



## **Jaclyn te Velde**

I grew up on a large, commercial dairy farm in the Central Valley. Words including colostrum, palpation, and fluid milk are commonly used at my family's dinner table. My great-grandfather came to America from the Netherlands seeking opportunity and settled in Southern California where he began a dairy farm. More than 100 years later, my family is still involved in agriculture and the love for this industry has been passed down to my six siblings and me. Growing up, my siblings and I were in charge of a small heifer ranch. Through this experience, I witnessed first-hand the hard work and dedication that goes into putting responsibly produced food on the consumers' table. This experience is what began my passion for agriculture. To continue this passion and help equip me with the skills necessary to convey the importance of the dairy industry to the public, I am currently pursuing an agricultural communications and journalism degree at Texas A&M University. I have studied, worked, and lived "agriculture" and that is what inspired me to be a part of the California dairy community.

Studying agriculture in college has exposed me to the importance of implementing sustainable practices. I have identified sustainability as meeting the needs of today's population while still preserving our ability to meet future generations' needs. Sustainable practices are crucial if the world's population reaches 9.7 billion by 2050. Being sustainable requires strategy, an innovative mindset, and a dedication to improve continuously. The dairy industry has continued to demonstrate that it is committed to sustainable farming, and there are many examples of sustainable dairy practices, including digesters. Digesters reduce carbon dioxide emissions and make more use of renewable energy. Some dairies operate solely on the renewable energy produced by the facility's waste, further enhancing the sustainability "cycle." Digester installations are an example of dairy farmers becoming socially responsible while remaining economically viable. Dairy farmers are actively making plans to sustain the integrity of the environment while working for a return on investment. My dad is accomplishing the same goal that my great-grandfather did 100 years ago; however, my dad is producing significantly more with fewer cows, less water, and less land while leaving a smaller carbon footprint. Although it is a large investment for dairy farmers to implement sustainable practices, it is ultimately an investment in the future.

Working in agriculture has opened my eyes to how the industry is revolutionizing. This summer, I had the opportunity to intern for the Innovation Center for U.S. Dairy which changed how I view dairies future. The little red barn has been replaced with free stall barns equipped with technology to provide comfort and wellbeing for the herd. Hand-milked cows have been replaced by efficient rotary milking parlors, decreasing the need for labor and increasing the number of cows milked per hour while preserving animal welfare. The dairy industry is constantly implementing new technology to increase efficiency. A change I foresee in the future of the dairy industry is greater communication within the supply chain and a greater responsiveness to demand. Consumers want to know the origin of their food, how it is produced, and if it is sustainable. Checking these boxes for consumers is what drives the market and the dairy industry. In the California dairy industry, specifically, water use has to advance. One water-preserving practice that dairy farmers can continue to implement is to switch to an air-based cooling system for milk instead of water. This would help dairy farmers continue to

work actively to minimize water usage and preserve the environment. However, through change, the red barn values have remained constant, and must continue to remain constant. The dairy industry remains largely family owned, and dairy farmers strive to satisfy the consumer, provide proper animal care, and be good stewards of land and resources.

Having lived in the agriculture industry, I have seen the continuous efforts from dairy farmers to make a positive impact in the world. Dairying plays a necessary role in sustainable, nutritious global food systems because it is an important source of nutrition. Sustainable nutrition is about more than just feeding people — it is about nourishing the world. The dairy industry has been able to do that through the environmentally friendly production of milk and milk products. For instance, a single serving of milk provides three of the four nutrients of concern — calcium, potassium, and vitamin D, only lacking fiber — while also being a source of high quality protein. What is unique about the dairy industry is its capability to transform itself. For example, cows produce fluid milk, but it can be converted into a variety of forms to meet differing nutritional needs. This is important to a sustainable, nutritious global food system because these altered forms of fluid milk, including powdered milk, can be sent to areas in need. Powdered milk can be sent to areas lacking resources, such as refrigeration, to provide consumers with the opportunity to consume the nutrients offered from dairy products. Thus, dairy products have the unique ability to close nutritional gaps across the world and this is what makes it a vital sector of a nutritious global food system.

Growing up on a dairy farm has given me a unique insight into dairy foods, on-farm sustainable practices, and the endless advancements that dairy farmers use to better the industry. I am most excited to effectively tell the story of dairy farmers. The public has never been more interested in food origination, but the public has never been further removed from agriculture than they are today. Therefore, the dairy farmers' story is getting lost. The story about how proper animal care and sustainable production of nutritious products are two practices that are mandatory, not optional. The story about America's farmers whose goal is to provide for their communities. The story of an industry that nourishes people, the planet, and the generations to come. This is a story that deserves to be told.