Welcome to the teacher in-service training on “Winning with Nutrition – a 4-H Sports Nutrition Program. We are excited about the partnership that your school and Texas AgriLife Extension is establishing to offer an educational program targeted at teaching youth athletes the importance of proper nutrition and health in order to maximize their athletic performance.
Throughout today’s training, we’ll explain what is Texas AgriLife Extension and the youth development program we call “4-H.”

Next, we will take a look at the curriculum – why we chose to develop a sports nutrition curriculum, dive into each of the lessons and then try out some activities that are included in the curriculum lessons.

Finally, we will wrap up with what you can do to implement the program in your school/classroom or with your student athletes – in collaboration with your county Extension office.
The Texas AgriLife Extension Service offers practical, how-to education based on university research. Created by the Smith-Lever Act of 1914, the mission of Extension is to improve the lives of Texans by providing quality, relevant educational programs to the citizens of Texans. Extension leads change and helps communities stay on the cutting edge by applying the research-based information on a local level. Extension is located in all 254 counties and involves more than 104,000 volunteers to help deliver the research-based educational programs. Extension is funded through a three-way cooperation between USDA, the state of Texas and County Commissioners’ Courts of Texas.
Extension’s expertise lies in four broad program areas, which are:
- Agriculture and Natural Resources,
- Family & Consumer Sciences,
- Community & Economic Development, and
- 4-H & Youth Development – Extension impacts youth by offering a youth development program that focuses on leadership, citizenship and life skills and working with youth to be the leaders of the future in their communities.
How many of you have heard of 4-H? How many were a 4-H member growing up? What did you gain from 4-H that you still utilize today? What is your greatest memory from being a 4-H member?

Today’s 4-H program looks a little different than it did 100 years ago when the organization centered around teaching youth new technology and strategies for better crop production because adults would not adopt the practices. Today, 4-H still values the deep agriculture roots and teaches youth cutting edge technology; however, our focus has been fine tuned to address developing the whole child and helping them develop into productive members of our community and beyond.
Every organization has a vision for where they want to go, and the Texas 4-H & Youth Development Program is no exception. Our vision is focused on life skill development through hands-on learning experiences. We are also committed to empowering youth and adults by involving them in leadership roles in 4-H. Last, Texas 4-H is a leader in developing partnerships with other like-minded youth organizations and agencies to prepare youth for the future. Schools are just one example of a partnership that helps us to deliver the 4-H program to youth.
The way that Texas 4-H partners with schools is through enrichment curriculum programs. We fully understand that it is getting more and more challenging for teachers to be able to bring in new and creative curriculum because of the emphasis on the TEKS and TAKS tests. Texas 4-H is committed to developing enrichment curriculum resources that are designed to support the TEKS and enrich the required curriculum.

Enrichment curriculum takes place in the classroom and is led by the teacher and sometimes an Extension volunteer or agent. Sometimes, curriculum enrichment may involve a tour or fair for the students. The activities will depend on the curriculum being offered. Many schools participate in Ag Fairs, Water Fairs or Farm Safety Fairs that involve a field trip with learning stations for youth. Teachers receive a packet of materials and lessons that supplement what was learned at the fair.

Other enrichment curriculum programs are lesson plans with hands on activities and other resources. The minimum requirement for any curriculum enrichment program is at least 5 sequential learning experiences, at least 30 minutes each. Research tells us that children learn more through a series of learning experiences centered around a concept than through just a one time experience. Through providing a sequential series of learning experiences, the impact on learning increases.

By offering enrichment curriculum in the school, we also expose students to 4-H and the opportunity to join a 4-H club. Enrichment curriculum is a 4-H activity and our hope is that the experience they have through enrichment curriculum will spark their interest in 4-H!
More than 120,000 youth participate in the 4-H Food & Nutrition Project, learning how to prepare nutritious and safe meals and snacks and adopt behaviors that can help reduce their risk for chronic disease. Learning experiences within the food and nutrition project are focused on nutrition, menu planning, food purchasing, food preparation, food safety, careers and cultural influences.

Over the past few years, county Extension agents have received requests to provide nutritional information to student athletes, so they began developing lessons focused on nutrition for youth athletes! Even though this curriculum targets youth athletes, it can also be a great teaching tool for any youth – as they try to remain physically active in order to maintain a healthy lifestyle.

We also know that the University Interscholastic League (UIL) offers 23 athletic activities in which more than one million student athletes participate.

According to the 2007 Youth Risk Behavior Survey, conducted by the Centers for Disease Control and Prevention (CDC), more than 45% of young people were trying to lose weight. Almost 12% reported that during the 30 days before the survey, they had gone without eating for 24 hours or more to lose weight or to keep from gaining weight.
The purpose of the Winning with Nutrition program is to engage youth athletes in learning the importance of proper nutrition and hydration for maximum athletic performance and for general health and well-being. The curriculum also explores the habits and temptations that can negatively affect an athlete’s performance.
There are five lessons that are included in the Winning with Nutrition Curriculum. They are:

- Eating for Excellence
- Hydration Station
- Game Day Dining
- Performance Robbers
- Fads and Facts

-Plus:
  - Glossary of Key Terms
  - Background information on Supplements

- The curriculum also has a glossary of terms for the instructor and background information on supplements, which tends to be a common topic among youth. This information will help you answer questions that may come up about supplements.
Each of the five lessons includes the following components:
- Objectives
- Materials Needed
- Background Information for Instruction
- Activity
- Worksheet
- Handout
- Media presentation

This gives you the option to choose among the activities to implement in your classroom.

- Worksheets and Handouts are available in the lessons to reinforce what has been covered and taught in the lesson.
- Each lesson also has a media (powerpoint) presentation that the instructor can use, if he/she chooses, while teaching the lesson.
Now, let’s take a closer look at each of the lessons in the Winning with Nutrition curriculum.

The Eating for Excellence lesson:
- Examines My Pyramid, teaching youth to identify foods that belong in each group of the pyramid.
- Explores macronutrients, which are carbohydrates, protein and lipids – teaching athletes the benefits of getting adequate amounts of these nutrients.
- Explores micronutrients, which are calcium, iron, Vitamin C and B Vitamins – again, teaching athletes the importance of getting the right amount of nutrients to enhance and maximize their athletic performance.

Activities within this lesson include:
- Calculation scenarios – teaching how to calculate the amount of nutrients needed based upon the number of calories they intake each day.
- Matching food to My Pyramid – giving youth the opportunity to identify foods that belong to each group in the Pyramid
- Purpose Cow Smoothies – a fun, tasty treat – youth can learn how to make a healthy snack and get to enjoy it!
The Hydration Station Lesson teaches youth to:
- Identify signs and symptoms of dehydration
- Allows youth to investigate the functions and importance of water to the body
- Analyzes the athlete’s need for water vs. sports drinks

Activities in the lesson include:
- Make your own sports drink – giving youth the opportunity to actually make a sports drink and then try it out!
- How much sugar is in my drink? – teaches youth to identify and realize the amount of sugar that is in drinks they commonly consume
- Word find – an individual activity that allows them to find key terms taught in the lesson
The Game Day Dining Lesson teaches youth to:
- Review and prepare sample game-day menus
- Identify appropriate nutrient dense snacks
- Discover appropriate fast food selections
- Create a schedule for game-day dining

**Activities:**
- Calculate grams of carbohydrates, protein and fat
- Create game day meals
- Game Day Dining Jeopardy

Activities in the lesson include:
- Calculating the grams of carbohydrates, protein and fat that athletes need based upon their daily calorie intake
- Create game-day meals to teach good options for game-day dining
- Game Day Dining Jeopardy – a jeopardy game that tests youths’ knowledge of game day dining based upon what was taught in the lesson
The Performance Robbers lesson teaches youth to:
- Recognize the benefits of sleeping and its effect on athletic performance
- Discover the effects of alcohol and smoking on athletic performance

Activities in the lesson include:
- Ruler reaction time – showing how lack of sleep can slow down a person’s reaction time
- Running with a smoker’s lung – teaches youth to realize the effects of smoking and how it can make breathing difficult
- What in the smoke? – Explores the dangerous and addictive chemicals in cigarettes.
The Fads and Facts Lesson teaching youth to:
- Recognize fad diets
- Identify healthful ways to manage weight
- Discover the risks of fad diets
- Explore correct uses of nutritional supplements

Activities in the lesson include:
- Exploring common myths related to nutrition and dieting
- Spotting a fad diet – gives youth the opportunity to explore various diets and identify whether they are a fad or a good, healthy option
After completion of the lessons, there is an evaluation for each student to complete.

It is important to remember that the evaluations are scannable forms and should be completed neatly! Please try to use pencils and erase all marks outside of the bubbles so that they will scan well. Do not fold the evaluations so that they will go through the machine easily.

Once the completed evaluation forms are turned in to your county Extension agent, they will have them scanned and be able to provide you with the data – so you can see the impact of the program implementation.
How can your school/class get involved?

- Work with your local county Extension agent to:
  - Select grade/class to target
  - Train other teachers, if needed
  - Implement the curriculum with students
  - Have students complete the evaluation and turn in to the agent
  - Complete the group enrollment form and turn in to the agent
Questions?