to identify at least four types of grasses or legumes commonly used in pastures for dairy cows or heifers in your area.
- Describe how poor nutrition can influence the growth, health, and reproductive performance of a heifer.
- Explain why it is important that heifers be the appropriate age and size at first breeding. List the appropriate age and size at first breeding for your favorite breed.
- Explain what an estrus synchronization program is and describe two types of estrous synchronization programs that may be used for heifers.



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basis.

- Using a model or a live animal, demonstrate how to artificially inseminate a heifer or a cow.
- List at least three advantages of using artificial insemination vs. natural breeding.
- Explain to younger members how to read a pedigree.
- List five characteristics that you would look for when selecting a bull to breed your heifer.
- Using a model, demonstrate how you would ear tag or tattoo a heifer.
- Using a model or diagram, demonstrate two techniques that may be used to remove horns from a heifer.
- Hold a training session about dairy heifer management for younger 4-H members.
- Demonstrate that you can identify the parts of the mammary gland.
- Explain at least three advantages and disadvantages of using custom heifer growers to raise replacement heifers.
- Explain the importance of environmental assurance to younger members.
- Describe housing requirements for a heifer at birth, weaning, one year of age, and two weeks prior to freshening.
- Select a type of manure management system for a facility that raises 100 dairy heifers from birth to freshening. Tell why you selected that system.
- Prepare a skit demonstrating how to handle questions about dairy heifer production practices from people who are not familiar with animal agriculture.
- Help a new 4-H member with a dairy heifer project prepare an animal for show.
- Judge a class of four dairy heifers and give oral reasons (explain your placings).
- Help teach younger members to judge.
- Help a new member update his or her records.
- Give a presentation to the younger members of your club about careers in the dairy industry.
- Help younger members prepare for a dairy quiz or knowledge bowl.
- Complete the Project Picture pages in the Quality Assurance section of this book.
- Exhibit your heifer at the county fair.
- Send a thank you note to award donors and anyone who helped you with your project (advisors, older members, parents, etc.).