THE FUNCTIONS AND IMPORTANCE OF MEAT INSTRUCTION IN THE CURRICULUM OF THE AGRICULTURAL COLLEGE

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Since all of my college teaching has been done at my alma mater, I hope you will excuse the frequent reference to that institution.

My discussion takes several angles, based on the use that a student is most likely to make of the knowledge gained by getting basic training in meats. Your opinion may differ from my own and, if so, it should lead to a healthy discussion.

According to the records of our department, graduates in animal husbandry have gained their greatest prominence as county agricultural agents, teachers of vocational agriculture, and farm managers. It is true that at present five colleges--Alfred University, University of Connecticut, University of Idaho, North Carolina State College, and The Pennsylvania State College--are employing Penn State men as teachers of meats, also the Harris School of Meat Cutting in Pittsburgh, but percentage-wise we have more men trained in animal husbandry engaged in other activities.

Penn State offers five meats courses, viz., (1) Slaughtering, a three-credit course designed to give practical experience in dressing pork, beef, veal, and lamb, with practice in cutting, curing, and processing pork; (2) Meat Cutting, a three-credit course where students judge and cut pork, beef, veal, and lamb for retail, locker storage, and institutional use; (3) Meat Judging, a one-credit, three-hour per week course in judging pork, beef, lamb, and veal carcasses and their wholesale cuts and identification for sex and grade (the members of our intercollegiate meat judging teams are selected from this group); (4) two graduate courses, one in advanced meat studies and one in research on some phase of meat science.

Our experience is that students schedule one or more meat courses for one of the following reasons, personal, required or professional, and for credit. Students taking a course for personal reasons do so because they feel they can make practical use of such knowledge in their chosen field. In the slaughtering course, taken for personal reasons at Penn State, we find pre-veterinary students leading the list, followed by agricultural education, dairy husbandry, poultry husbandry, agronomy, and agricultural economics, in that order. This trend has existed during the past ten years. Prior to that it was dairy husbandry students who led. In the sheet that has been passed around, you will note that animal husbandry students lead at other institutions.

Enrollment in the Meat Cutting course for personal reasons shows home economics majors leading, followed by pre-vets, agricultural education, dairy husbandry, poultry husbandry, and agronomy. We follow the trend of other institutions in this case. Students taking the slaughtering course for professional reasons are those who intend to follow that line of work or use it professionally in their chosen field. Since our department makes Slaughtering and Meat Cutting required courses, and the school of education makes Meat Cutting a required course for students majoring in hotel administration, we find animal husbandry majors leading in enrollment in Slaughtering, and hotel administration

leading in enrollment in Meat Cutting. At present, this situation is due primarily to our lack of facilities to accept all applicants, with the result that optional students must be barred in favor of the required. In one section of Slaughtering during the past semester, we had to screen out forty applicants. During the war, 90 per cent of the students taking Meat Cutting were girls. Since the return of the G.I.'s, we can accommodate only 10 per cent.

I suppose we are not unique when it comes to students taking courses for credit. If we spot them after the "drop" period has expired, we make it tough enough for them so they rue the act and take their medicine, with more or less favorable results.

As I proceed, I fear that I will encroach on the subject matter of the next speaker since I am unable to separate functions from objectives. By saying very little, I may succeed.

The functions of Meat Instruction, as I view them, are as follows: (1) It should familiarize the student with anatomy and anatomical terminology. This assists the student in understanding some of the terms he has to digest in technical bulletins and books. (2) It must give him a knowledge of what lies under the hide or pelt so he can correlate it with his judging of the live animal. Whenever possible, we slaughter a class of four animals that have been used in the livestock judging course. The class in livestock judging is then invited to view the exhibit and the placing of the carcasses is explained to them. I must admit that in some cases the instructors who placed the live animals were wrong, or perhaps it was me. The chances for being right, you must admit, were in my favor. (3) It should give the student a better idea of what he should strive for in a breeding program for herd improvement by giving him a knowledge of relative values. He sees why a deep twist is important because he cuts out more top round. He learns from experience why finish increases carcass yield and how fill decreases yield. He weighs and computes, he learns to judge carcass weights and carcass grades; he estimates carcass cost, the value of the by-products; he makes discoveries on his own and under guidance. (4) It should make him a better buyer and a better seller since he can recognize the label on the lining as well as the worth of the article. He learns to use market reports and market terminology. S.P. hams now mean sweet pickle ham instead of salt peter hams. (5) It should give male and female students pride and confidence in their ability to recognize cuts, know their position in the carcass, their uses and methods of preparation, and some knowledge of their retail value. They speak a language that others envy. Women students agree that the way to learn is to make the cut. We make them do just that. We do the same with the girls taking Slaughtering. Demonstrations have value, particularly in putting across ideas, but wherever it is possible to have them make the cuts, they gain in the doing. To describe the washing of a soiled diaper and actually doing it are jobs of a different odor. Parents have come to me and commented on how their son or daughter is changing the names of the cuts we eat. Quote.: "We no longer eat steak, we now eat club steak or round tip or top round or strip steak or 6th rib roast." Dad says, "Mother is learning, too, because Jane is showing her how to use a steel, something I've been trying to do for years." One of our students serving as dietician at Walter Reed Hospital assisted the chef during a rush period and he was impressed by her dexterity with a knife and the job she did in assisting him in preparing the meat for the oven. Needless to say, she gained face in the eyes of the chef and it made her job a great deal easier.

I doubt whether any man gets more satisfaction out of his ability than a county agent who can step into a meeting and pinch hit in a cutting or

slaughtering demonstration. In Pennsylvania, the most successful and influential county agents and teachers of vocational agriculture are animal husbandry graduates. I submit this as testimony that meat instruction is important.

It is my feeling that our facilities for teaching meats should be greatly expanded and that all agricultural students should be encouraged rather than discouraged in taking the courses. Students majoring in animal husbandry should be required to schedule and complete at least two courses in meats. I can think of only one reason why they should not and that would be lack of facilities. Some coaches of livestock judging teams have another reason but it is strictly a professional one and holds only if the student desires to become a member of both the meats and the livestock judging teams. We do not subscribe to that policy at Penn State. We even send them to the Cotton Bowl.

Permit me to quote a short conversation that took place with one of my senior students some years ago. Quote: "I wish I had taken Slaughtering and Meat Cutting in my sophomore or junior year instead of in my senior year. I feel that it would have made me a better judge of livestock because I would have had the reasons more clearly in mind of why we placed animals as we did or, probably more often, did not. Looking at an animal and looking at the carcass are like looking at yourself in your dress suit and then looking at yourself in the nude. Most of us are camouflaged; we don't jibe. In the Slaughtering course we learned what finish really looks like and what it does to a carcass if it isn't smooth. We learned some anatomy and the position of the vital organs. Now I know where and why the veterinarian inserts the trocar where he does. Things cleared up because I could see underneath the hide. I can see where we have some bigoted ideas in our judging of the live animal such as depression in the back, long legs, stretch, and deep bodies. The depressions in the back spoil the appearance of the live animal but I don't see where it affects the value of the carcass. The legs are cut off and when we checked the weight of that long-legged steer against the short-legged one we killed two weeks ago, the difference was a lousy three pounds. Why all this fuss about extra daylight for three pounds? The deep sides are necessary in breeding stock, I suppose, although there isn't any concrete evidence, and yet it gives the carcass an excess of cheap plate and flank. The producer wants it; the packer doesn't. You know, Professor, I think somebody had better make up their mind. We get confused."

I am sure that most of us here agree with this student's statement. It gives us another good reason why students in agriculture should have the knowledge of relative values between the animal and the carcass. The student should have said, "Why do we couple the rounds to the chucks when it is loins and ribs that are in demand?"

I would criticize some of our teachings, particularly where the instructors of livestock judging teach some things that are contrary to what a carcass judge knows to be true. If we must use the excuse that we have a show standard and a market standard, we confuse our youth in their concept of what the ultimate goal of a breeder of livestock for meat purposes should be. We compromise with ourselves by catering to the breeder who is too often just a fancier who breeds dollars instead of animals that have maximum economic value. When the cattle business becomes stigmatized with the term racket, it makes the job of teaching animal husbandry more difficult and demanding--more difficult in that we may be placed in a position where we must offer apologies for high pressure policies, more demanding in that we must stress more emphatically the value of sobriety in all that we do, and inculcate in our youth the desire to build and serve in a manner that will reflect honor and credit to themselves.

and the industry. I think most of us appreciate our obligations in this regard and try to be fair and honest with our students.

In closing, I might summarize the functions of meat instruction in the agricultural curricula in one sentence, viz., to give the student a knowledge of the finished product so that he can better understand the reasons for producing such a product. It gives him his second sight. Like the two Scotchmen who were walking down the street. The one picked up a five dollar bill from the sidewalk. The other one borrowed it, so he could have his eyes examined.

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CHAIRMAN TOMHAVE: Thank you, Professor Ziegler.

Professor Kunkle will lead the discussion on this subject.

PROFESSOR KUNKLE: Mr. Tomhave, I think Tom has performed true to his character. Are there any questions that the audience would like to direct to Professor Ziegler?

PROFESSOR McCLURG (Iowa): Mr. Ziegler, did I understand that in your meat cutting courses the boys and girls have the same class, in that so-called second course?

PROFESSOR ZIEGLER: We have boys and girls together. We haven't been able to segregate them. Personally, I want to hear Professor Cole answer that question on No. 7. He said he could explain that on his feet better than he could on paper.

PROFESSOR KUNKLE: All right, Professor Cole from Tennessee.

PROFESSOR COLE: Well, I haven't been a professor very long, so it isn't from the experience gained in Tennessee that I make this observation. I think what I had reference to was mainly dealing with pork. I have even gone this far: When the judging coach of South Dakota State College was training his team, he had a class of four hogs, and we'd take them down and slaughter them. He'd say, "How do they look?" I'd say, "You better not come down", because he placed them. He was trying to teach one thing, and what showed up in the carcass was a different story.

I think hogs are probably the most difficult to correlate with carcass yield. I think many of you in this room are aware that there are some judges in this United States like the National Barrow Show last fall, where they were picking long hogs and they didn't care whether they were ten inches wide; they probably preferred them to those that were fourteen inches wide, weighing around 225 pounds. And then we still have some judges that think they have to be fat, and they don't care particularly how short they are.

This is what I had referred to, Professor Ziegler. We don't seem to be on the beam on hogs as to what is ideal. There are standards for beef carcass excellence. But I doubt if any meats man here could pick the champion carcass at the International. You might do it luckily once or twice, but because the differences are small, it is just as you say: It is hard to tell what is underneath that hide. In hog judging, I think most of you will agree that there is a feeling that some judges still want them fat and pretty lardy; they don't care about length. And the others don't care if they are ten inches wide, as long as they have a nice length and firmness and so forth.

PROFESSOR KUNKLE: Thank you, Mr. Cole.

Now, this discussion leadership is a very democratic operation on my part.

PROFESSOR LOEFFEL (Nebraska): Well, Mr. Chairman and Friends: I think the matter has been adequately covered. I personally feel if you want to spoil a good livestock judging man, just put him in a meats course (laughter). That's being said, of course, because of the fact that a lot of the things we lay stress on, as Ziegler has referred to and Cole has pointed out, are not necessarily true; they are fine points, and if the boy really knows the truth, it weakens his judging from the standpoint of our accepted standards.

I think our accepted standards are wrong, and it is going to take a long time to make Christians out of some of these folks. I'd like to see a bunch of meat men -- I'd like to see a bunch of new fellows judge the International Steers and the International Barrows. I think we might get somewhere if we could bring something of that sort about, but that's probably in the far distant future. And in the meantime, I think we had better not weaken the morale of these kids, if we'd like to win contests. Now, if you don't care whether you win contests or not, okay.

PROFESSOR KUNKLE: Professor Loeffel, that prompts me to reiterate an observation that was brought to us last winter at Columbus when C. T. Conklin of the Ayrshire Association was invited to meet our group of animal husbandry meats course fellows and say a word about the water over the dam in the twenty years that he had been away from Ohio State's Meat Laboratory. He opened his remarks something like Professor Loeffel's point of view. He said, "He'd like some day to return to college teaching." He said not that he wasn't satisfied with his present job, but he'd like to try teaching animal husbandry once more.

Now, here is an Ayrshire man praying for a chance to teach animal husbandry. The sense of his statement to these boys on an impromptu basis was that if he undertook to teach Animal Husbandry he'd start with the skeleton, and then they'd start taking the muscles off the sides of beef and find out the relationship of muscle to bone. He concluded, "We'd have a lot of fun getting ready to go out and see the live animals which wouldn't come until we were thoroughly acquainted with carcasses. I know, with a fair sense of humor, that we'd never win a livestock judging contest, but I'd sure have a peck of fun with those youngsters, making them appreciate the value of this product that farmers in the United States are producing."

I can't help but feel that this double standard to which Mr. Tomhave referred is in accordance with contemporary operation; that is, we have a set of show ring requirements, and then this set of exceptions that we find when we start cutting and dissembling the parts of resulting carcasses.

I wonder if you have something to add, Professor Mackintosh?

PROFESSOR MACKINTOSH (Kansas): Well, I had in mind a question I wanted to ask Tom Ziegler. Then I'd like to inject something into this discussion. Approximately what percentage of your students take more than one course in meats?

PROFESSOR ZIEGLER: You mean our animal husbandry students?

PROFESSOR MACKINTOSH: Well, I suppose, yes.

PROFESSOR ZIEGLER: You see, our animal husbandry students are required to take slaughtering but not required to take cutting, but about 50 per cent do take the cutting course.

PROFESSOR MACKINTOSH: I asked the question because of the dubious division of material. The other question I had in mind is possibly not so much a question, but our department, I presume like the departments that many of you represent, has discussed this question. Not only the advantages and disadvantages of particularly meat judging, but also the meats course in general in its preparation for livestock judging. In a general way we feel that meats experience is advantageous for livestock judging. We make that deduction primarily because from year to year one or more of the outstanding men in the livestock judging team have had meats perhaps in spite of it, rather than as a result of it.

PROFESSOR KUNKLE: If there isn't any other pertinent interrogation for Professor Ziegler, I think Professor Tomhave would like to continue with the program.

CHAIRMAN TOMHAVE: I want to say at this time that if you have any other questions that you'd like to ask any of the speakers, where we could not have enough time during the discussion period, please make a note of it, because tomorrow afternoon we do not have a set program, and we will give you an opportunity to discuss further the problems that have not been discussed.

One of the difficult problems in teaching meats is the adaptation of meat courses to meet the needs of students of allied subjects, such as home economics, food technology, veterinary medicine, hotel and restaurant management. Professor Mackintosh of the Kansas State College is one of the most experienced men in animal husbandry, and I am sure has some very interesting observations on the subject. So we will now hear from Professor Mackintosh on the subject: "Adapting the Meat Course to the Needs of other Groups, such as Home Economics, Food Technology, Veterinary Medicine, Hotel and Restaurant Management."

Professor Mackintosh.

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