**The relationship between agriculture and Animals**

Pillar 3 A. Give examples of specific ways farmers care for animals (Grades 4th – 8th)

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| **Website**: <http://indianafamilyoffarmers.blogspot.com/2011/08/5-ways-farmers-care-for-their-animals.html> <http://animalscience.psu.edu/4-h> **Hands On:** <https://communities.naae.org/servlet/JiveServlet/download/6621-3758/Injections%20.ppt>  |

Today you get to be the vet! Your patient is of course fragile and needs extra special care, as would all your patients.

**Procedure**

1. View the power point presentation and/or reading on injections
2. Review the types of injections
3. Review the parts of the syringe and how to load medication
4. Proceed with lab using bananas and oranges as “patients”
5. Check off each injection site with instructor as directed. The instructor will initial your worksheet as you complete the check off.

**Lab Activity**

 **Intramuscular Injection**

1. Properly load 1 cc of labeled medication into the syringe provided
2. Prepare the injection site
3. Carefully inject the medication into the proper site
4. Check off this injection with the instructor **AFTER** the other injections have been given. If done correctly, you will actually have to peel your banana to identify the correct placement of the medication.

**Subcutaneous Injection**

1. Properly load 1 cc of labeled medication into the syringe provided
2. Prepare the injection site
3. Carefully inject the medication into the proper site
4. Check off this injection with the instructor AFTER the conclusion of all injections. If done correctly you will NOT be able to see a “bruise” on your banana.

**Intradermal Injection**

1. Properly load ½ cc of labeled medication into the syringe provided
2. Prepare the injection site
3. Administer the medication in the correct location
4. Check off immediately with the instructor. If done correctly you WILL be able to see a slight “bruise” or circle of medication in your orange peel. Due to the orange peel being so porous, you may get squirted back. This would not happen in a real animal.

**Discussion Questions:**

Why do farmers give livestock animals medication?

Why are the medications administered by injection?

What is the purpose of the subcutaneous injection compared to Intradermal?

5 Ways Farmers Care for their Animals

*By Kimmi Devaney of* [*Winners Drink Milk*](http://www.winnersdrinkmilk.com/)

The dairy industry is near and dear to my heart, so I know firsthand the dedication, passion and commitment to excellence that farmers have when it comes to farming and their animals. After all, it’s their livelihood. Not to mention the right thing to do. I hope many of you had an opportunity to meet a farmer or two as you strolled through the aisles of the barns at the Indiana State Fair. You won’t find better people than farmers.



***Have you ever wondered how farmers care for their animals?***

**Nutrition.** Farmers work with animal nutritionists to formulate diets based on the animals’ nutritional needs. There is no one-size-fits-all ration and it changes depending on age, life stage (stage of lactation, etc.), and other factors. Nutrition is one of the most important factors influencing milk production, so this is an important area.

**Medical Care.** Veterinarians care for animals much like how doctors care for people. They provide check-ups, vaccinations and treat animals when they are sick.

**Animal Comfort.** Happy animals are productive animals. California is on to something when they talk about happy cows. Happy, comfortable cows produce more milk. And milk equals money. Therefore, it is very important to provide safe and comfortable living conditions for cows and all animals. On our dairy, we had sprinklers over the feed alleys to cool cows off (and encourage them to eat more feed), large fans in the free stalls to make their naps more comfortable (cows spend a considerable amount of time lying down, so it is important that they are as comfortable as possible!), and fans in the holding pen to cool cows off as they waited their turn to be milked. Some farmers use sand bedding and rubber matting to increase cow comfort. The take away message here: animal comfort is *very* important and farmers recognize this.

**Housing.** Dairy cows are generally housed according to age. This makes it easier to provide the best care for each group, as they all have different needs. A second-lactation fresh cow *(a cow that just gave birth)* has different needs than a growing 10-month-old heifer *(female dairy animal who has not had a calf)*. Dairy farmers separate cows and calves to provide the best individual care for each. Calves receive colostrum *(the first milk after a cow calves)* as soon as possible to jump start their immune systems, and then receive milk for about two months. In the meantime, they are slowly transitioned off of milk and onto hay and grain *(called the weaning process)*. At the same time, the milk cows are fed high-energy diets to provide for their lactation requirements. Milk production requires a lot of energy!

**Employees.** Whether farm employees are family members or not, they care for the animals like they are their own. Working toward a common goal—whether that be high milk production, excellent milk quality, etc.—always has a way of bringing people together. Visiting with my favorite cows always made the workday a lot better. And of course, who can be upset when you are surrounded by adorable calves?

**Take Home Message:** Farmers depend on their animals for their livelihoods and they provide the best care for them as possible.