Title: Development and initial evaluation of an early initiated complex intervention preventing social inequality in childhood overweight and obesity by targeting family's social conditions.

Type of presentation: Oral session

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Key words: Social inequality, childhood overweight and obesity, early prevention, complex intervention

Background: Childhood overweight and obesity (COO) is a complex issue, as the web of predictors consists of societal, family-related and individual factors (1). New perspectives on COO prevention are needed, as a focus on change in behavioural factors is associated with small preventive effects. The clear social gradient in COO in European high-income countries like Denmark (2), calls for a focus on changes in social conditions rather than in lifestyle factors. This, as social position and social recourses may be of great significance for development of COO, and as social conditions, such as social position, social relationships, social support and stressful life events, are causally related to health (3). The foundation of the social gradient may be founded in early childhood (4), but a lack of research targeting children between 0 to 3 years leaves an unexplored preventive potential in age group. However, targeting such young children require of inclusion of the family. The main aim of this PhD-project is therefore to develop and perform initial evaluation on an early initiated complex intervention preventing social inequality in childhood overweight and obesity (COO) that generates changes in high-risk family's social conditions.

Theoretical framework and methods: The PhD-project have a multi-phased mixed-methods design, and the framework of Medical Research Council's (MRC) guidelines on Developing and Evaluating Complex Interventions will inform the process of developing and feasibility testing a complex intervention (5).

Main results and conclusions: A PhD-project under progress. The first study will be completed in June 2017. In this study, child and family characteristics associated to

early life COO and characteristics of the social conditions in these groups will be identified through a register study based on Danish national registries. This study will contribute with knowledge on high-risk groups and their social conditions in Denmark.

Implications for research: The PhD-project will constitute the first steps of creating a preventive intervention targeting social inequality in COO, which, in time, may be implemented in relevant settings in Denmark or in other Nordic countries.

Key references:

- 1. Davison KK, Birch LL. Childhood overweight: a contextual model and recommendations for future research. Obes Rev. 2001;2(3):159–71.
- 2. Morgen CS, Mortensen LH, Rasmussen M, Andersen A-MN, Sørensen TIA, Due P. Parental socioeconomic position and development of overweight in adolescence: longitudinal study of Danish adolescents. BMC Public Health. 2010;10:520.
- 3. Link BG, Phelan J. Social Conditions As Fundamental Causes of Disease. J Health Soc Behav. 1995;80–94.
- 4. Cameron AJ, Spence AC, Laws R, Hesketh KD, Lioret S, Campbell KJ. A Review of the Relationship Between Socioeconomic Position and the Early-Life Predictors of Obesity. Curr Obes Rep. 2015;4(3):350–62.
- 5. Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M. Developing and evaluating complex interventions: The new Medical Research Council guidance. Int J Nurs Stud. 2013;50(5):587–92.