

Optimal nutrition during a transition period **Peter Kappel Theil** Department of Animal Science, Aarhus University

Quantitative nutrition is important for living animals. Previously, proper pig nutrition was evaluated based on growth performance reproductive performance during 3 to 4 month periods. However, nutrition needs to be studied in a much shorter time frame during critical periods. The transition from late pregnancy to early lactation is clearly a critical period for the sow and even more so for her newborn piglets to stay alive. At the day of parturition, it is crucial for the piglets to be born fast and to suckle sufficient colostrum is crucial to maximize survival, vitality and growth. But how can we make sure the birth process is short and that the mammary glands produce a lot of colostrum? With the sow at parturition as an example, I will talk about how we study organ physiology, nutrient metabolism, transfer of nutrients to other organs, and how we quantify nutritional requirements on a day to day basis (or even on an hourly basis) and integrate the information into whole animal requirements.





Friday January 31<sup>th</sup> at 13.15 Seminar room at Zoophysiology (1131-127)