

ALFA-Diet – Influence and Impact on mood, life quality, cognitive alertness and eating behaviour –a prospective pilot study on obese adults

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Abstract

The effects of alternate fasting over a specific period of a few weeks were examined with regard to body composition and lipide profile, but there is slightly no evidence in the field of alternate fasting based on the psychophysical impacts on this dietary intervention.

Therefore this thesis is working on this problem statement and is giving an answer to the question, if alternate fasting shows negative consequences in mood, cognitive attention, impulsivity and concentration over an estimated period of twelve weeks.

Methods

The parameters cognitive control and irritability of eating behaviour, vitality, subjective psychical well-being, alertness, mood, calmness, reaction time and impulsivity are all quantified with questionnaires and a

computer-based concentration test. Within the estimated dietary period of twelve weeks these data were measured at the beginning, after two weeks, after four weeks and at the end.

Results

The results in body composition (thesis: Patrik Horak, Effects of alternate-day fasting (ALFA) on body fat distribution, lipid profile and blood pressure

– a prospective pilot study on obese adults) show, that Body weight decreased by 7,1kg after 12 weeks of diet. Percentage body fat decreased by 14,7%. The results show a significant improvement in the domains of eating behaviour measurements [start (M= 10,67; SD=3,416), end (M=5,44; SD=2,297), $p= 0,002$]. Data does not show any changes in the parameters of alertness, mood and calmness. In the dimension of alertness, there is a notable change from week one (M= 13,13; SD= 2,560) to week four (M= 15,43; SD= 3,155) ($p= 0,012$), which lasts for the rest of the test period. The results of the data of subjective psychical well-being [start (M= 21,60; SD= 3,851), end (M= 26,44; SD= 1,333), $p= 0,009$] and vitality [start (M= 13,53; SD= 2,696), end (M= 17,00; SD= 3,000), $p= 0,008$] also show a significant improvement. During the period of examination there wasn't any change in the parameters of concentration- reaction time [start (M= 859,467; SD= 388,9462), end (M= 869,311; SD= 316,5085), $p= 0,641$] and impulsivity [start (M= 53,990; SD= 5,4638), end (M= 52,162; SD= 3,3697), $p= 0,155$].