# Effects of alternate-day fasting (ALFA) on body fat distribution, lipid profile and blood pressure – a prospective pilot study on obese adults.

Zur Erlangung des akademischen Grades

## Doktor der gesamten Heilkunde (Dr. med. univ)

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## **Abstract**

## Objective

The short time effects of alternate-day fasting on body-fat distribution and lipid profile are mentioned in a few publications, but not surveyed over a longer period than 8-weeks. The aim of this study is about to answer the question, if ALFA is a metabolic effective, over a longer period feasible and due to the psycho-physical side effects sustainable eating pattern.

#### Study design

In this prospective pilot-study, 15 obese patients (10 women, 5 men) were constrained to eat every other day over a period of 12 weeks.

Weight and blood pressure were measured every two weeks, as well as a bioelectrical impedance analysis. Lipid profile was measured at the beginning, after 6 weeks and at the end of the intervention.

#### Results

9 out of 15 subjects participated the whole intervention successfully, whereas none of the drop-outs is directly related to the diet. The rate of weight loss remained constant during the study. Body weight decreased by 7,1kg after 12 weeks of diet. Percentage body fat decreased by 14,7%. Total cholesterol, LDL cholesterol, and triacylglycerol concentrations decreased by 8%, 8% and 35%, respectively, after 12 wk of ALFA, whereas VLDL and HDL cholesterol remained unchanged. Systolic blood pressure decreased by 12,2 mmHg.

#### Conclusion

From these data it can be concluded that ALFA is a feasible metabolic effective and due to the -none occuring- side effects sustainable diet.