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Investigating predisposing factors for childhood obesity

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BACKGROUND

Childhood obesity is considered to be an epidemic in developed countries that can negatively affect children's health and psychology [1].

AIMS

The aim of this study is to investigate the nutritional and environmental factors that lead to the presence of childhood obesity and its complications.

METHODOLOGY

A total of 949 students, 3-12 years old, living in Sparta-Greece, have participated in our research.

Their lifestyle and eating habits were determined by using specially designed questionnaires.

Anthropometric and blood pressure measurements were performed.

Our research was conducted with the permission from the *Greek Ministry of Education and Religious Affairs, Culture and Sports* and the consent of the individuals as well as the parents of children.

RESULTS

With statistical significance ($p \leq 0.05$) we observed all the following findings:

- ☐ 36% of the boys and 29.9% of the girls were found overweight or obese
- ☐ Females that breastfed had a decreased BMI% ($p=0.016$)
- ☐ BMI% was increased by 12 units in children having an obese relative ($p=0.005$)

Obese children tend to:

- ☐ consume more olive oil/olives per week ($p=0.005$)
- ☐ exercise less ($p=0.033$)
- ☐ have elevated levels of blood pressure ($p < 0.001$)



BMI% was greater in children who:

- ☐ skip breakfast ($p=0.001$)
- ☐ consume fruits ($p < 0.001$), vegetables ($p < 0.001$), legumes ($p=0.039$), grains, rice, pasta, bread ($p=0.001$), dairy products ($p=0.013$)

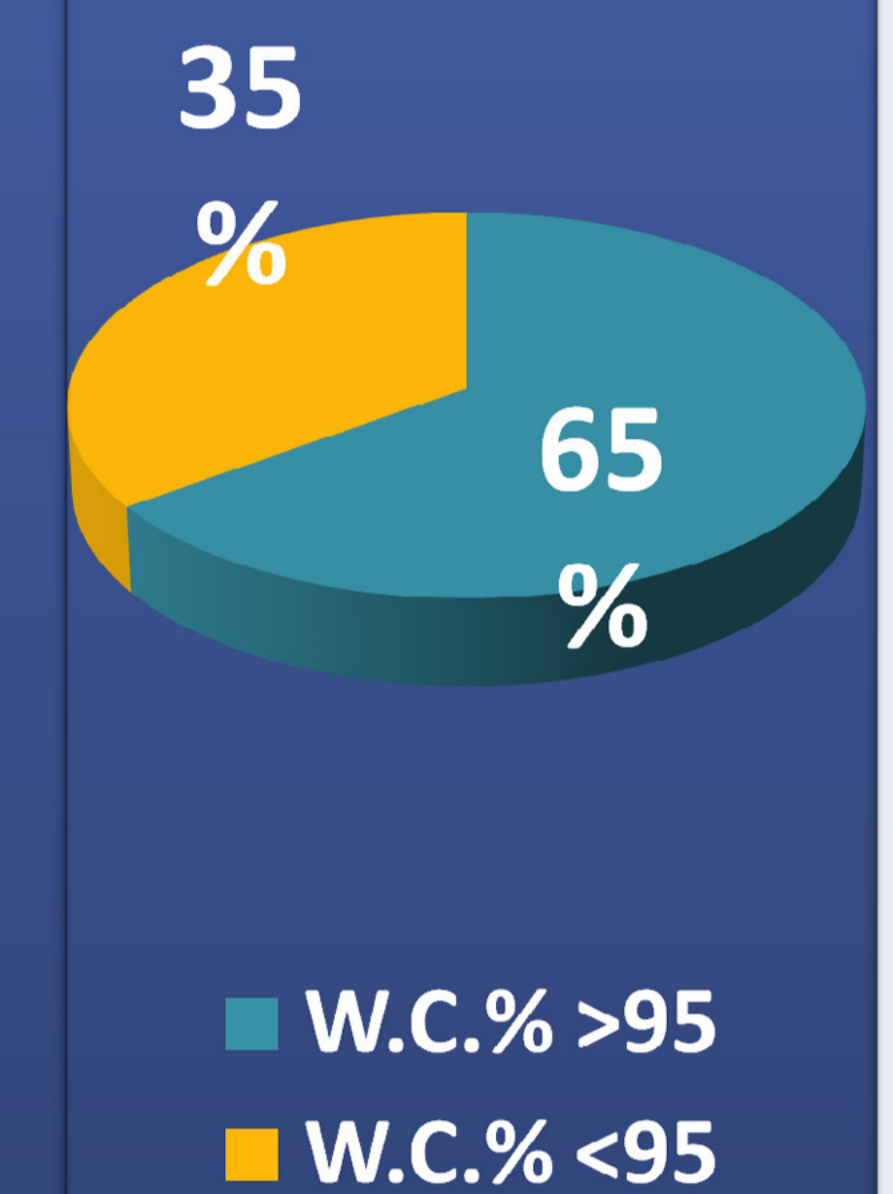
WC% in boys:

- ☐ increases with decreased exercise/week ($p=0.029$)
- ☐ is affected by stress and anxiety ($p=0.05$)

BMI% in children

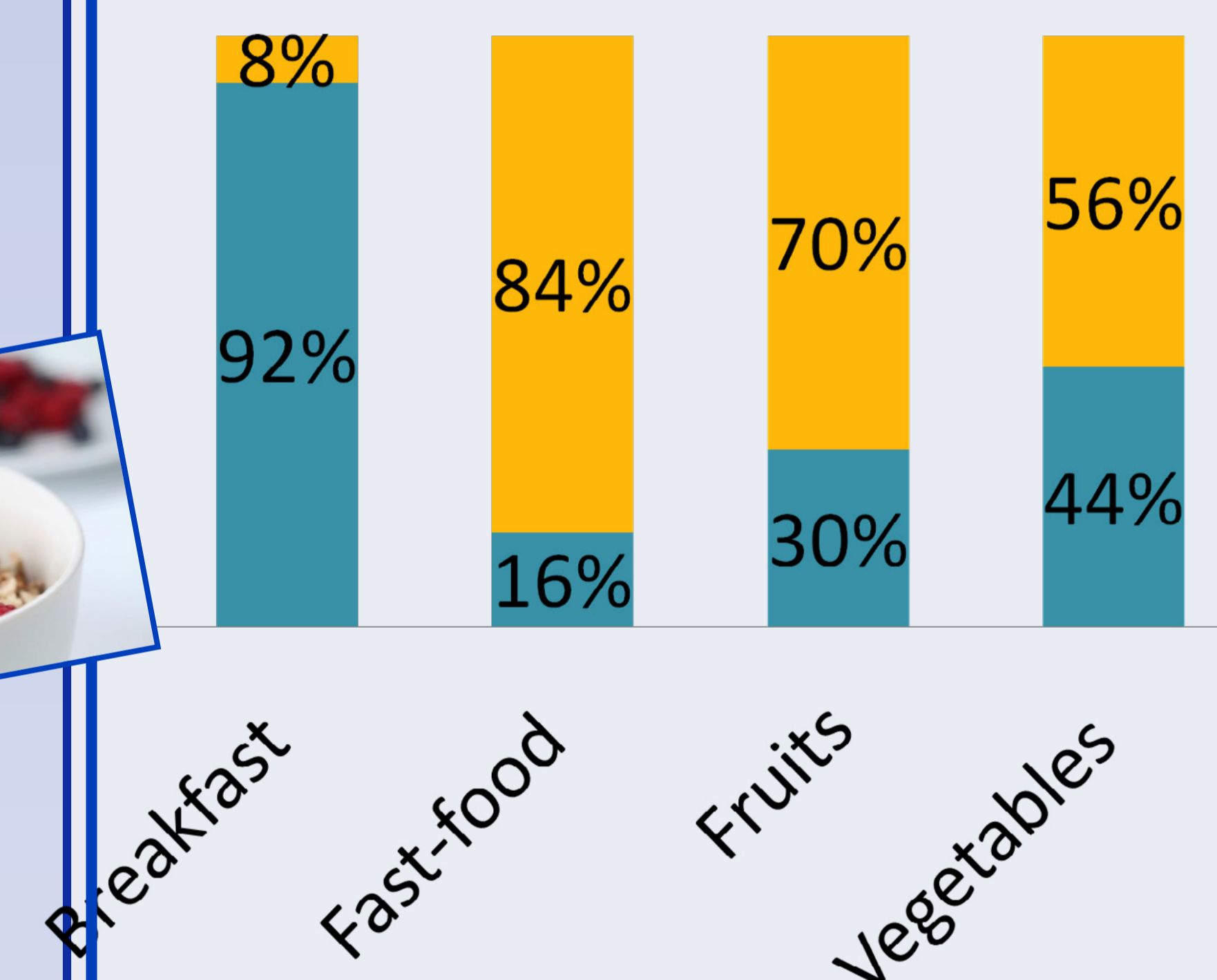


W.C.% in children



Eating Habits

YES NO



CONCLUSIONS

In Greece, the high prevalence of overweight and obese children is regarded as a bizarre finding, since Mediterranean diet has been always associated with good health status [2]. Consequently, there is rising awareness towards adopting proper health habits during childhood.

REFERENCES

- [1]. Kimm, S.Y. and E. Obarzanek, Childhood obesity: a new pandemic of the new millennium. *Pediatrics*, 2002. 110(5): p. 1003-7.
[2]. Velázquez-López L, Santiago-Díaz G, Nava-Hernández J, Muñoz-Torres AV, Medina-Bravo P, Torres-Tamayo M., Mediterranean-style diet reduces metabolic syndrome components in obese children and adolescents with obesity. *BMC Pediatr*. 2014.5;14:p.175.

