

FEARLESS



A TEXAS TECH PRODUCTION

Season 2 | Episode 1 | Who's Got Beef

Taylor Peters, Host: I OFTEN THINK ABOUT THE THINGS THAT MAKE LIFE EASIER – THE INVENTIONS THAT HAVE BECOME SUCH AN IMPORTANT PART OF OUR WORLD THAT I COULDN'T IMAGINE HOW WE EVER LIVED WITHOUT THEM. LIKE YOUR PHONE... WHERE YOU MAY BE LISTENING TO THIS PODCAST RIGHT NOW. AND WHO ARE THE PEOPLE THAT RESPONSIBLE FOR THEM? RESEARCH IS INSPIRED BY CURIOSITY. HOW DOES SOMETHING WORK, OR WHY, CAN WE CHANGE IT IF NEEDED? AS A CARNEGIE R-1 INSTITUTION, OR YOU MAY HAVE HEARD PEOPLE REFER TO IT AS A TEIR 1, TEXAS TECH FACULTY ARE FACILITATING SOME OF THE TOP RESEARCH IN THE COUNTRY. OVER THE LAST FEW YEARS, TEXAS TECH HAS HAD A RECORD NUMBER OF PROPOSAL SUBMISSIONS AND AWARDS. THE UNIVERSITY AS A WHOLE IS UP 35 PERCENT IN FEDERAL AWARDS FROM THIS TIME TWO YEARS AGO. IT'S LIKELY THAT THE UNIVERSITY WILL EXCEED \$40 MILLION IN TOTAL FEDERAL EXPENDITURES FOR THE FIRST TIME IN SCHOOL HISTORY. ALL OF THESE METRICS MATTER TO THE STRENGTH AND SUCCESS OF THE RESEARCH ENTERPRISE AT TEXAS TECH, BUT THEY'RE NOT WHY WE'RE TELLING THIS STORY. THIS SEASON IS ABOUT GOING BEYOND RESEARCH TO LEARN MORE ABOUT THE PEOPLE CONDUCTING IT AND WHY. WE WANT TO KNOW MORE ABOUT WHAT INSPIRES THEM ABOUT THIS WORK, WHY THEY ARE MOTIVATED TO CREATE CHANGE.

(Fearless Intro Music)

Western Caucus Press Conference

Jody Arrington, United States Congressman: We'll have members of the congress as they make their way to the podium.

I am so proud to be from the food, fiber and fuel capital of the world...in West Texas. God's country...

Peters: CONGRESSMAN AND TEXAS TECH GRAD JODEY ARRINGTON USES THIS PHRASE A LOT- FOOD, FIBER, FUEL... HE'S RIGHT TOO, BESIDES THE OBVIOUS KING,

(George Straight Song)

Peters: AGRICULTURE SITS ON THE THRONE OF WEST TEXAS. AND MEMBERS OF THE WESTERN CAUCUS KNOW THAT... IT'S WHY THEY'RE HERE ON THE TEXAS TECH CAMPUS... AT THIS CURRENT MOMENT, TAKING A TOUR OF THE ANIMAL AND FOOD SCIENCES BUILDING. JODEY REFERS THE WOMAN AND MEN ON EITHER SIDE OF HIM AS THE CHAMPIONS OF RURAL AMERICA.

Ronny Jackson, Congressman: I come from, the 13th congressional district is what I represent now up in Amarillo, which is the number one agriculture district in the state of Texas.

Peters: AND IF YOU'RE GOING TO THRIVE IN ONE OF THE TOP AGRICULTURE DISTRICTS IN THE STATE, YOU NEED A UNIVERSITY THAT EMBODIES THAT. THAT CREATES THE NEXT GENERATION OF CHAMPIONS... IN MORE WAYS THAN ONE.

News Anchor: Texas Tech Meat Judging team has brought home its third consecutive national championship.

Peters: IN THE WORLD OF MEAT JUDGING, THERE ARE FEW SCHOOLS THAT RULE TO ROOST, AS THEY SAY. AND AT THE VERY TOP OF THAT LIST FOR THE LAST FEW DECADES, YOU GUESSED IT... IT'S HAS BEEN TECH.

Arrington: You're going to have to build a bigger building just for all your national championship banners that are.

(Sounds of walking)

Peters: THIS BUILDING STANDS ALONE ON THE WEST SIDE OF CAMPUS, TUCKED INTO A PLOT OF LAND NEAR THE UNITED SUPERMARKETS ARENA... IF YOU'VE EVER DRIVEN BY, YOU'D REMEMBER IT. TWO LARGER THAN LIFE BULL STATUES STAND LIKE RELICS AT ONE OF THE BUILDING'S ENTRANCES.

(Door opening)

Peters: WE ENTER AROUND THE BACK, BY RAIDER RED MEATS. WE KEEP WALKING AND FIND OURSELVES STARING AT ROWS AND ROWS AND STILL MORE ROWS OF GOLD PLATED, WOODEN PLAQUES AND TROPHIES INSIDE A FLOOR TO CEILING GLASS CASE THAT EXTENDS THE LENGTH OF THE HALLWAY. HORSE JUDGING, WOOL JUDGING, MEAT JUDGING...EVEN IF THIS WAS ALL THAT DOCUMENTED THE DECADES OF SUPERIOR EXCELLENCE. BUT IT'S NOT. IT'S ONLY A PORTION OF THE TROPHIES THAT TELL THE STORY OF

WHERE THIS COLLEGE HAS BEEN. WHERE IT'S GOING. THE COLLEGE, NOW KNOWN AS DAVIS COLLEGE, WAS RENAMED IN JANUARY OF 2022 FOLLOWING THE LARGEST SINGLE INVESTMENT IN TEXAS TECH HISTORY. BY JOYCE AND GORDON DAVIS, WHO IS A FORMER FACULTY MEMBER AND COACH OF THE MEAT JUDGING TEAM. AS WE WALK BY THE NATIONAL CHAMPIONSHIP BANNERS AND UP THE STAIRCASE, WE FIND THE PERSON WE'RE HERE TO MEET.

Mindy Brashears, Director, of the International Center for Food Industry: My name is Mindy Brashears...

Peters: MINDY BRASHEARS' OFFICE READS LIKE A STORYBOARD OF HER LIFE. DOZENS OF HARD ROCK CAFE T-SHIRTS LINE THE BOOKSHELF ALONGSIDE THICK, HARD COVER BOOKS DEDICATED TO ALL THINGS AGRICULTURE. FRAMED PICTURES COVER HER DESK AND WALLS... INCLUDING ONE INSIDE A SHADOWBOX. IT READS IN THIN BLACK SHARPEE- MINDY, THANKS FOR YOUR SERVICE. YOU'VE MADE A DIFFERENCE IN FEEDING AMERICA. SIGNED BY SONNY PERDUE, THE FORMER UNITED STATES SECRETARY OF AGRICULTURE.

Brashears: First of all, I grew up on a farm, so I love agriculture. It's at the core of who I am, and so never did I dream I would be serving in DC as the highest-ranking female in agriculture.

Peters: BUT THAT'S WHERE SHE FOUND HERSELF. HER INVESTMENT IN THE REGION HAS BEEN IN HER BLOOD SINCE THE VERY BEGINNING. SHE IS WEST TEXAS, FIGHTING FOR WEST TEXAS.

Brashears: When I was in DC, a lot of people who make decisions know nothing about Ag and they're sitting in positions that make important decisions.

Peters: HER ROAD TO D.C. WAS PREDETERMINED BY THE STEPS SHE TOOK LEADING UP TO THAT POINT. INCLUDING THE DEVELOPMENT OF A PROBIOTIC THAT WOULD PROVE REVOLUTIONARY IN FOOD SAFETY. BUT GROWING UP, MINDY ALWAYS KNEW SHE WOULD GO TO MED SCHOOL. AND SHE WAS ON TRACK TO DO SO HERE AT TECH.

Brashears: But I got a scholarship from the Houston Livestock Show and it required you to major in Ag at the time, and I was like, well, I'll go into animal science..."

Peters: NEEDLESS TO SAY, SHE MADE THE RIGHT CHOICE.

Brashears... and I was like, I'll do that for a couple of years and then I'll change majors. Well, as you can see, I'm still

here.

Peters: SHE GOT HER UNDERGRADUATE DEGREE AT TECH, MASTERS AND PHD FROM OKLAHOMA STATE, AND STARTED WORKING AT THE UNIVERSITY OF NEBRASKA IN 1997.

(Gavel)

This hearing of the subcommittee for biotechnology, horticulture, agriculture and research... will come to order. Peters: IN

2015 MINDY ADDRESSED THE HOUSE OF REPRESENTATIVES AT A SUB COMMITTEE HEARING.

Brashears from subcommittee meeting: August 13th, 1997 was a very significant day in my life. Not only was it my first day on the job as an assistant professor at the University of Nebraska, it was also the day of the Hudson Foods ground beef 25-million-pound recall due to E Coli O157:H7 contamination which was, at the time, the largest recall in history.

Peters: THAT MOMENT HAD AN ENORMOUS IMPACT ON HER. THE PROBLEM WAS CLEAR. MINDY WANTED TO DO SOMETHING ABOUT IT- AND SO SHE DID.

(Music)

Peters: OVER THE NEXT FEW YEARS, SHE WOULD POUR HERSELF INTO DEVELOPING ANTIMICROBIAL DRUG RESISTANCE IN ANIMAL FEEDING SYSTEMS. WHEN THESE PROBIOTICS ARE ADMINISTERED TO CATTLE, IT CAN SIGNIFICANTLY DECREASE THE LIKELIHOOD OF THAT ANIMAL DEVELOPING E COLI AND SALMONELLA.

Brashears: It's been commercialized and over 50 percent of the industry uses this, and it kills E coli before the cattle go to market. That's one of the big things. I summarized it in a few seconds, but that was 10-12 years of my career that I spent doing that.

Peters: THIS INVENTION IS IMPORTANT FOR A LOT OF DIFFERENT REASONS- IT PROTECTS THE ANIMALS AND IT PROTECTS THE CONSUMERS. MINDY'S FOCUS ON FOOD SAFETY IS WHAT LANDED HER IN WASHINGTON TO BEGIN WITH, BUT IT HAS ALSO MADE HER A LEADER IN HER FIELD. DISCOVERING NEW, MORE FUNCTIONAL WAYS OF PROTECTING LIVESTOCK. MOST CATTLE RANCHERS AND LIVESTOCK PRODUCERS TAKE PROACTIVE MEASURES TO ENSURE THEY ARE GROWING HEALTHY CATTLE AND DELIVERING A SAFE PRODUCT FOR DISTRIBUTION. IT'S IMPERATIVE TO PEOPLE LIKE MINDY AND HER COLLEAGUE IN THE DAVIS COLLEGE, TATE CORLISS.

(Music)

(Answering phones at Raider Red Meats)

Tate Corless: We're 90 percent student-run. From animal handling to delivering it to the customer.

(Ordering food at Raider Red Meats)

Peters: FOR NEARLY TEN YEARS, TATE HAS BEEN THE DIRECTOR OF RAIDER RED MEATS, BUT HIS BACKGROUND IN THE PROGRAM DATES BACK TO HIS DAYS AS A STUDENT.

Corless: It wasn't quite to the level where it was at. When I came through it was more on that traditional side. Obviously, we still sold products, but it wasn't again to that scale.

Peters: THE BUSINESS SIDE OF THINGS HAS GROWN A LOT... BUT AT IT'S HEART... AT IT'S MEDIUM RARE CORE, IT'S STILL ABOUT THE STUDENTS.

Corless: I came through the program, was on the meat judging team here and then got my masters at Texas Tech and then that opportunity to come back and I did.

Peters: TO GET TO TATE'S OFFICE, YOU WALK PAST MORE GLASS CASES GARNERING TROPHIES FROM PAST JUDGING TEAMS. HIS BLACK HAT FEATURES A LEATHER PATCH STAMPED WITH THE RAIDER RED MEATS LOGO TO MATCH THE ONE SEWN ONTO HIS SHIRT. THE BOOKSHELF BEHIND HIS DESK IS PACKED FULL OF SEASONINGS, RUBS, BBQ SAUCES, MINATURE COTTON BALES, COFFEE MUGS AND AWARDS. WHAT TATE'S DOING ISN'T EXACTLY RESEARCH... BUT IT'S ONE OF THE BEST EXAMPLES OF A PRODUCT DEVELOPED ON CAMPUS WITH WIDE-SPREAD DISTRIBUTION. SIMPLY PUT...

Corless: ...Is a brand and it's also our meat lab. It's our students, a piece of our experiential learning here in the Animal and Food Science Department and it's a business model for those students to learn and interact in so to better prepare them for the industry. Our business model focuses around student interaction and a high-quality, high-end product.

Peters: TATE SAYS THAT FROM HARVEST TO THE HANDS OF CUSTOMERS, RAIDER RED MEATS IS DIFFERENT THAN MEAT LABS AT OTHER UNIVERSITIES.

(Credit Card Swiping)

Corless: Whether that's a chef as part of our food service business, or whether it's a walk-up customer who comes up

here. Or dealing with the customer on the phone, on the email. All of our customer service and interface is done with students...whether we're talking packaging, cutting, mixing, grinding, when we're talking about sausages and different things like that. They're involved in every piece of it.

Peters: AS THE BUSINESS MODEL HAS GROWN, THEY'VE EXPANDED THE PRODUCT LINEUP- JERKEYS, SNACK STICKS, RUBS, SAUCES, SEASONINGS. TATE IS REALLY CONNECTED WITH THESE STUDENTS, HE RIDDLES OFF NAMES OF FORMER STUDENT SUCCESS STORIES. AMBASSADORS OF THE PROGRAM WHO HAVE GONE INTO THE CORPORATE WORLD AND SUCCEEDED AT A HIGH LEVEL.

Corless: I have recent graduates and past graduates, that we'll just call me and say, "Man, it was so easy to jump in with blank company and they're using the same program we were using. Then I've had employers call me and say, "I need six more just like Jeremy, just like Stephanie, she was awesome. I got to get more like this." To me, it's super humbling, super rewarding for me to hear that. I get to see that impact on a daily basis and again, it's just very rewarding what I get to do.

Peters: PROCEEDS FROM RAIDER RED MEATS GO DIRECTLY BACK INTO THE PROGRAM FOR EQUIPMENT, FACILITIES, EMPLOYING STUDENTS. BUT AT THE END OF THE YEAR, MONEY THAT'S LEFT OVER GOES INTO A SCHOLARSHIP ENDOWMENT FOR STUDENTS WITHIN THE DAVIS COLLEGE.

Corless: I had the opportunity to sit on that first board where we gave away the first scholarship and just imagining the blood, sweat, and tears going into that first scholarship. Really rewarding and we've been super fortunate.

Peters: That's a great feeling.

Corless: It is.

Peters: FOLLOWING THE PANDEMIC, THE DEMAND FOR ONLINE SALES SKYROCKETED. SO, TATE IS FOCUSING ON THAT WHILE MAINTAINING CONTRACTS WITH UNITED, OUTDOOR CHEF, THE BENT NAIL AND OTHERS... INCLUDING VENUES OUTSIDE OF LUBBOCK, LIKE THE TURKEY HOTEL IN TURKEY, TEXAS. THE FUTURE IS BRIGHT FOR THIS BUSINESS.

(Ordering Food at Raider Red Meats)

Peters: SO MUCH OF WHAT HAPPENS IN THIS BUILDING IS CREATED TO EMPOWER STUDENTS, TO SEND THEM OUT INTO THE WORK FORCE A CUT ABOVE THE REST. AND IF YOU ASK TATE CORLESS, AND HIS

COLLEAGUE MINDY BRASHEARS, THEY'LL SAY THAT'S EXACTLY WHAT THEY'RE DOING.

Brashears: If we can grow more people and get them in DC, then it's really an amazing thing. I have a really cool story...

Well, I got a phone call and they said, "We've hired a chief of staff and I think you might know her." I was like, "Oh, okay, who is it?" They said her name is Shawna Newsome. She was my husband's grad student. [LAUGHTER] Yeah. I get emotional thinking about it, but I don't know why.

Peters: I THINK WE CAN ALL UNDERSTAND WHY. MINDY'S HUSBAND TODD IS A PROFESSOR IN THE DAVIS COLLEGE, TOO, IN AGRICULTURAL EDUCATION AND COMMUNICATIONS. SHAWNA WAS A GRAD STUDENT HE TAUGHT AND MENTORED. PROFESSORS OFTEN INTERACT WITH THOUSANDS OF STUDENTS BUT DON'T ALWAYS GET TO SEE THEM FLOURISH IN THE REAL WORLD. MINDY AND TODD GOT THAT EXPERIENCE AS UP CLOSE AND PERSONAL AS POSSIBLE. AND FOR TWO WOMEN, TWO TEXAS TECH GRADUATES REPRESENTING THIS REGION AT A NATIONAL LEVEL... THAT IS PRETTY SPECIAL.

Brashears: It's a small world, but [LAUGHTER] you never know what you're doing might impact you 10 years later. Oh my goodness, I worked with her on food safety projects...

(Walking)

Peters: DALE WOERNER'S OFFICE IS JUST DOWN THE HALL FROM MINDY AND A LOT OF THEIR WORK OVERLAPS. DALE IS AN ENDOWED PROFESSOR IN SUSTAINABLE MEAT SCIENCES, WHICH INCLUDES FOOD SAFETY AND THE INDUSTRY AS A WHOLE.

Peters: So, you have lots going on.

Dale Woerner, Endowed Professor, Animal and Food Sciences: A lot going on. A lot going on. At home, my wife and young son, I have a 10-year-old son, we're very involved in all things 10-year-olds do. (FADE OUT)

Peters: HE AND HIS WIFE MET AS UNDERGRAD STUDENTS AT TECH. DALE IS A TALL MAN WITH A KIND FACE AND DISPOSITION. WE ARE SEATED AROUND A SMALL CONFERENCE TABLE IN HIS OFFICE... WE ACTUALLY HAD TO KICK OUT A COUPLE OF STUDENTS TO DO THIS INTERVIEW. I'M SORRY ABOUT THAT. ANYWAY, WE ARE HERE TO TALK TO DALE ABOUT SUSTAINABILITY IN AGRICULTURE.

Woerner: I think sustainability is a buzzword that's often times overused or used without the appropriate context. Quite literally, sustainability means to perpetuate, to keep going. Most of the time that involves economics.

Peters: DALE IS ATTEMPTING TO CONSERVE AND CREATE SUSTAINABLE PRACTICES IN RURAL AGRICULTURAL COMMUNITIES. HIS RESEARCH IS SPECIFIC TO TOWNS WE HAVE ALL SEEN-

(Driving)

Peters: ONES THAT MAY ONLY ATTRACT INTERSTATE TRAVELERS. THESE ARE DOTS ON THE MAP IN AGRICULTURAL REGIONS WHERE CROP OR CATTLE PRODUCTION THRIVE. THOSE SMALL TOWNS THAT ONCE WERE LIVELY NOW PROBABLY INCLUDE STORE FRONTS WITH BOARDED UP WINDOWS, LONG SINCE CLOSED OR PRODUCTION PLANTS THAT ARE NO LONGER IN USE, OUTDATED NOW WITH THE RAPID SHIFT IN TECHNOLOGICAL ADVANCES. DALE CALLS THESE PLACES GHOST TOWNS (SAID TOGETHER) AND IT'S WHERE HE'S FOCUSING HIS RESEARCH.

Woerner: In agriculture, which candidly is the only thing we can't live without, we need small towns. We need rural communities so that agriculture can continue in those areas and unfortunately, we've seen a diminishing of these communities and it becomes less and less attractive for people to live in a small town when all the amenity leaves.

Peters: ACCORDING TO DALE, AGRICULTURE LIVES AND DIES IN THESE SMALL RURAL TOWNS. THEY ARE ESSENTIAL TO THE MAKEUP AND SUCCESS OF THE AGRICULTURAL COMMUNITY. SO, WHEN THEY DISSIPATE, WHAT LONG TERM IMPACT DOES THAT HAVE ON THE BIG PICTURE? COULD THIS DAMAGE OUR ABILITY TO PRODUCE AND DISTRIBUTE FOOD?

Woerner: What is the impact of agriculture in general to a rural environment? But then more specifically, what's the impact when that agriculture leaves? What does it leave behind and how do we circumvent that? How do we stop that from happening?

Peters: THESE ARE ALL REALLY COMPLEX QUESTIONS. AND THEY'RE ONES THAT MAY NOT HAVE IMMEDIATE ANSWERS, BUT DALE BELIEVES THAT PRESENTING THESE QUESTIONS IS WHAT CAN BEGIN THE CULTURE SHIFT. HIS RESEARCH SHOWS THAT WHEN INDIVIDUALS LEAVE THESE SMALL TOWNS AND HEAD FOR THE BIG CITY, THEY'RE MOVING AWAY FROM JOBS RELATED TO AGRICULTURE; INSTEAD OPTING FOR PROFESSIONS IN WHAT DALE DESCRIBES AS SOCIAL PROGRAMS. (FADE IN)

Woerner: And other things that candidly become burdens to society in terms of financial need or additional health care.

All of those things that they've left a community behind because they couldn't be provided with those things and then that

burden is just intensified on the municipalities or the cities or what have you, where they're all moving to. But ultimately what we need to do is take the data that we capture to demonstrate the magnitude of what's happening. To go to leaders, to go to politicians, to go to Austin, to go to Washington D.C.

(Music)

Peters: AFTER SHARING HIS FINDINGS, DALE SAYS IT'S TIME TO CREATE A PLAN- 10-YEAR, 20-YEAR, 50-YEAR PLAN. IN THE NOT-SO-IMMEDIATE FUTURE, DALE SAYS HE'S ATTEMPTING TO MERGE THE GROWING FIELD OF TECHNOLOGY WITH THE TRADITION OF RURAL TEXAS.

Woerner: Looking at robotics for use in the meat industry, facilitating jobs. That's another big thing that's coming.

Peters: DALE IS DEVELOPING THESE EXPERIMENTS, RESEARCHING THESE TRENDS IN REAL TIME. IT'S HAPPENING AS WE PRODUCE THIS PODCAST. DALE, AND OTHERS IN THE INDUSTRY, RECOGNIZE THAT THERE IS A REAL SENSE OF URGENCY HERE.

Woerner: The one thing we can't live without is food. We have to be focused on food production. If nothing else, water and food is what will sustain us moving forward. If we don't do that in a responsible way, then we'll run ourselves out of resources and out of food. Here we sit in 2022 and we talk about 2050 as if that's in someone else's lifetime. But it's not, it's in all of our lifetime. I'm talking to students who are 18, 19, 20-ish years old in a classroom, and in 2050, they will not yet be 50. They'll very much be in the prime of their life, and possibly struggling for water and food.

Peters: IN 2019, A GOVERNMENT REPORT STATED THAT BECAUSE OF AN INCREASE IN POPULATION AND DECREASE IN RAINFALL, IT IS ESTIMATED THAT PARTS OF THE UNITED STATES, INCLUDING THIS REGION, WILL SUFFER FROM EXTREME WATER SHORTAGES BY 2050.

(Music)

Woerner: This is very real to all of us, very much within the reach of our lifespan.

Rusty Smith, Director, Texas Produced Water Consortium: I don't think anybody would argue with you that the security of our future water resources is crucial.

Peters: THIS IS RUSTY SMITH, HE'S THE DIRECTOR OF THE TEXAS PRODUCED WATER CONSORTIUM... HE'S ONE OF THE PEOPLE SPEARHEADING EFFORTS AT A STATE LEVEL TO FIND A SOLUTION TO THE WATER

SHORTAGE.

Smith: It's really not until we find ourselves in times of crisis, when the lights don't come on, when the water doesn't come out of the faucet that we start to really hone in on the reality of how big that problem will be...

Peters: THAT'S COMING UP NEXT TIME ON FEARLESS.

(Music)

FEARLESS IS PRODUCED BY THE OFFICE OF COMMUNICATIONS AND MARKETING, IN COLLABORATION WITH THE OFFICE OF RESEARCH AND INNOVATION. IT'S WRITTEN AND HOSTED BY ME, TAYLOR PETERS, AND CO-PRODUCED BY ALLISON HIRTH. EDITING AND SOUND DESIGN BY THOMAS BOYD. FEARLESS IS A TEXAS TECH PRODUCTION, FROM HERE IT'S POSSIBLE.

(Music)

HI EVERYONE! THANKS FOR LISTENING. IF YOU WANT TO LEARN MORE ABOUT THE CHARACTERS YOU MET TODAY OR SEE PHOTOS FROM THE INTERVIEWS LOG ON TO OUR WEBSITE AT TODAY.TTU.EDU/FEARLESS. AND AS ALWAYS, PLEASE LIKE, REVIEW AND SUBSCRIBE!