

**PREVIEW – Prof. Stephen Phinney
– Low-Carb Ketogenic Diets for Athletes (SA 2015)**

Dr. Phinney: The current consensus still among most sports physiologists is that the carbohydrates are absolutely essential for sport. And that goes back a long time to the Christensen and Hansen 1939 paper, but as Gary Taubes told us two days ago, anything that was published in German before World War II, disappeared, but then it was rediscovered in the 1960s by the remarkable research by the Scandinavians.

And everything they've said is factually true. Absolutely true. Just anticipating what I'm going to try to show you, there are a number of issues with their research. And one of them is that all of the studies they did showing the benefits of a high carb diet compared to a low-carb diet, were done in studies that varied less than 14 days and many of them were a week or less.

So the assumption is that if you go on a different diet, once you've eaten it for a few days, your body is fully adapted. And that issue would never really been addressed in their research. Second point is that partially because they assumed that a low carbohydrate diet is necessarily a high-protein diet and to induce students in Scandinavia back in the 1960s to eat a low carbohydrate diet they said - "We'll give you all the steak you can eat"...

And a lot of those studies involved protein contents that were as high as 300 g a day. Which represents well over 30% of the person's daily energy expenditure. We now know that dogs can tolerate a 30% to 50% of energy from protein diet very well. But humans actually don't function well when you get that high-protein. And I'll come back to that in a subsequent slide.