

Beginner QA Activity

#1 in a 6-Part QA Educational Series
Dr. Susan Kerr, WSU-Klickitat County Extension

Need: bananas, apples, marking pens (all sorts), note paper, tape, stapler.

If possible, give a banana or apple to each child (banana should be green or yellow with no brown spots). If too many youth, give one piece of fruit to a few youth and assign the others these tasks:

1. Observers—watch and report what happened.
2. Buyers – decide which items they will purchase after
3. Dissectors—(announce this category last)—will open the bananas and look for QA issues.

Have all youth with fruit stand shoulder-to-shoulder at one location and instruct them to deliver their product to another location (such as from one side of a room to another). You can leave the instructions this simple or add other criteria such as they must use a partner, have to do it as quickly as possible, etc. We must be able to tell whose fruit is whose throughout the activity. Hopefully some youth will choose to roll, throw, kick or otherwise traumatize their fruit during delivery. Also hopefully some fruit ID techniques will also cause some trauma. If activity is done inside, be sure youth are mindful of lights or other breakable objects in the room.

After all bananas have been delivered, the dissectors will open them up and look at the “carcasses” and show them to the buyers. Note bruising and other QA issues that could influence purchasing decisions.

Processing questions

- Would you eat your fruit after this activity? Why or why not?
- Which fruit were buyers willing to buy?
- Would a buyer be able to sell your product to another person with pride and confidence?
- Which fruit now has the highest value? The lowest?
- What aspects of the fruit made it more or less likely to be damaged?
- How did your handling techniques and management decisions affect the food product?
- What animal handling techniques can cause similar damage?
- How does the number of people handling the food product affect likelihood of damage?
- If this were an animal, how was the hide damaged by your actions?
- What characteristics of animals make them more or less likely to develop carcass problems?
- Would you eat the meat you produce? If not, why not?
- What are good food handling practices?

Quality Assurance = Trust

#2 in a 6-Part Quality Assurance Educational Series

Dr. Susan Kerr, WSU-Klickitat Co. Extension

Note: Need to select a youth volunteer who has a parent present; seek permission from parent to do this activity. It is best to not give youth details about what is going to happen. Make sure youth is not allergic to any of these foods and is emotionally able to be the focus of some laughter at the activity -- "class clowns" do well here. Tell the youth other youth will be laughing at what is happening, not at them.

- Offer a youth a sweet candy (such as a pixie stick) but the sugar has been replaced with salt.
- Offer a youth a sweet drink (such as sweet iced tea) but instead it is cold black coffee
- Offer a youth a vanilla jelly bean, but instead it is another flavor, such as garlic
- Offer a youth a soft mini-marshmallow, but instead it is rock hard
- Offer a youth a cold, refreshing soft drink, but it is warm and flat

Results: Negative experience; the taste, texture and/or toughness of the food is not what was expected.

Questions:

(To the youth volunteer):

How much did you trust me before this activity?

How much do you trust me now?

(To the group):

If I were a livestock producer and you bought and ate my products, how likely is it that you would buy from me again?

How likely is it you would consume this product again?

How many of you have had a bad eating experience with a cut of meat? What was it? How did that affect you?

Lesson: If consumers expect wholesome products and an enjoyable eating experience yet receive something else (injection lesion, toughness, scarring, off-flavor, allergic reaction to a residue, food-borne illness), how much will they trust meat producers in the future? Quality assurance programs and actions are aimed at doing everything possible to make sure each consumer's expectations are met or exceeded. Consumers TRUST food producers to provide healthy, substance-free, good-tasting products. Youth market stock producers, you are food producers!

NOTE: Tell youth to NEVER take a substance from someone if you don't know what it is!! This was a very controlled and unique educational situation!

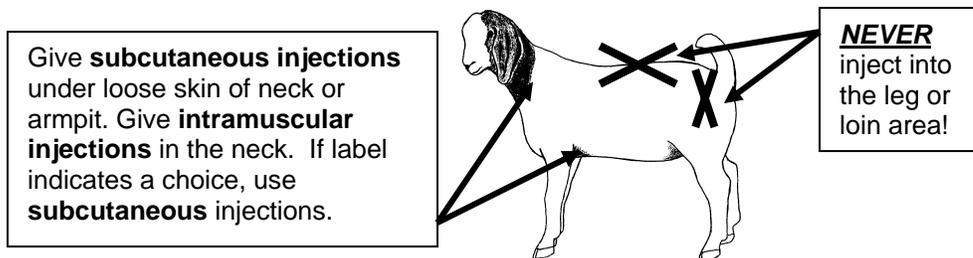
April 5, 2011

Producing High Quality Market Animals

- Get all prior identification and treatment records from breeder
- Select your project animal carefully for good health, proper weight for age and genetic potential
- Practice low-stress methods of animal handling (slow, quiet, no hitting or crowding)
- Minimize use of medications
- Abide by all medication use guidelines, including dosages and withholding time
- Calculate rate of gain needed to meet target weights by target dates; feed for that rate of gain
- Do not hold or push animals
- Do not hold animals off water or feed
- Do not use unapproved medications without discussing it with your veterinarian
- Feed your animal a complete and balanced diet
- Practice routine health care practices such as hoof trimming, vaccinating and deworming
- Provide a clean, safe and healthy environment for your animal
- Exercise your animal a reasonable amount
- When possible, obtain carcass data from your animals; study and learn from the results
- When possible, interview consumers what they thought about the food products you raised
- Make sure that market animals are not cryptorchids or have any other disqualifications
- Avoid offspring of animals known to produce kids with poor carcass characteristics

Ten Good Production Practices (courtesy National Pork Producers' Council)

1. Identify and track all animals
2. Maintain medication and treatment records
3. Properly store, label and account for all medication products and medicated feed
4. Obtain and use prescription medications based on a valid veterinary/client/patient relationship
5. Educate all family member and employees about quality assurance
6. Use drug residue testing when appropriate
7. Establish an effective and efficient herd health management plan
8. Provide proper animal care
9. Follow appropriate feed processing and handling procedures
10. Complete a quality assurance checklist annually



Proper Injection techniques

- ❖ Use SQ whenever possible
- ❖ If IM, use neck muscle
- ❖ Divide large injections into multiple sites
- ❖ Clean and prep injection site if possible
- ❖ Use sterile syringe for each treatment and sterile needle for each animal
- ❖ Use smallest size needle possible for the injection
- ❖ Restrain animal well to prevent needle breakage or excessive tissue damage

Practice routine biosecurity measures such as minimizing visitors, isolating sick animals, disinfecting equipment and quarantining new animals or returning show animals.

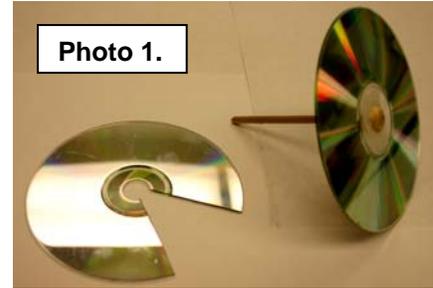
WOULD YOU EAT THIS?

#3 in a 6-Part Quality Assurance Educational Series
Dr. Susan Kerr WSU-Klickitat County Extension Director

Instructions for activity leaders

1. Materials needed

- Two CDs (new, rejects or scratched) per youth. One CD should have a pre-cut pie-shaped piece removed from it; this piece should be about 1/6 of the entire CD (see Photo 1, left disc). Several can be cut simultaneously using a band saw.
- Small wooden dowels or other stick-like items, 3 to 6" long
- Wooden beads or other circular objects with a hole in the center
- Color photos of retail meat cuts and carcasses with examples of good and bad quality issues
- One arched "WOULD YOU EAT THIS?" title for each participant (see p.3)
- Glue sticks
- Scissors



2. Before the activity

- Create a color handout of examples of meat quality by placing the photos in three columns. Column A should consist only of examples of desirable meat quality, Column B of only undesirable examples and Column C should be mixed with both desirable and undesirable examples of meat quality. Alternatively, use the pre-prepared photo page (see p. 2).
- At least 12 hours before conducting the activity, insert dowels into wooden beads and glue the bead to the center of the intact CD. The bead must extend a little above the surface of the CD (see Photo 1, right disc).

3. Instructions for the activity

- Give each participant one of the CDs with the pre-glued wooden bead and dowel rod and one of the CDs with the pre-cut pie-shaped piece removed.
- Give each participant one copy of the page of examples of meat cuts.
- Ask each participant to choose and cut out 6 meat photos of their choice, but they must choose two from each column.
- Have each participant use glue sticks to adhere each photo to the "up" side of the intact CD (the non-dowel handle side). Distribute the photos evenly around the CD.
- Have each participant place the pre-cut CD on top of the CD with the photos. Have them cut out and glue the "WOULD YOU EAT THIS?" text to the top of this CD.
- Ask each participant to hold the dowel with one hand and spin the upper CD with their other hand. They should answer the "WOULD YOU EAT THIS?" question for every photo that appears after each spin, explaining their decision.

4. Processing the activity

Use the time when participants are assembling their spinners and after each spin to discuss quality assurance issues. Ask youth questions such as:

- What do people expect when they purchase meat?
- What are people apt to do if they have several bad experiences with meat quality?
- What are residues?
- What can you do to be sure the meat of the animals you raise will be safe and good tasting?
- How should you give injections so you damage as little meat as possible?
- What are the possible consequences of someone eating meat with unacceptable levels of residues?
- Why is keeping records on all medications given to meat animals important?
- What is withholding time?
- What information is included on a medication label?
- For more advanced youth, bring up topics such as dark cutters, PSE pork, genetics, marbling, fat cover, grading, low-stress handling, etc.

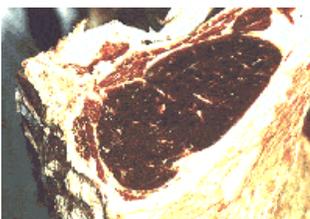
At the conclusion of the activity, make sure each participant grasps the importance of these items:

- Regarding the youth market livestock project, quality assurance means ensuring food safety, wholesomeness and consumers' positive eating experiences.
- Youth livestock market projects will end up on someone's plate and be eaten.
- Consumers do not have reduced standards for meat safety and quality just because it is from livestock raised by a child.
- Meat quality can be affected by how an animal is fed and cared for during its life.
- Rough handling, stress and improper injection techniques are some things that can cause problems with meat quality.

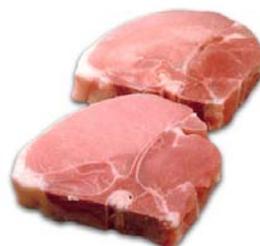
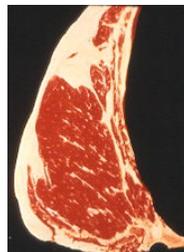
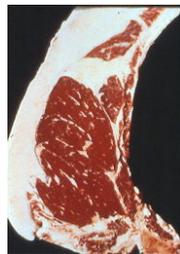
MEAT QUALITY PHOTOS

Cut out six photos of your choice, using two from each column. Glue them to the top side of the solid CD.

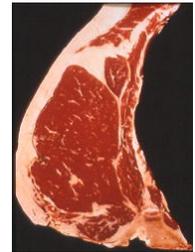
Column A



Column B



Column C



WOULD YOU EAT THIS?

ROLES IN THE QUALITY ASSURANCE CHAIN

#4 in a 6-Part Quality Assurance Educational Series
Dr. Susan Kerr, WSU-Klickitat Co. Extension

Write the terms below on separate 3x5 cards (one role per card). You may need to have more than one card per role depending on the number of people in the group because you want each person to have a card. Distribute a card to every person but tell them they can't look at their card; they must hold it above their head so others can see it but they can't (everyone can see and read everyone's card except their own). **WITHOUT TALKING**, the group needs to sort itself out and place everyone in the correct order of the QA chain. Expect chaos and frustration at first, but it will eventually work out!

- **Food animal producer**
- **Youth market livestock producer**
- **Cook / food service worker**
- **Consumer**
- **Trucker**
- **Meat processing plant worker**
- **Feeder / finisher**
- **Grocer / retailer**
- **Veterinarian**
- **Breeder**
- **Buyer/broker**
- **Inspector**

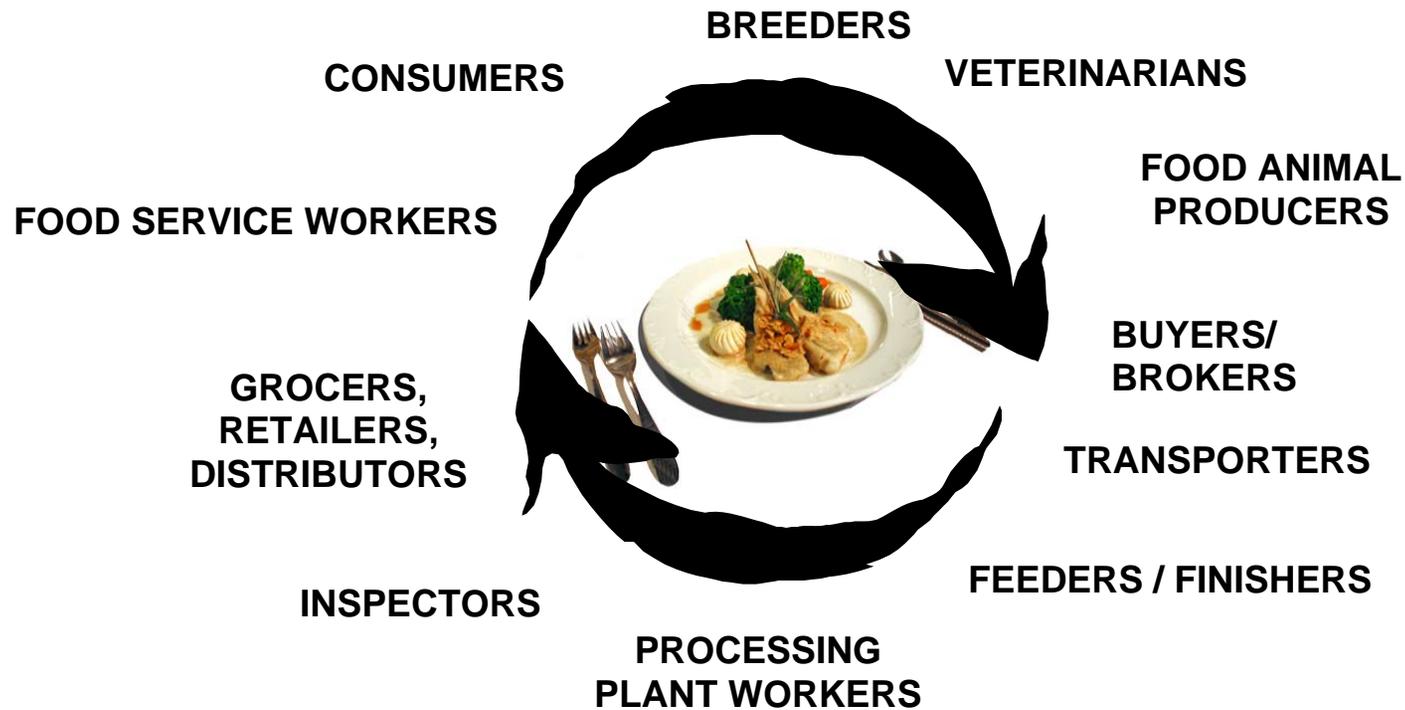
Processing the activity

- How did the group put everyone in their proper place in the QA chain?
- Which roles in the QA chain were new to you?
- Which roles could have multiple places in the chain?
- What issues with a food animal product could make a consumer have a bad eating experience?
- What actions or lack of actions could happen at each link that could break the QA chain?
- How do you look at your role in the QA chain now?

April 5, 2011

THE QUALITY ASSURANCE FOOD SUPPLY CYCLE

Everyone must do his or her part to ensure that only safe, wholesome and delicious products end up on a consumer's plate!



Quality Assurance: Making it Personal
 #5 in a 6-Part Quality Assurance Educational Series
 Dr. Susan Kerr, WSU-Klickitat Co. Extension

Note: this activity focuses on goat meat eating experiences but can be adapted to other species.

On white 3x5 cards, write the “personal characteristics” listed below (one per card). On any color 3x5 cards, write the “meat experience” listed below. Next, hand one card to each person (one characteristic OR one experience to each person). Add other characteristics or experiences if you’d like. If you have a small group, select the characteristics and experiences you’d like to emphasize. Match the number of “characteristics” people to the number of “experiences” people. For example, if you have 16 people in your group, give 8 the white cards and 8 the colored cards.

Have the group mingle, mingle, mingle, with “characteristics” people repeatedly interacting with different “experiences” people (they can identify each other by the colors of their cards). Have three pieces of flipchart paper on a wall and ask people to make a hash mark if their interaction was positive, negative or neutral. For example, if the “You are allergic to penicillin” person met up with the “Penicillin residues in meat” person that would be a NEGATIVE experience.

Processing the activity

- Share some of your interactions that were neutral, positive or negative.
- What positive and negative meat-eating experiences have you had?
- As producers, why should we care about each person’s meat-eating experience?
- How much control do producers have regarding on whose plate their product ends up?
- As a result of this activity, how will you change how you care for your animal?
- As a result of this activity, how has your understanding of your role as a food producer changed?

Personal Characteristics Options	Meat Experience Options
You are allergic to penicillin	Tender and flavorful goat leg
You are thinking of becoming a vegetarian	Good flavor, nutrition and value for the price
You are a beef producer	Tough and dry chop
You have never eaten goat before	Abscess in leg roast
You are a member of PETA	Tough scar tissue in loin
You are a market sale buyer	Penicillin residues in meat
You are a youth producer	Broken needle in meat
You are a multi-generation meat goat rancher	Delicious tenderloin
You have a lot of money and can buy any kind of food you like	Juicy broiled chop
You don’t have a lot of money but wanted to cook a special meal for a family celebration	Tiny, high-priced chop
You are on a low-fat diet	Too much non-edible portions of the cut
You are a fiber goat producer	Tasty burgers
You only eat red meat once or twice a month	Great kabobs
You grew up eating goat meat as your main meat	Wonderful grilled chops
You never have had a good experience with goat meat	Unpleasant flavor to meat (buck, boar, other)
You never have had a bad experience with goat meat	Uncooked meat was bruised and discolored

For your convenience, you may cut out the phases below and tape them on the 3x5 cards to save you the trouble of writing them.

PERSONAL CHARACTERISTICS OPTIONS

MEAT EXPERIENCE OPTIONS

You are allergic to penicillin

You are thinking of becoming a vegetarian

You are a beef producer

You have never eaten goat before

You are a member of PETA

You are a market sale buyer

You are a youth producer

You are a multi-generation meat goat rancher

You have a lot of money and can buy any kind of food you like

You don't have a lot of money but wanted to cook a special meal for a family celebration

You are on a low-fat diet

You are a fiber goat producer

You only eat red meat once or twice a month

You grew up eating goat meat as your main meat

You have never had a good experience with goat meat

You have never had a bad experience with goat meat

Tender and flavorful goat leg

Tough and dry chop

Juicy broiled chop

Abscess in leg roast

Tough scar tissue in loin

Penicillin residues in meat

Broken needle in meat

Delicious tenderloin

Good flavor, nutrition and value for the price

Too much of the cut was non-edible

Tiny, high-priced chop

Tasty burgers

Great kabobs

Wonderful grilled chops

Unpleasant flavor to meat

Uncooked meat was bruised and discolored

Quality Assurance Skit

#6 in a 6-Part Quality Assurance Educational Series
Dr. Susan Kerr, WSU-Klickitat Co. Extension

Note: this activity can be adapted to any market livestock species.

Need 5-10 volunteers. Give cards with one of the following five assignments and descriptions to each volunteer:

- You are a healthy, tame market goat. Wander around but stay with the herd. (1 to 5 volunteers)
- You are a tame but lame market goat. Limp when you wander around. Stay with the herd. It isn't very stressful for you to be handled. (1 to 4 volunteers)
- You are a lame and wild market goat. Limp when you wander around. No need to stay with the herd if people are nearby. Act very stressed when handled. Allow yourself to be caught for one treatment but not again. (1 to 3 volunteers)
- You are a child of the herd owner and help your parent with the goats. (1 volunteer)

Put all "goats" inside a circle ("fence") made by the remaining participants.

Narration:

Owner to child, looking at goats: "Oh nuts. I see that (3) of our market goats are lame. They probably have foot rot again. Come to think of it, we haven't trimmed feet in months; maybe that and the wet weather have something to do with it. Maybe we should start using the foot bath agina. Or maybe it was that new buck we brought in. He did seem to be limping when I brought him home and turned him out with the does...Well, we'd better treat these limping goats with antibiotics."

Action: Catch lame goats; handle roughly and loudly.

Owner to child: "Let's see, I guess they average about 150# so I'll treat them all for that. The bottle says 1 cc of Miracleillin per 100 pounds for cattle, but I want these goats to get better fast, so I'm going to triple that dose. Plus that one looks like it's lame in two feet so I'm going to give that one even more. To make sure the medicine gets to the bad foot faster, I'm going to put it in the muscle of the lame leg. We'll leave the medication on the fencepost so it will be there tomorrow when we need it."

Action: Treat and release all lame goats. Handle roughly and loudly.

The next day...

Owner is alone. "Well it's time to treat the goats again. Dang it, I can't catch that wild one and I can't find my (daughter/son). I guess I can't treat it again. I'll just treat these other two. They seem better, so I won't give them as much this time."

Action: Treat and release tame lame goats. Handle roughly and loudly.

Later, the child appears alone. "I think I'll help (Mom/Dad) out by treating the goats."

Action: Treat and release tame lame goats.

Another day passes...

Owner to child: "Time to treat the goats again. Wait a minute, I can't tell which ones were lame!" I guess we don't have to treat them any more.

Three days pass...

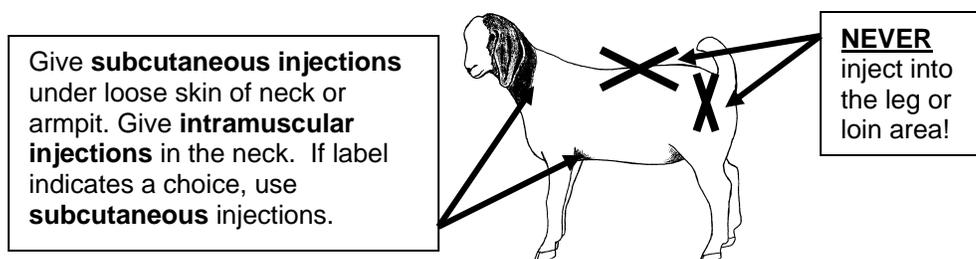
Owner and child looking at goats. "I'd like to have Mr. and Mrs. Neighbor over for a barbecue, so let's pick a goat to butcher. I know that Mrs. Neighbor is allergic to Miracleillin, but I think it should be gone from the meat by now in case we butcher one of the goats we treated."

Discussion: What went wrong? (Ask group; write answers on flip chart)

- Lack of animal ID
- Lack of treatment records
- Lack of isolation of affected animals
- Illegal extra-label use of medication (species, dose)
- Lack of completing treatment protocol, leading to bacterial resistance
- Guessing at weights
- Random dosing decisions
- Lack of proper animal care and routine herd health practices (hoof trimming)
- Improper storage of medication
- Poor sanitation practices
- Poor communication with family members resulting in double treatments
- Use of antibiotics when maybe goats would have responded to more simple measures
- Lack of proper withholding time, putting consumer at risk
- Lack of use of drug residue tests
- Stressful animal handling which can cause bruising and other carcass faults

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