



RELATION BETWEEN PHYSICAL ACTIVITY LEVEL AND WEIGHT STATUS AMONG CHILDREN. "THAO - SALUD INFANTIL PROGRAMME".

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1. INTRODUCTION

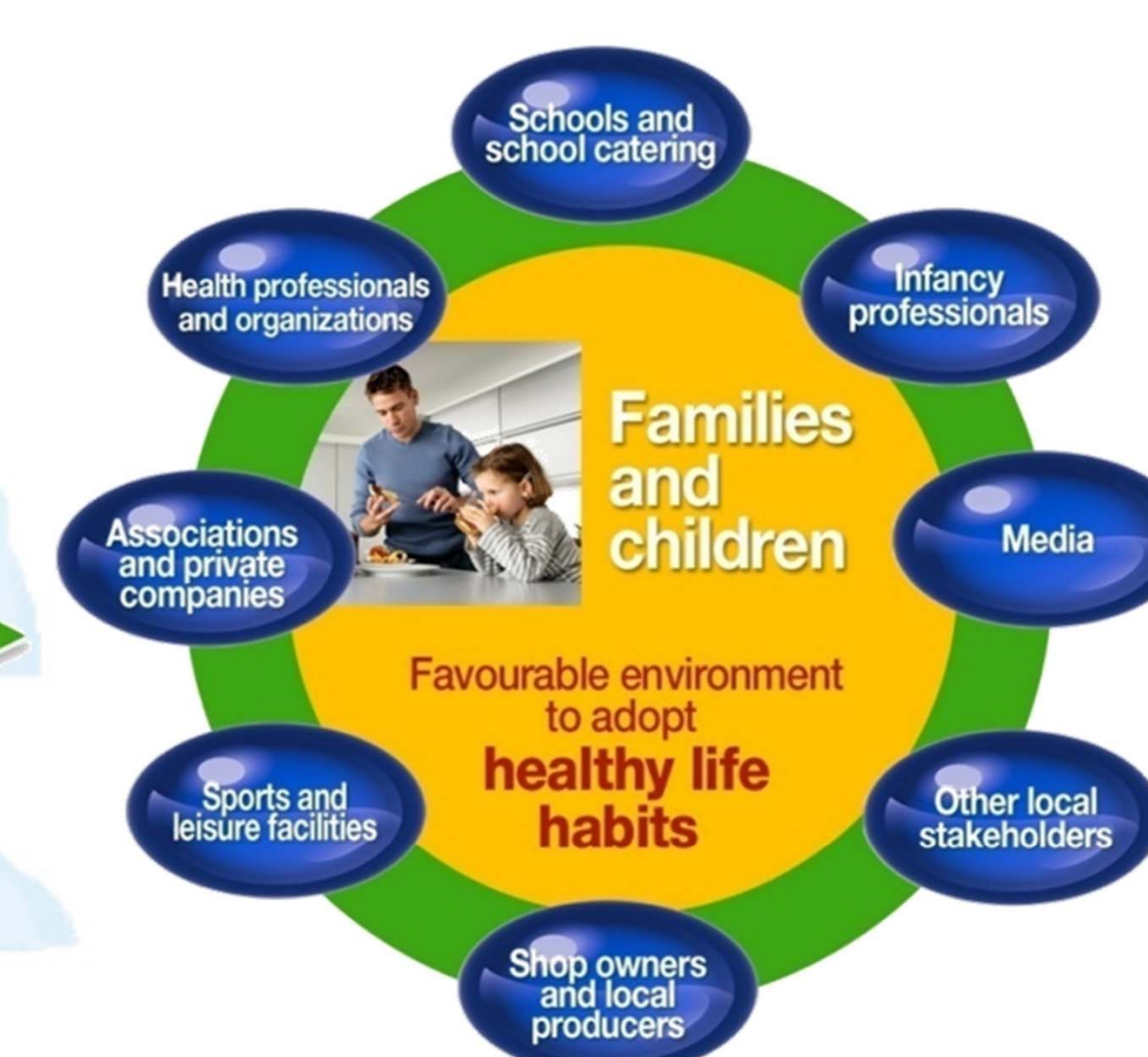
Physical activity is one of the factors to consider when talking about energy balance.

Many studies relate physical activity to a better health status, but only few directly evaluate association between physical activity and prevalence of obesity and overweight.

One of the initiatives related to the healthy living promotion that take place in Spain since 2007 is the "Thao - Salud Infantil Programme", which is an intervention to prevent childhood obesity. Its main objective is to stop the progression of obesity in children changing their lifestyles by promoting a balanced diet and regular practice of physical activity.



Thao is implemented at community level in each of the towns, led by the City Hall.

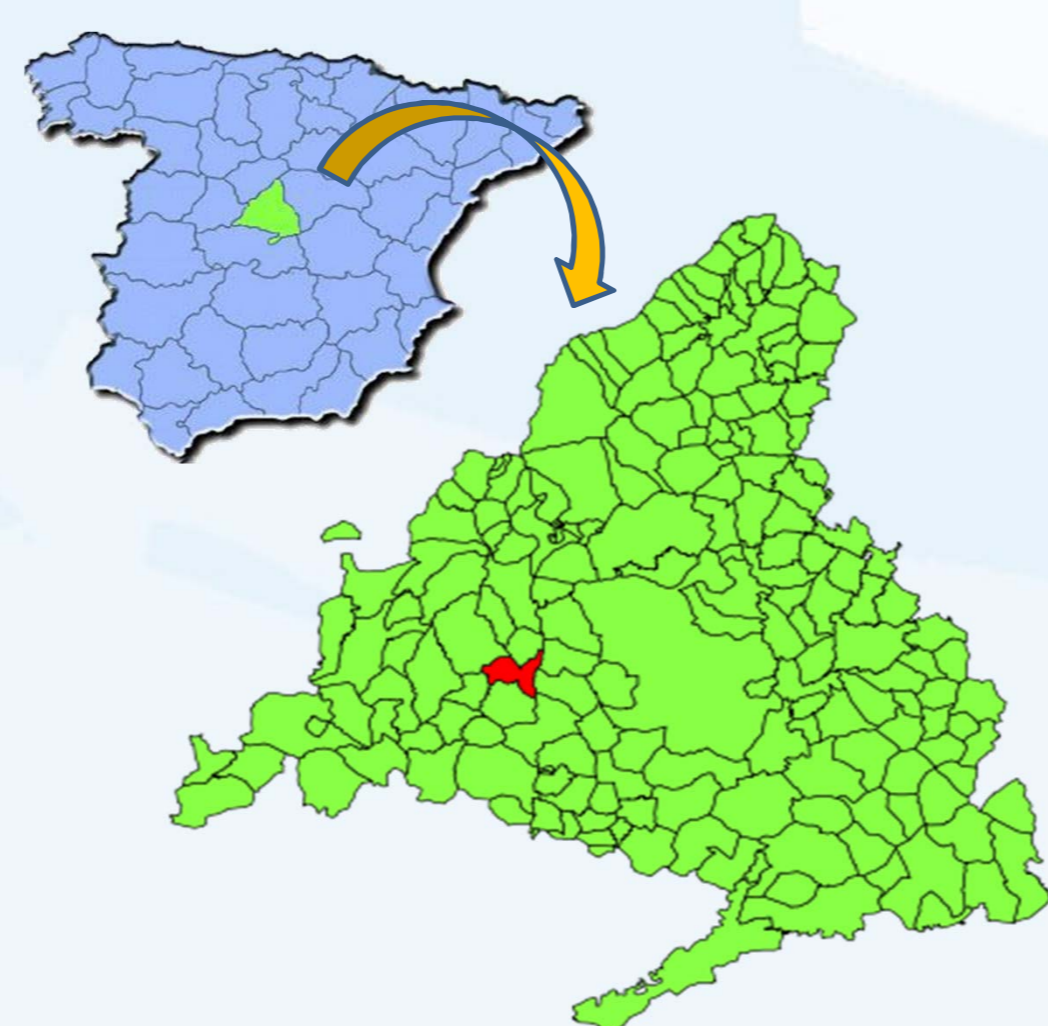


Thao consists on coordinated actions involving the whole community, aimed to encourage the positive attitudes of healthy lifestyles.

Villanueva de la Cañada (Madrid, Spain)

Member of the Thao Programme since 2007 as one of 5 pilot cities.

On February 2010, became member of Phase V (2009-2013) of the WHO European Healthy Cities Network.



2. OBJETIVE

To correlate an objective measurement of energy expenditure attributable to physical activity with different anthropometric parameters related to weight status, in a group of school children of Villanueva de la Cañada (Madrid).

3. METHODS

69 school-children (11-12y) from Thao Programme (2009-2010) in Villanueva de la Cañada (Madrid) were studied.

To quantify physical activity, kids wore accelerometers (GT3X Actigraph) during a complete week. The output of these devices was expressed as *activity counts*.

Anthropometric parameters (weight, height, and waist circumference) were collected as part of the Thao evaluation during the academic year 2009-2010. These allowed to calculate waist/height ratio (WHtR) and body mass index (BMI).

The Pearson Correlation was calculated to study the relationship between *activity counts* and waist circumference (WC), BMI and WHtR.

4. RESULTS

As the table shows, Pearson Coefficients confirm that there is no significant correlation between *activity counts* from accelerometers and any of the anthropometric parameters studied.

Variables	Pearson Coefficient (r)	p value
A.Counts vs. WC	0.17	0.47
A.Counts vs. BMI	0.11	0.23
A.Counts vs. WHtR	0.10	0.41

5. CONCLUSION

The lack of significant results could be due to the fact that weight status is conditioned not only by the physical activity level, but also by other lifestyle factors like dietary intake.