

## **Summary & conclusion**

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This research deals with study of childhood obesity and its impact on school performance of primary school children in Benha . Across sectional study was conducted on a sample of 50 obese children in the first primary stage; the average age was 6.6 years compared to 50 non obese age, sex and I.Q matched children ( controls ) . The study was done during the period from october 1990 to may 1991 .

The obesity in these children was assessed by visual observation , anthropometric measurements and full clinical examination to exclude any pathological obesity .

The intellectual development was assessed by a specific intelligence test ( test of mental ability for children 6 - 8 years , Mosa 1984 ) .

The scholastic performance was assessed by scholastic performance for nursery, first primary stage by Hassan, 1990 .

The results of this study revealed that the average weight of obese ( children ) in our sample was above the 95 th percentile while that of controls was at the 50 th percentile , the average skinfold thickness of obese children was above the 95 th percentile while that of controls was slightly above the 50 th percentile .

It was found that height , head circumference , chest circumference, midarm circumference were significantly higher in obese than in controls .

Regarding the sex differences in anthropometric measurements between obese females and obese males , the head circumference was significantly heigher in males, while skinfold thickness was significantly higher in females .

Regarding the impact of childhood obesity on blood pressure of studied sample, it was found that systolic blood pressure of obese was above the 95 th percentile while that of controls was above the 75 th percentile , the difference in systolic blood pressure between obese and controls was statistically signicant . The diastolic blood pressure of obese was slightly below the 95 th percentile while that of control was above the 50 th percentile , the difference is statistically significant .

As to the study of I.Q ; it was found that the I.Q is slightly higher in controls than in obese and the difference is insignificant . The I.Q. was slightly higher in obese males than obese females and the difference is also statistically insignificant , concerning the difference in I.Q a cording to school type it was found that the I.Q was significantly higher in obese children of private schools than those of governmental schools .

As to the impact of childhood obesity on school performance , it was found that school performance was slightly heigher in controls than obese but the difference is statistically insignificant .

Concerning the sex difference in school performance between obese males and obese females; it was found that school preformance was higher in obese females than obese males but the difference is statistically insignificant, also the school performance was higher in obese children of private school than governmental ones , but the difference is also statistically insignificant .

**Finally we recommend that :**

- 1 - Screening school children on periodic health appraisal programs conducted in schools to detect early overweight and obesity .
- 2 - Full clinical examination of obese children including blood pressure and follow up those with high blood pressure .
- 3 - Introduction of a program for prevention and mangement of childhood obesity among schools . The program should include nutritional education aiming at along term modification of bad feeding habits, it should also include encouragement of physical exercise in schools .
- 4 - Specified scholastic performance tests should be avilabe and standardized to measure school performance for different grades .
- 5 - Psychometric tests should be performed to all obese children to detect any psychological problems and be manage promptly .