## PREVIEW\_ Andrew Mente - Presentation 1 (Breckenridge 2018) 2

**Dr. Andrew Mente:** Here's the distribution of sodium intake around the world. The red line or the red curve shows the distribution of sodium intake based on a single morning fasting urine. The blue curve shows usual intake after adjusting for random error.

So focusing first on the red curve, you could see that only about 3% of the global population meets the 2.3 g per day recommendation. And less than 1% meets the 1.5 g per the recommendation.

After we adjust for random error almost nobody meets even the 2.3 g per day recommendation. So now it's the amount that we currently recommend for people to eat is what nobody eats.

And basically the current recommendations are based on sparse human experience. And so in 2011 we looked at data from ONTARGET. This was a secondary prevention study. People with pre-existing cardiovascular disease or diabetes, 28,000 people followed up over 56 months.

Morning fasting urines were collected at baseline, so we're able to measure sodium excretion versus cardiovascular outcomes. And you could see that we had over 4700 clinical events accrued during the follow-up.

And you can see there is a sweet spot in the middle from about 3 g to 6 g per day associated with the lowest risk. At higher levels above 6 g per day you start to see an increase in the risk for future clinical events, but at low levels, below 3 g per day, you also see an increase risk.

So being in the middle is optimal. If you were to consume the current recommendations, 1500 mg for this population, you would be putting yourself at increased risk based on this data.

And when we first saw this, we went into this with no preconceptions and we sat on this data for about a year and a half and we analyzed it to death and the relationship would not go away. No matter how you looked at it. So it's very robust data.