A wide-angle photograph of a vast field of golden wheat. The wheat stalks are in sharp focus in the foreground, showing their intricate structure. The field extends to a flat horizon line. In the background, there are some dark silhouettes of trees and buildings. The sky is a deep, dark blue with some lighter, wispy clouds, and a faint rainbow is visible on the horizon.

Ag4Life

Keeping Oklahomans Strong

Ag4Life

Welcome to Ag4Life.

Agriculture for life: for most, it's a heritage of planting, birthing and reaping through the years, withstanding unexpected turns and celebrating good times. It's the can-do spirit that is passed down from generation to generation.

Please read on to learn how you can live the **Ag4Life** way in four important areas of healthy living: health, safety, job readiness and building resilience.

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One way we can maintain healthy living is with *assistive technology* (AT). AT is any tool, device, piece of equipment, or service that “assists” us in staying active, healthy and engaged. Throughout this publication, we spotlight a variety of AT that is keeping Oklahomans strong!

There are worksheets on these topics of healthy living in the middle of this magazine to bring to the kitchen table for family conversations.

Learn how Oklahoma producers used available resources to remain resilient despite difficulties they faced in their operations.

Throughout, you'll learn about the important work your Cooperative Extension Service is doing for the citizens of Oklahoma.



Health

The foundation for living the **Ag4Life**

way is to be productive, on the job, and enjoying good health despite living with chronic health conditions such as low vision, hearing loss and arthritis.

JOE'S STORY

Joe and Pat, husband and wife, manage a 12-head cow-calf operation, run goats, and produce corn, squash, tomatoes, okra, onions, and green beans on their 75-acre property.

Completing farm tasks was already demanding, even more so after Joe's health deteriorated and he became disabled. A trip and fall into the barn door in 2008 left Joe with a broken back and surgery that resulted in right-side paralysis.

A professional assessment identified several AT solutions, including an electric winch to lift and set the bale and to reduce physical demand to his body.

Accommodations to the home included a bath transfer seat, grab bars, an overhead trapeze bar to assist with bed transfers, and a ramp with rails at the front of the house. Joe's truck is now equipped



with running boards that assist him when climbing in and out of his vehicle. The banding kit and storage/feed bins reduce obstacles when providing care to his cattle. For walking short distances, Joe now travels to his various worksites around the farm on his scooter.



"I don't even know whether I would be farming now; it would be so hard. They've helped us so much."

– Joe

Ag4Life

BARRIERS

Mobility
Farm Management

ACCOMMODATIONS

Electric Winch for Tractor
Bath Transfer Seat and Grab Bars
Overhead Trapeze Bar for Bed Transfers
House Ramp with Rails
Vehicle Running Boards
Banding Kit
Storage/Feed Bins
Power Scooter

RESOURCES

Oklahoma ABLE Tech
Department of
Rehabilitation Services

HEALTH WORKSHEET

On page 9, tear out the worksheet and complete the Personal Health Inventory. Follow the instructions by adding or subtracting the points as indicated.

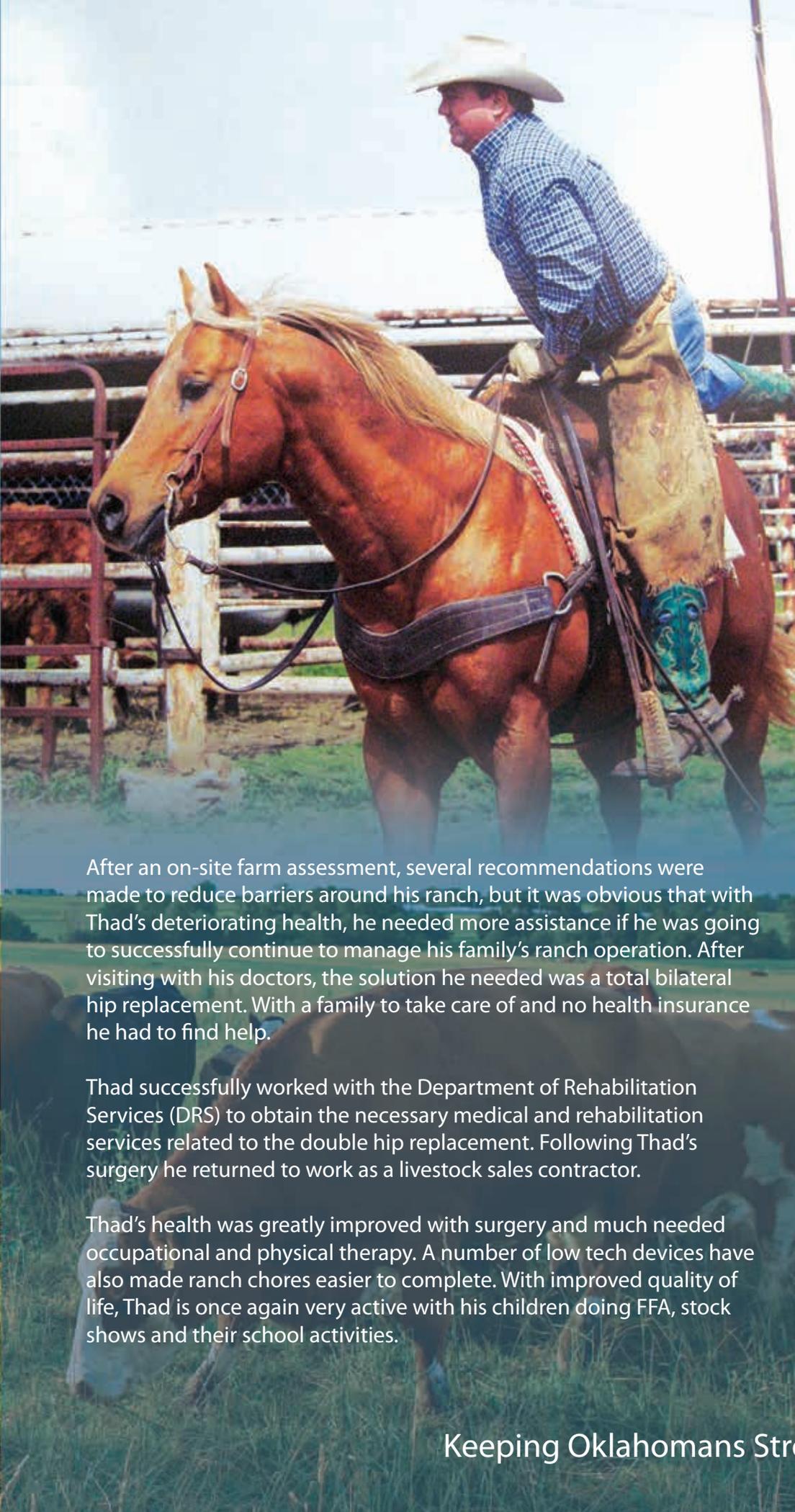
Health

Strength, balance and flexibility from regular physical activity – along with sensible eating – is at the heart of living the **Ag4Life** way. Oklahoma Extension's Family & Consumer Sciences programming offers assistive technology (AT) solutions to continue activities such as walking, gardening and exercising to stay active, strong and engaged.

THAD'S STORY

Thad has worked in the livestock industry in southern Oklahoma all his life. His family's ranch operation has been thriving since the Land Run. Thad backgrounds, or trains, several thousand head of cattle that requires long stints of time working on horseback. This physically demanding job resulted in severe osteoarthritis in both hips. His health condition limited his mobility and normal daily routine.





“Now I can raise horses. I’m able to ride and be a cowboy again, run cows, take care of my sheep, and the most valuable thing is... I can do stuff with my kids again.”

– Thad

Ag4Life

BARRIERS

Mobility
Physical Ability
Farm Management

ACCOMMODATIONS

Double Hip Replacement
Daily Living Aids

RESOURCES

Oklahoma ABLE Tech
Department of
Rehabilitation Services
Local Extension Office

HEALTH WORKSHEET

On page 9, tear out the worksheet and complete the Personal Health Inventory. Follow the instructions by adding or subtracting the points as indicated.

After an on-site farm assessment, several recommendations were made to reduce barriers around his ranch, but it was obvious that with Thad’s deteriorating health, he needed more assistance if he was going to successfully continue to manage his family’s ranch operation. After visiting with his doctors, the solution he needed was a total bilateral hip replacement. With a family to take care of and no health insurance he had to find help.

Thad successfully worked with the Department of Rehabilitation Services (DRS) to obtain the necessary medical and rehabilitation services related to the double hip replacement. Following Thad’s surgery he returned to work as a livestock sales contractor.

Thad’s health was greatly improved with surgery and much needed occupational and physical therapy. A number of low tech devices have also made ranch chores easier to complete. With improved quality of life, Thad is once again very active with his children doing FFA, stock shows and their school activities.

Safety

As our population ages and more people choose to age-in-place, following safety practices is important for Oklahoma Ag families.

The **Ag4Life** way emphasizes putting safety first to prepare us for normal aging changes that can impact activity, balance and overall strength. While accidents can happen to all of us, staying diligent about safety audits can reduce injuries and death. Safety checks in the barn, around the house, in the fields and beyond can reduce accidents.

DAVID'S STORY

David is a farmer who grows hay, wheat, and cattle in partnership with his father in Central Oklahoma. It is a cow-calf operation. He has approximately 20 head of cattle and two bulls. David's accident occurred when he was working on a front end loader. He was lifting cylinders out of the loader and, as he went back to put them in, an accident occurred. His back was up against the A frame. Something in the loader slipped and crushed his right arm, resulting in the amputation of his lower arm.



“If I can learn to do this, anybody can. It just means learning how to do things differently. My family has been a big help to me.”

– David

Ag4Life

BARRIERS

Mobility
Physical Ability
Farm Management

ACCOMMODATIONS

Prosthetic Limb
Daily Living Aids

RESOURCES

Oklahoma ABLE Tech
Christopher Reeves
Foundation Grant
Department of
Rehabilitation Services
Local Extension Office

SAFETY WORKSHEET

On page 13, tear out the worksheet and complete the Home Safety Checklist to determine the safety of your home and what barriers might exist.

Through his neighbor, David heard about Oklahoma’s disability-related farm and ranch services such as Oklahoma ABLE Tech, DRS, and local Extension offices.

After an on-site farm assessment, David tried out some daily living aids to help him independently get dressed and eat his meals. An occupational therapy student helped him by making sure he was using therabands and performing special stretches to keep his muscles actively working and strong until he healed and a more permanent solution could be arranged.

Fortunately, David applied for and received a Christopher Reeves Foundation Grant that provided the needed funding for him to get a prosthesis, which allowed him to independently and safely resume farm tasks.

David and his dad continue to work together, allowing David to learn how to safely use his left hand along with the new prosthesis on his right arm.

The services in Oklahoma have given David many ideas about how to alter controls on tractors, and weld with his left hand.

Safety

The **Ag4Life** way encourages the use of assistive technology (AT) to move about

on unsteady surfaces, to extend reach, or simplify everyday tasks.



JERRY'S STORY

Jerry works a 450-head beef cattle operation while farming several thousand bales of hay with his father. This has become more difficult over time

with stress fractures of the first, second, and third metatarsal bones on his right foot.

These fractures limited Jerry's mobility and ability to co-manage the property. Additionally, swelling at the right lower leg, ankle, and foot area impaired his balance. He was not able to put weight on his right leg since he had little to no feeling in that area. These factors contributed to difficulties climbing into and out of the cab of his tractor, lifting heavy objects, hitching implements, and climbing the stairs to the front and back doors of his home.

After an on-site farm assessment, Jerry worked with the Oklahoma Department of Rehabilitation Services (DRS) as an appropriate funding source for the needed AT devices and accommodations.

Jerry continues his farming business with fewer obstacles and barriers as he safely completes tasks on the farm and in his home.

"The accommodations I've received have greatly aided my ability to run both my farm and household."

– Jerry

Ag4Life

BARRIERS

Mobility
Farm Management

ACCOMMODATIONS

Seated Lift
Quick-Hitch System for Tractor
Ramp
Shower Bench
Hand-held Showerhead
Generator
Plug-in Lamp
Battery-powered Lamp
Battery Recharger

RESOURCES

Oklahoma ABLE Tech
Department of
Rehabilitation Services
Local Extension Office

SAFETY WORKSHEET

On page 13, tear out the worksheet and complete the Home Safety Checklist to determine the safety of your home and what barriers might exist.

Job Readiness

Ag4Life defines a family's employment and economic viability. It brings to mind a memory of place, a way of living and a legacy to pass along.



MIKE'S STORY

Mike owns and operates a diversified livestock and farming operation with his family in central eastern Oklahoma. They raise cattle, chickens, peacocks, guineas, and grass hay.

Mike identified physical barriers to prolonged tasks using his upper body brought on by Crohn's disease and carpal tunnel syndrome. He agreed they were obstacles to his productive employment. Mike related difficulties in lifting heavy items, gripping, grasping, fatigue, and standing for long periods of time.

Working with the Oklahoma Assistive Technology Foundation, Mike applied for and was granted

funds necessary to purchase work-related accommodations. A 9" auger and 3-point posthole digger were recommended to reduce physical demands. A gate wheel provided easier access to his fields and pastures. Mike was quick to agree that these AT tools and equipment greatly assisted him with his Ag production employment.



"I really appreciate the tools and suggestions to improve my work on the farm. I have more energy and can work longer periods of time."

– Mike

Ag4Life

BARRIERS

Physical
Fatigue
Grasping/Gripping
Farm Management

ACCOMMODATIONS

Nine-inch Auger
Three-point Post Hole Digger
Gate Wheel

RESOURCES

Oklahoma ABLE Tech
Department of
Rehabilitation Services
Oklahoma Assistive
Technology Foundation

SWOT WORKSHEET

On page 15, tear out the worksheet and complete the SWOT Analysis - Strengths, Weaknesses, Opportunities and Threats found in a business employment venture.

Job Readiness

Agriculture is a job from which few retire. It is a job that many say they were 'born' to do. In economic downturns and upturns, Ag families benefit from using **Ag4Life** local, state and national resources to stay on the job despite living with injury, accident, normal aging changes or disability.

Oklahoma Extension often refers to other state resources to assist your family. For example, Oklahoma Assistive Technology Foundation (OkAT) and the Department of Oklahoma Rehabilitation Services (DRS) can provide AT solutions to assist with employment-specific barriers for qualified citizens.

JOHN'S STORY

John has been working in agriculture for more than 32 years and operates nearly 700 acres in northwestern Oklahoma. He raises cattle and produces wheat, alfalfa, milo and soybeans, and also has taught microbiology at a local community college.

John acquired a rye wicker, and one day he and a friend were wicking volunteer rye from wheat fields with an herbicide. As John was driving the machine up through a ditch the rye wicker overturned and crushed him. The accident left John with a T-12 incomplete spinal cord lesion.



“It’s doable if you are willing to work at it and contact the right people to get the ball rolling.”

– John

Ag4Life

BARRIERS

Mobility
Physical Ability
Farm Management

ACCOMMODATIONS

Journeyman Scooter
Tractor Lift
Vehicle Hand Controls
Power Gate
Cherry Picker
Adapted Saddle

RESOURCES

Oklahoma ABLE Tech
Christopher Reeves Foundation Grant
Department of Rehabilitation Services

SWOT WORKSHEET

The SWOT Analysis (pg 15) determines Strengths, Weaknesses, Opportunities and Threats found in your employment environment.

Months after his accident, his physical therapist referred him to Oklahoma ABLE Tech and the Oklahoma Department of Rehabilitation Services. After an on-site farm assessment, the DRS obtained specific assistive technologies to support him with employment. Devices such as a Journeyman Scooter, tractor lift and vehicle hand controls have helped him to effectively manage his operation and complete farm work allowing him to once again be gainfully employed.

He also received funds from the Christopher Reeves Foundation Grant, which outfitted him with a power gate and cherry picker for his pickup to lift his wheelchair up and down so he doesn’t have to take it apart every time.

While lying in the hospital bed following his accident, John didn’t think he had much of a chance to return to farming employment, but dreamed of one day getting back on his horse so he could check on the cattle and fences and just enjoy the great outdoors.

Resilience

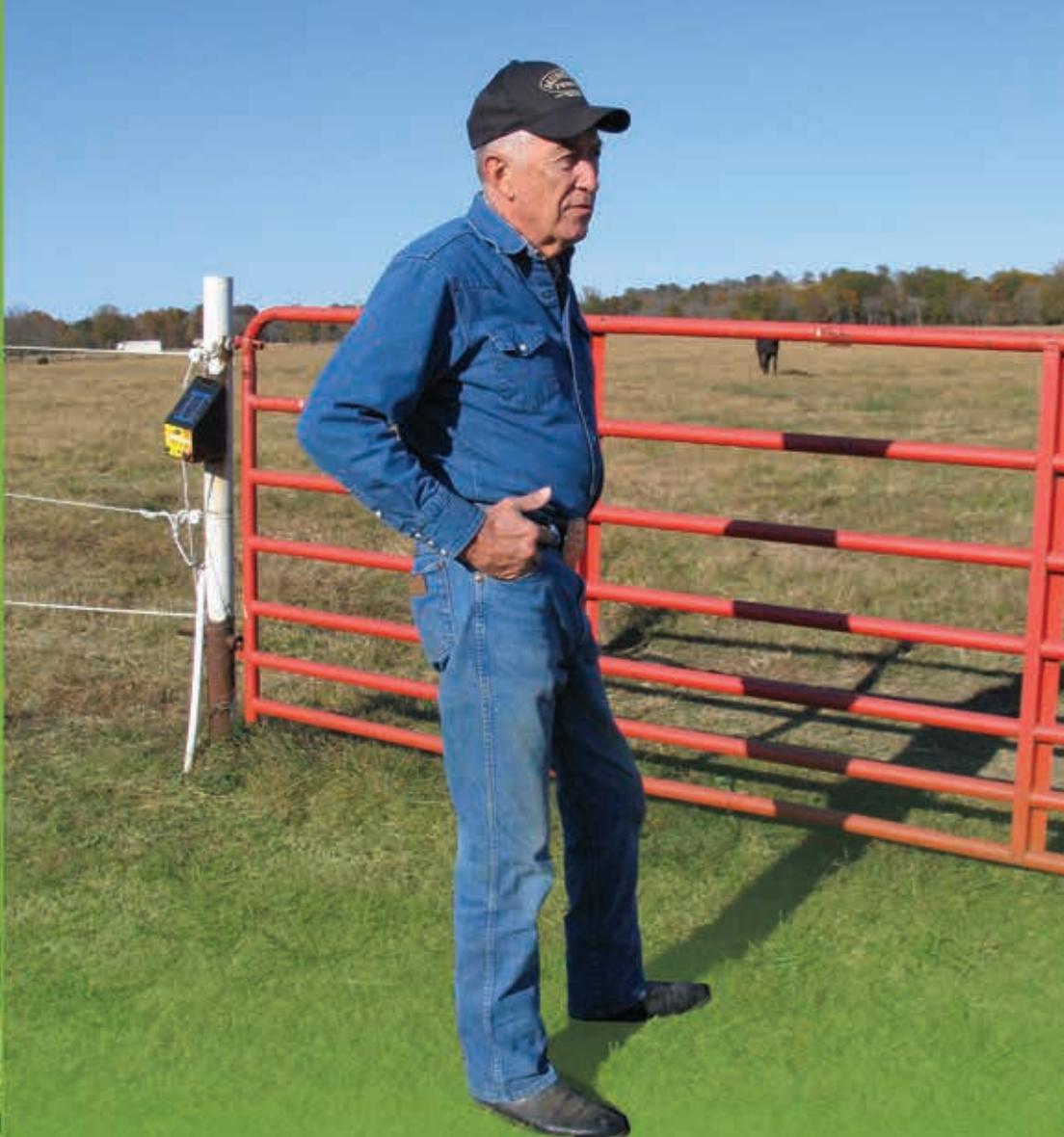
Building resilience is at the heart of **Ag4Life** Extension programming, focusing on AT solutions that help us 'bounce back' and adapt to changes, both expected and unexpected.

ELMER'S STORY

Elmer has been raising horses on his 60 acres for over 40 years in northeastern Oklahoma. He has 10 brood mares and raises 6-7 babies a year. However, it became increasingly more difficult to handle the babies as his vision deteriorated.

Elmer's vision worsened to the point that he was 95% blind and diagnosed with Macular Degeneration so he had to quit his day job. Elmer said, "Sometimes, I will reach down to get a stick and it will be a snake." He knew he would need help if he was going to be able to continue working on his horse ranch.





“Without this help, I wouldn’t have been able to continue on the farm. I would have had to sell and move back to town. That would have been a disaster – I enjoy my animals too much.”

– Elmer

Ag4Life

BARRIERS

Mobility
Vision Problems
Farm Management

ACCOMMODATIONS

Round Pen
Changes & Tools for High Visibility
Installation of Additional Lighting
Swing out Waterers and Feeders

RESOURCES

Oklahoma ABLE Tech
Department of Rehabilitation Services

QUALITY OF LIFE WORKSHEET

On page 17, review the Quality of Life worksheet.

The Department of Rehabilitation Services (DRS) provided Elmer with a round pen. He successfully uses the pen to train his yearlings to halter and break them, and also uses it as a turnout pen for his studs so they can get exercise and eat green grass during the summer. He also obtained swing out waterers and feeders that allowed him to feed the horses without having to physically go into the stalls, thereby reducing risk. High-powered lighting was installed in the barn creating a much safer environment, reducing Elmer’s challenge of not being able to see.

“Before I got the round pens, I would have to go out and catch the yearling, which was becoming more difficult with my vision loss,” Elmer said. Elmer’s fence posts and tools were painted with high-visibility white paint that allowed him to more easily navigate his barn, pens and pastures. The paint provided Elmer with reference points that helped him identify gate locations and fence lines, which increased his ability to work with his horses safely.

Resilience

The ability to adjust to health conditions is the essence of **Ag4Life**. Following safety behaviors at work and home helps build a foundation for personal, family and community resilience.



IA'S STORY

Ia and her husband, Joua, manage a 2-acre garden in northeastern Oklahoma where they produce and sell a wide variety of vegetables and fruits as family employment.

The family travels nearly 100 miles each week to sell their produce at the farmers market.

Ia enjoyed her life on the farm and working in the garden until it became painful for her to stand, walk, climb, or carry heavy items. She experienced leg pain when her muscles tightened and knee swelling when standing for long periods of time.

These disabling conditions hindered her from continued employment and reduced quality of life, all which affected her resilience.

Adaptations including an outdoor scooter and an irrigation system provide for continued success on this family's farm. With the right tools, accommodations and use of assistive technology, Ia and her family should see many successes in their future, further building a foundation of resilience.

"The assistance of the scooter has really helped me work with less pain. The irrigation system has really helped our garden and our ability to produce more crops."

– Ia

Ag4Life

BARRIERS

Mobility
Physical Ability
Farm Management

ACCOMMODATIONS

Power Scooter
Irrigation System
Improved Access to Home

RESOURCES

Oklahoma ABLE Tech
Department of
Rehabilitation Services

QUALITY OF LIFE WORKSHEET

On page 17, tear out (or use another sheet of paper) to write your thoughts on what Quality of Life means to you. Family members may also want to contribute to this important discussion.

Resources Recap

In these pages, we've looked at reducing risks to our health and safety, and improving job readiness and resilience by using assistive technology (AT). AT is any tool, device, piece of equipment, or service that 'assists' you in remaining active, strong, healthy and engaged in your community.

Featured resources to rely on include:

Oklahoma ABLE Tech, statewide Assistive Technology Act Program, increases access to, and acquisition of, assistive technology (AT) for individuals with disabilities of all ages:

www.okabletech.okstate.edu

OK Department of Rehabilitation Services (DRS) improving employment/ economic self-sufficiency for workers with a qualifying condition:

www.okdrs.org

OK Assistive Technology Foundation (OkAT) assists Oklahomans with disabling conditions to receive AT or durable medical equipment:

www.okatfoundation.org

Oklahoma Cooperative Extension offers Ag, Family & Consumer Sciences, 4-H/ Youth and Rural Development science-based information in all 77 counties: www.oces.okstate.edu

National AgrAbility, a USDA program, assists Ag workers with expert information, AT recommendations and local resources: www.agrability.org

 www.ag4life.okstate.edu

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United States Department of Agriculture
National Institute of Food and Agriculture



Ag4Life is sponsored by the U.S. Department of Agriculture (USDA),
National Institute of Food & Agriculture; Grant # 2010-41590-20754.

Contributing Program: Langston University; School of Physical Therapy

This report is printed using funds from USDA Special Grant #2010-41590-20754 and issued by Oklahoma State University as authorized by the Vice President, Dean and Director of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of \$8,850.00 for 8000 copies. In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, gender, age, or disability. (Not all prohibited bases apply to all programs.)

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Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources.