



**THE RAW TRUTH  
ABOUT BEEF**



**AN EDUCATIONAL EXPERIENCE**

**PROVIDED BY THE TEXAS BEEF COUNCIL**

## Platform description:

This educational experience was designed for you to bring the beef industry to life for your students! It utilizes elements of the Raw Truth About Beef platform. Your students will get a behind-the-scenes look at the beef industry and explore the beef production process from pasture to plate. The program follows a registered dietitian nutritionist and an executive chef on a tour through the beef lifecycle. To learn how cattle are raised, they visit a purebred ranch, a cow/calf ranch, and tour a feedyard. Stops at a processing facility, a distributor, a retail store, and a restaurant explore how beef becomes a safe, nutrient-dense protein source.

Your students will navigate through the experience in the following ways:

- **Experience videos:** These videos range from seven to eight minutes and are a synthesis of the facility tour. The cast meets with experts and learns about what happens at each step in the process.
- **Reflection videos:** These videos are between four and five minutes each and include the host debriefs during the tour with the dietitian and chef.
- **360-degree videos:** These videos explore different aspects of each stop and allow learners to dig deeper into content that interests them through interactive hot spots.
- **Additional resources:** Students can download or print materials related to topics such as antibiotic use in cattle, food labels, nutritional value, and beef preparation.
- **Evaluation:** Pre and post surveys are embedded into the site. This will allow the Texas Beef Council to measure change in knowledge and perception and to provide additional learning opportunities as appropriate.
- **Connect session interviews:** Recorded interviews allow users to dig deeper with experts in the industry. Participants can submit their questions to be addressed in future interviews.

## How will the Raw Truth About Beef Experience help my students?

As consumers become further removed from agriculture, it is increasingly important that nutrition professionals are equipped to share accurate information about the food system. Learning about how food is raised will help nutrition professionals confidently provide evidence-based information about beef production, labeling claims, and the nutritional value of beef. This guided experience will provide a holistic view of the beef production process. Regardless of their focus area, this platform will add to your students' knowledge base and allow for them to apply this information to their future career in the field of nutrition.



## How do I incorporate the Raw Truth About Beef Experience into my program?

**Online/Self-paced:** Use the Raw Truth About Beef platform as a completely self-paced instructional activity for your students. Have them watch the videos on the platform, answer reflection questions for each segment, and complete the summative application assignment(s). Your students can submit the assignments to you through the platform. You can also easily view which students have watched or completed the elements of the platform.

**In-Class:** Use the experience video of each location as an in-class introduction to each segment of the industry. Watch the experience video together as a class each week. Following the videos, have the students in groups explore the reflection videos, 360 videos, and resources. Use the reflection questions (page 5) to allow students to discuss their learnings with classmates.

Host three in-class discussions for the students:

- **Discussion 1:** This discussion should take place after students have completed the first three segments (Purebred, Cow/Calf, and Feedyard). Use the reflection questions (page 5) to have an in-class discussion on what they have learned. Instruct the group to complete the questions prior to coming to the class.
- **Discussion 2:** This discussion should take place after the students have completed the final three segments (Processor/Distributor, Retail, and Restaurant). Use the reflection questions (page 5) to have an in-class discussion on what they have learned. Instruct the group to complete the questions prior to coming to the class.
- **Discussion 3:** Have students present or discuss their summative assignment during a class session.

**Hybrid/Blended:** Use the experience video of each location as an in-class introduction to each segment of the industry. Have students watch the reflection videos and explore the 360 videos on their own. Assign the reflection questions and summative application assignment(s) as out-of-class work.

- **Group Discussion:** Have your students discuss the reflection questions in class a week after they have gone through the platform.



## Potential timelines for instruction

Below are two sample timelines to utilize The Raw Truth About Beef Experience in the classroom.

### Two-Week Timeline:

#### Week 1: Raw Truth About Beef Experience

- Watch all the videos on the platform, including: the "Meet the Dietitian" video, experience, reflection, and 360 video experiences. Have students complete the respective reflection questions (page 5) in class and discuss or via discussion board.

#### Week 2: Application Assignment

- Have students complete the summative assignment. Present and discuss assignments in class.

### Ten-Week Timeline:

#### Week 1: Purebred

- Watch the "Meet the Dietitian" video. Watch experience and reflection videos. Have students complete the respective reflection questions below in class and discuss or via discussion board.

#### Week 2: Cow/Calf

- Watch experience and reflection videos. Have students complete the respective reflection questions below in class and discuss, or via discussion board.

#### Week 3: Feedyard

- Watch experience and reflection videos. Have students complete the respective reflection questions below in class and discuss or via discussion board.

#### Week 4: Processor/Distributor

- Watch experience and reflection videos. Have students complete the respective reflection questions below in class and discuss or via discussion board.

#### Week 5: Retail

- Watch experience and reflection videos. Have students complete the respective reflection questions below in class and discuss or via discussion board.

#### Week 6: Restaurant

- Watch experience and reflection videos. Have students complete the respective reflection questions below in class and discuss or via discussion board.

#### Week 7 & 8:

- Watch a connect session each week. Share insights of the event in the class discussion board.

#### Week 9 & 10:

- Introduce summative assignment to the class. Allow the class one week to complete the assignment so that they are ready to share a final version with their class the following week. If possible, have students come in to share their presentations in front of the class. Otherwise, have the group share their presentations via the class discussion board. Allot two weeks for presentations or discussion depending on the class size.



**Reflection questions:**

Assign the following reflection questions to your students to help them process and draw meaning from the experience. You can structure these assignments in several different ways. Students can turn in their reflection questions to their instructor. Alternatively, the instructor can set up a discussion board for each location on the Learning Management System and students can post their reflections there. If this option is selected, encourage students to read and engage with their peers on the discussion board.

**Purebred:**

- What made you curious as you explored the purebred ranch?
- How is beef quality and consistency influenced by cattle genetics?
- How do purebred ranchers' choices about cattle genetics influence human health?
- Of the information covered in this segment, what do you see as most important to understand for your future career?

**Cow/Calf:**

- What surprised you about what you learned?
- Describe how beef cattle upcycle grass and convert it into animal protein.
- Why are animal identification systems important for tracking animal health?
- What best practices do beef producers employ when using antibiotics and giving vaccines?
- How can you apply the learning from this segment into your interactions with peers or others curious about beef production?

**Feedyard:**

- What were the most important elements or significant ideas presented at the Feedyard?
- How do different feed rations affect the tenderness and flavor of beef?
- List a few common ingredients in feed rations and identify the nutrients they provide the animal. Consider how feed rations are similar to the diets of humans.
- What information learned in this segment do you see yourself actively applying in your future career?

**Processing/Distribution Facility:**

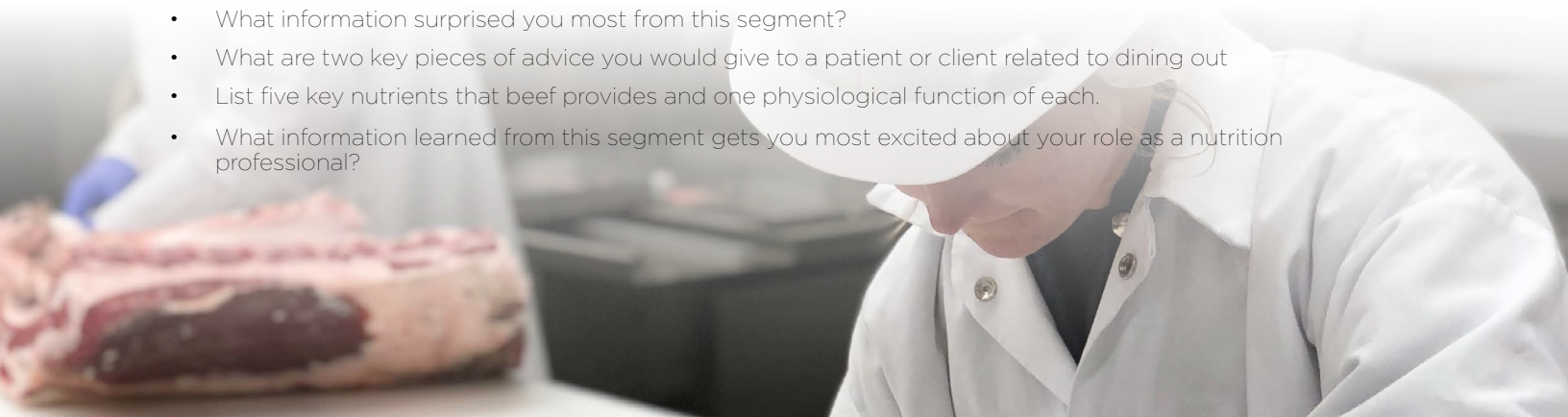
- What protocols in a processing facility ensure food safety?
- How have trimming practices changed and how have these changes influenced the fat content of beef?
- List three to five lean cuts of beef and describe the fatty acid profile of lean beef.
- How do you see yourself applying the information learned in this segment into your career?

**Retail:**

- What information from this segment would you share with your peers or community?
- What meat handling tips and food safety practices are important for your clients to understand?
- If giving a grocery store tour, what information would you share about labeling claims on beef products in the meat case?
- What information learned in this segment do you see yourself using to perform your job well in the future?

**Restaurant:**

- What information surprised you most from this segment?
- What are two key pieces of advice you would give to a patient or client related to dining out?
- List five key nutrients that beef provides and one physiological function of each.
- What information learned from this segment gets you most excited about your role as a nutrition professional?



## SUMMATIVE APPLICATION ASSIGNMENTS

After your students have completed the Raw Truth About Beef Experience, assign one or more of the following summative application assignments to help them apply the experience to their field and demonstrate ACEND Core Competencies. Each assignment will focus on one of the following areas: foodservice, clinical and community.

### Foodservice-Focused Assignment: Menu Development

**Objective:**

- Learners will develop single meal menu incorporating nutritional information of various lean beef cuts.

**ACEND Core Competencies Met:**

- CRDN 3.10 Develop and evaluate recipes, formulas and menus for acceptability and affordability that accommodate the cultural diversity and health needs of various populations, groups and individuals.
- CRDN 1.3 Justify programs, products, services and care using appropriate evidence or data.
- CRDN 1.6 Incorporate critical-thinking skills in overall practice.

**ACEND Accreditation Standards for Nutrition and Dietetics Didactic Programs Met:**

- 5.1.a.12. Food science and food systems, environmental sustainability, techniques of food preparation and development and modification and evaluation of recipes, menus and food products acceptable to diverse populations.
- 5.1.b.1-KRDN 1.3 Apply critical thinking skills.

**Prompt for Students:**

- Develop a one-page food menu incorporating various cuts of beef into the scenario below. Be sure to describe why you have chosen each cut and the nutritional value it has.
- Visit a grocery store to find and compare at least three cuts of beef (i.e., sirloin steak, flat iron steak, tenderloin steak, top round roast, sirloin tip roast).
  - Look up the cuts you chose [here](#) and with the “Beef Retail Cuts” chart to learn more about characteristics, appropriate cooking methods, and recipes.
  - Develop a single meal menu for each of the cuts you selected and write two to three sentences about a scenario or location (i.e., quick at-home meal, hospital kitchen, restaurant) for which you would recommend each menu.

**Resources to Consult:**

- [Retail Beef Cuts Chart](#)
- [Beef Loving Texans: Beef Cuts](#)
- [Beef Loving Texans: Beef Recipes](#)
- [Beef Loving Texans: Beef Cooking Methods](#)
- [AHA Certified Recipes](#)
- [Stock Your Protein Pantry](#)

**Assessment:**

- Evaluate assignment based on accuracy, creativity, and critical thinking.



## Community-Focused Assignment: Nutrition Education Material Development

### Objective:

- Learners will identify and develop appropriate educational materials for the audience types below to address the need of building beef into a sustainable and healthy dietary pattern.

### ACEND Core Competencies Met:

- CRDN 2.2 Demonstrate professional writing skills in preparing professional communications.
- CRDN 3.3 Demonstrate effective communication skills for clinical and customer services in a variety of formats and settings.
- CRDN 3.4 Design, implement and evaluate presentations to a target audience.
- CRDN 1.6 Incorporate critical-thinking skills in overall practice.

### ACEND Accreditation Standards for Nutrition and Dietetics Didactic Programs Met:

- 5.1.b.3-KRDN 3.2 Develop an educational session or program/educational strategy for a target population.
- 5.1.b.1-KRDN 1.3 Apply critical thinking skills.

### Prompt for Students:

- As part of your role as a pediatric dietitian, you have decided to create and manage a Facebook group for parents who are looking for a way to learn more about how to provide a balanced diet for their infants and toddlers. The page will serve as a place for parents to interact and support one other, and for you to give evidence-based information. How would you drive engagement on the group? What information would you share? Brainstorm the ways you would optimize Facebook group features (videos, blogs, pictures, events) and identify which modalities would help educate parents on incorporating nutrient-rich beef into their children's diet.
- You have recently been asked to host an educational booth at a farmer's market in Austin, TX. Your goal will be to share information related to food labeling claims targeting young professionals between the ages of 26-38.
- You have been asked to give a 15-minute presentation at a local town's harvest festival on the benefits of incorporating lean protein into one's diet. Your audience will be a group of high school students who are visiting from a nearby city. Many are athletes and would benefit from hearing about the importance of properly fueling your body for optimal performance.

### Resources to Consult:

- [Beef as a First Food](#)
- [Feeding Tips for Infants](#)
- [Feeding Tips for Toddlers](#)
- [Smart Starts for Infants](#)
- [Decoding the Label](#)
- [Surprising Facts about Lean Beef](#)
- [Grain-Finished vs. Grass-Finished Beef](#)
- [Powerful Protein](#)
- [Stock Your Protein Pantry](#)
- [Leidy et al., 2015](#)

### Assessment:

- Evaluate assignment based on originality of presentation, professionalism, accuracy of information, and audience-centric approach in messaging.



## Clinical-Focused Assignment: Addressing Patient Concerns Q&A

### Objective:

- Learners will respond to patient questions and concerns regarding beef production and nutrition.

### ACEND Core Competencies Met:

- CRDN 3.8 Deliver respectful, science-based answers to client questions concerning emerging trends.
- CRDN 1.6 Incorporate critical-thinking skills in overall practice.

### ACEND Accreditation Standards for Nutrition and Dietetics Didactic Programs Met:

- 5.1.2. Communication skills sufficient for entry into professional practice.
- 5.1.3. Principles and techniques of effective education, counseling and behavior change theories and techniques.
- 5.1.b.2-KRDN 2.6 Demonstrate an understanding of cultural competence/sensitivity.
- 5.1.b.2-KRDN 3.3 Demonstrate counseling and education methods to facilitate behavior change and enhance wellness for diverse individuals and groups.
- 5.1.b.1-KRDN 1.3 Apply critical thinking skills.

### Prompt for Students:

Answer the patient questions and concerns below regarding beef production and nutrition. Role-play the scenarios with a classmate in person or submit answers on the discussion board if remote.

- A married couple has come into your clinic and is wanting to try a new diet for the new year. They have friends who are trying higher protein diets. They are interested in trying this as well but worry about consuming too much meat, specifically beef. The couple is worried about the environmental impact their beef consumption will have and the effect it will have on their cholesterol levels. What nutritional and environmental information would you share with the couple to address their concerns?
- A college student has come into your clinic and has concerns about the health benefits of eating "grass-fed" versus "grain-fed" beef. She recently started buying only grass-fed beef despite the higher price tag. What nutritional and scientific information would you share with her to address her concerns?
- A 45-year-old male was referred to you by his physician after being diagnosed with high blood cholesterol levels (total cholesterol and LDL). He currently enjoys eating beef and chooses steak and 70/30 ground beef most often because he has experience cooking them. He states that he knows he should eat more vegetables but finds it difficult to get them in especially on days when he buys fast food for lunch for convenience. What three questions would you ask him in your first consultation, and what are three pieces of information or advice you would share?
- A 50-year-old woman with a BMI of 32 makes an appointment with you to discuss her desire to lose weight because she is seeing the impact her mother's obesity is having on her health and ability to maintain independence. The woman has made several changes including beginning to walk twice a week and trying to cook more at home. However, she loves to eat hamburgers and steak at a local restaurant and is having a difficult time not going there with her husband frequently. What recommendations would you give her especially related to muscle maintenance during weight loss, balanced meals, and preparing food at home versus dining out?

### Resources to Consult:

- [Weight Management Handout](#)
- [High Cholesterol Handout](#)
- [Beef Sustainability Infographic](#)
- [Executive Summary of Beef Sustainability](#)
- [Grain-Finished vs. Grass-Finished Beef](#)
- [Powerful Protein](#)
- [Maki et al., 2012](#)
- [Sayer et al., 2017](#)
- [Roussell et al., 2012](#)
- [O'Connor et al., 2017](#)
- [Leidy et al., 2015](#)
- [Paddon-Jones et al., 2015](#)
- [Layman et al., 2009](#)

### Assessment:

- Evaluate students on accuracy of information, empathy demonstrated for their patients, and providing targeted information for their patients.





## General Assignment: Nutrition Education Material Development

### Objective:

- Learners will create an eye-appealing and scientifically accurate employee training presentation covering various food safety topics.

### ACEND Core Competencies Met:

- CRDN 3.5 Develop nutrition education materials that are culturally and age appropriate and designed for the literacy level of the audience.
- CRDN 1.6 Incorporate critical-thinking skills in overall practice.

### ACEND Accreditation Standards for Nutrition and Dietetics Didactic Programs Met:

- 5.1.12. Food science and food systems, environmental sustainability, techniques of food preparation and development and modification and evaluation of recipes, menus and food products acceptable to diverse populations.
- 5.1.b.2-KRDN 2.1 Demonstrate effective and professional oral and written communication and documentation.
- 5.1.b.4-KRDN 4.5 Describe safety principles related to food, personnel and consumers.
- 5.1.b.1-KRDN 1.3 Apply critical thinking skills.

### Prompt for Students:

- You are training a team of employees that will be working with a variety of foods, including meat products. Create an eye-appealing and scientifically accurate training presentation that covers the following elements:
  - Responsibilities of various governmental organizations in ensuring a safe food supply
  - Relevant Laws related to food safety and their implications (i.e.: Food, Drug, and Cosmetic Act; Food Modernization Act)
  - Beef Quality and Yield Grades
  - Food Safety Techniques for Handling Meat
  - Appropriate Internal Cooking Temperatures for Protein Foods

### Resources to Consult:

- [FSIS: Food Safety Fact Sheets](#)
- [FSIS: Governmental Agencies and Partnerships](#)
- [Understanding Beef Quality Grades](#)
- [USDA: Beef Yield and Quality Grading](#)
- [FSIS: Safe Food Handling](#)
- [FSIS: Color of Cooked Ground Beef](#)
- [FSIS: Safe Internal Cooking Temperatures](#)

### Assessment:

- Evaluate assignment based on originality of presentation, professionalism, accuracy of information, and audience-centric approach in messaging.

