

## HB 1515 Testimony – In Favor

Mr. Chairman and members of the Senate Agriculture and Veterans Affairs Committee,

My name is Andrew Bornemann, I am a farmer and small ag-business owner from Kintyre, ND, and I am here to testify in support of House Bill 1515.

I would like to start by directing your attention to the origins of pasteurization, and the reasons that mandatory pasteurization became the norm. To find these origins, we have to look all the way back to the mid 18<sup>th</sup> century, when Louis Pasteur first developed the germ theory. First applied to wine, as a method of extending it's shelf life, Pasteur's process of heat treatment was eventually applied to beer, and by 1886, to bottled milk. By 1892, the new process had made it's way to New York City, where a severe epidemic of Tuberculosis was raging, and it was found to curb the spread of this terrible disease through the milk supply. By 1909, Chicago had mandated the pasteurization of milk sold in the city, and New York City followed the following year.

While there is no dispute that pasteurization DID indeed help curb not only the tuberculosis epidemic in New York, but also helped massively drop the infant mortality rate in the same, and other large cities, the question remains, why? There is a lot more to this story...

First off, near the turn of the century, the entire concept of germs and the transmission of disease was in it's infancy, and if even known, there was little understanding of the importance of keeping foods and utensils clean. Milk was often delivered in large horse drawn wagons, with customers containers filled directly from milk cans in the streets. Contamination was not just possible, it was the norm.

Second, the concept and technology of refrigeration was in it's infancy, and not yet widely used. The best option available was the icebox, and while effective, ice in large quantities in the summertime was prohibitively expensive. Thus, milk was often delivered and stored poorly cooled, if at all.

Third, the problems arising from raw milk in the late 1800s were almost exclusively found in the large cities, where the consumer was farther removed from the producer, and the issues of contamination and lack of cooling combined to form a hazardous situation. Raw milk continued to be used in the rural areas, where they had better access to fresh, clean supplies, with little to no ill effects.

Thankfully, both of these major contributors to food borne illnesses have been all but eliminated today. Chlorinated cleaners and contained milking systems have drastically cut down on the chances for contamination, and the universal use of refrigeration, both commercially and in the home, has probably been the single most important advancement in eliminating food borne illnesses.

The times have changed, and technology has advanced drastically in the last 120 years. It's time to join our neighboring states and many others in leaving the requirements of yester year's big cities behind, and allowing the citizens of our state access to raw milk again.

I grew up on a farm, consuming raw goat's and cow's milk, and would gladly purchase raw milk from one of my neighbors who is now milking a dairy cow. This bill, as you have it before you, opens the doors to once again purchasing raw milk for those who may wish or need to. I was intolerant to cow's milk as an infant, and at the time the only option for us was to purchase and milk goats, in order for me to get a healthy amount of dairy in my diet. While this was not a huge difficulty for us, as we already lived in the country and had other livestock, for those who live in town and are faced with a similar situation, this bill would provide some much needed options.

On behalf of my family and many others I know who appreciate the value of raw milk, I respectfully request a Do Pass recommendation from your committee.

Thank you for your time. I would be glad to answer any questions you may have for me.