FITOC (FREIBURG INTERVENTION TRIAL FOR OBESE CHILDREN) – CHANGES IN MOTOR ABILITIES OF OBESE CHILDREN IN THE COURSE OF THE THERAPY PROGRAM COMPARED WITH NORMAL-WEIGHT AND PHYSICALLY ACTIVE CHILDREN

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Aim: Deficits in motor abilities due to a lack of activity are primarily responsible for the present increasing prevalence of childhood obesity.

The purpose of this report is to present anthropometric data and to describe the motor abilities of obese children before and after the eight-month FITOC therapy program. These values are then compared with those from two groups, normal-weight children and physically active children.

Methods: Data were collected on n=13 obese children (BMI > 97th percentile) age 8-12 in a pre-test at the beginning (T0) and post-test at the end of the intensive phase of the therapy (T1). These data were compared with those from two groups, n=22 normal-weight children and n=51 physically active children.

General Sports-Motor Test [Allgemeiner Sportmotorischer Test (AST)] and BMI-SDS values were recorded.

Statistics: Anova; Two factor design, Repeated Measures on one factor.

Results: A significant reduction in the BMI-SDS (p<0.001) values of the FITOC-children and of the normal-weight children occurred at T1. The values for athletic children increased slightly.

At T0 and T1, the results of the General Sports-Motor Test of the obese children ranged significantly below the values of the normal-weight and of the physically active children on nearly all test-items (except the medicine-ball toss). However, their performance improved significantly in the areas of aerobic capacity, strength and postural stability. The differences between normal-weight and athletic children decreased.

Performance in the control groups varied.

Discussion: The results confirm a lack of motor abilities in obese children compared with normal-weight and physically active children. An intervention program like FITOC with a focus on sports, could help obese children to achieve results more like those observed in their normal-weight peer-group.

Keywords: Children Physical Activity, Obesity, Motor Skills