# Fighting Childhood Obesity The experience of Greece

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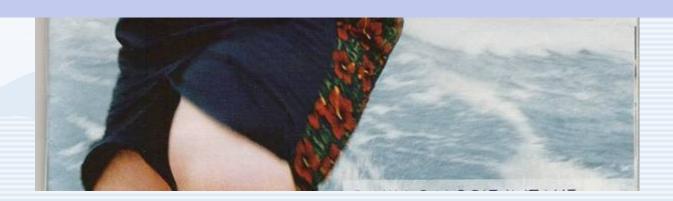




# Childhood obesity is increasing worldwide



- \*Most concerning result of childhood obesity is adult obesity!!
- Obese children and adolescents have higher possibility to become obese adults and to suffer from obesity related chronic diseases



- The WHO Regional Office for Europe has established a European childhood obesity surveillance system(COSI) in twenty one countries in the Region.
- The system aims to routinely measure trends in overweight and obesity in primary school children (6-9 years), in order to understand the progress of the epidemic in this population group and to permit intercountry comparisons within the European Region.

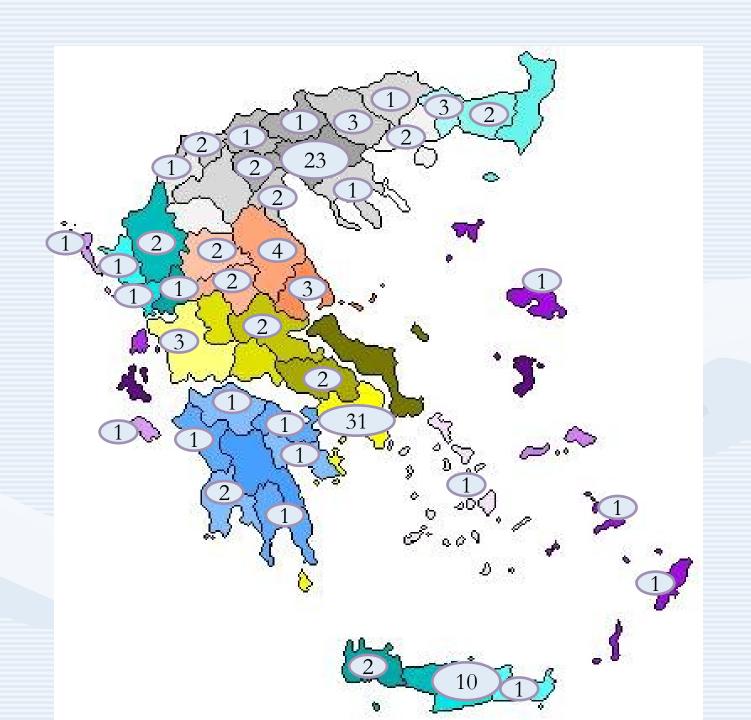


• In Greece we followed the protocol which was jointly developed by the WHO Regional Office for Europe and the participating Member States. We participated in round 2(2009-2010) and in round 3(2012-2013). We will also participate in the fourth COSI round that is planned for the school year 2015/2016.

### Study population and settings...

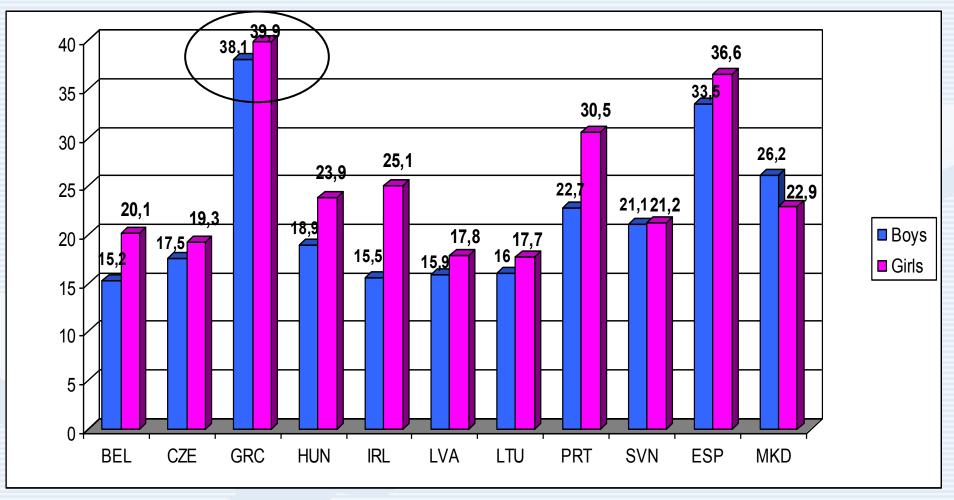
2<sup>nd</sup> and 4<sup>th</sup> elementary school grade, 7-8 and 9-10 years old children were chosen.





# Prevalence of Overweight, incl. Obesity Boys-Girls%, 7 years

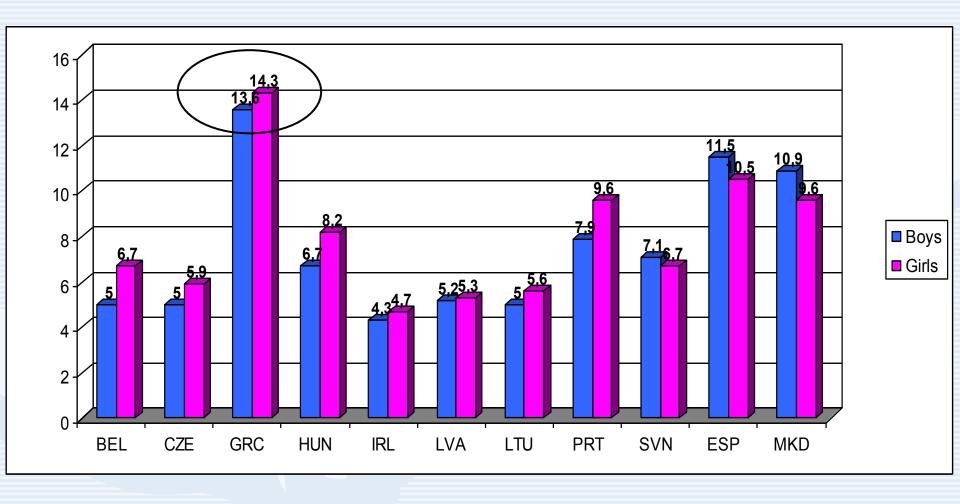
Based on the IOTF criteria



Trudy MA Wijnhoven et al ,WHO European Childhood Obesity Surveillance Initiative: body mass index and level of overweight among 6–9-year-old children from school year 2007/2008 to school year 2009/2010 ;submitted to BMC Public Health

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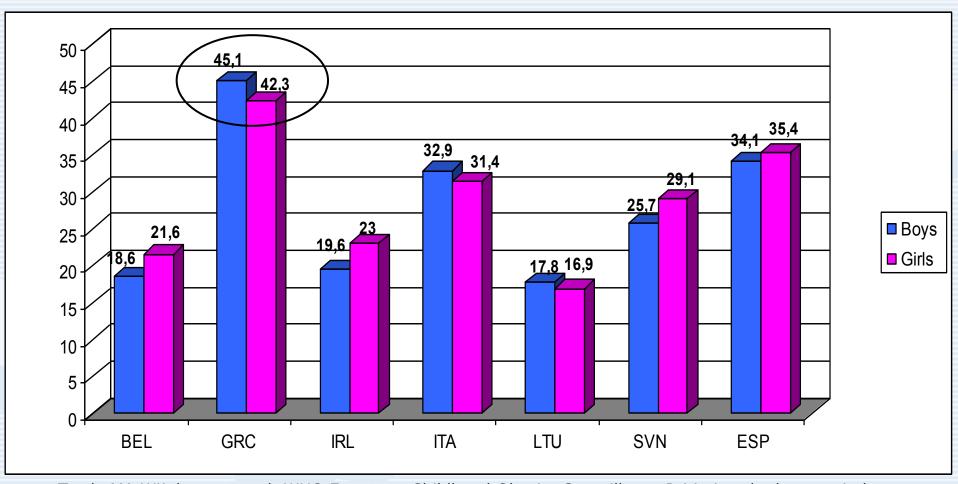
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# Prevalence of Overweight, incl. Obesity Boys-Girls%, 9 years

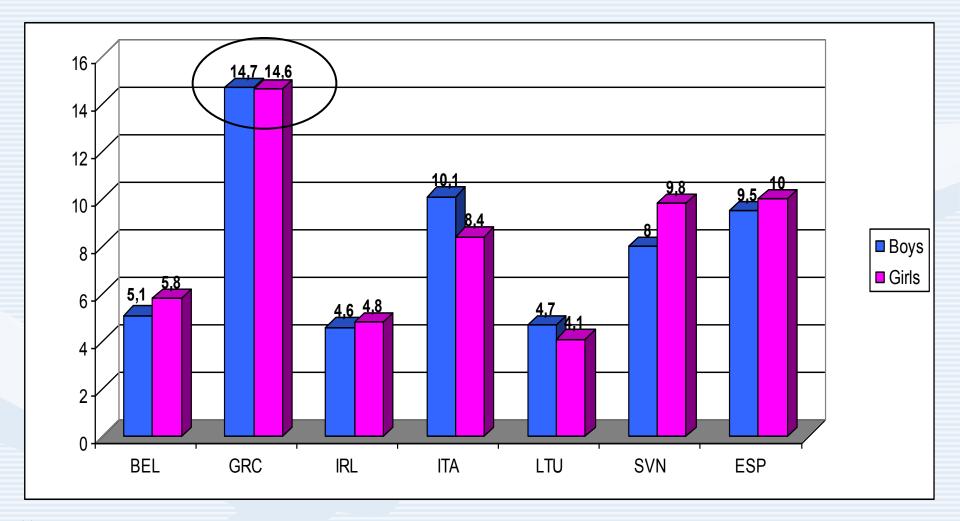
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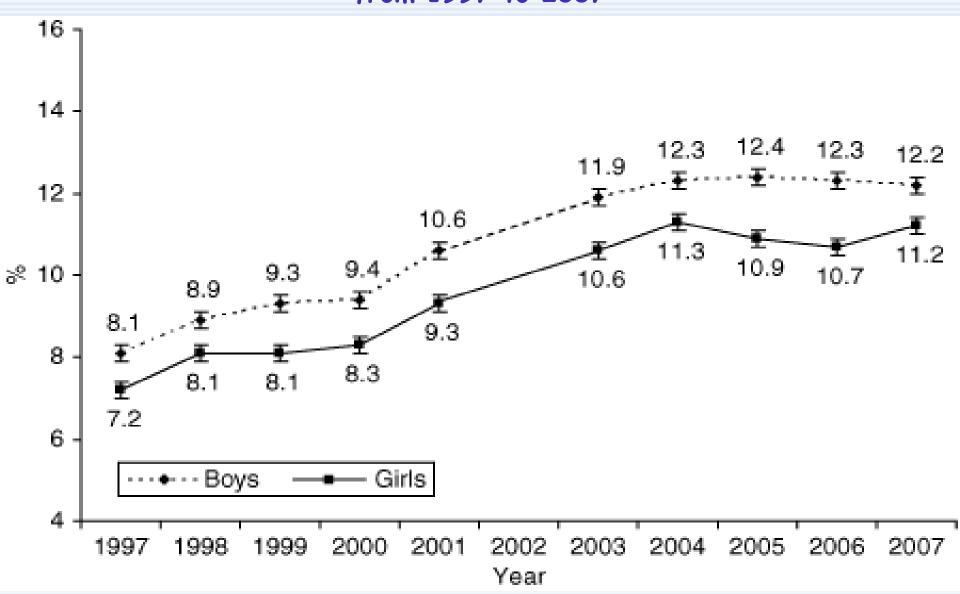
### Prevalence of Obesity Boys-Girls%, 9 years

Based on the IOTF criteria



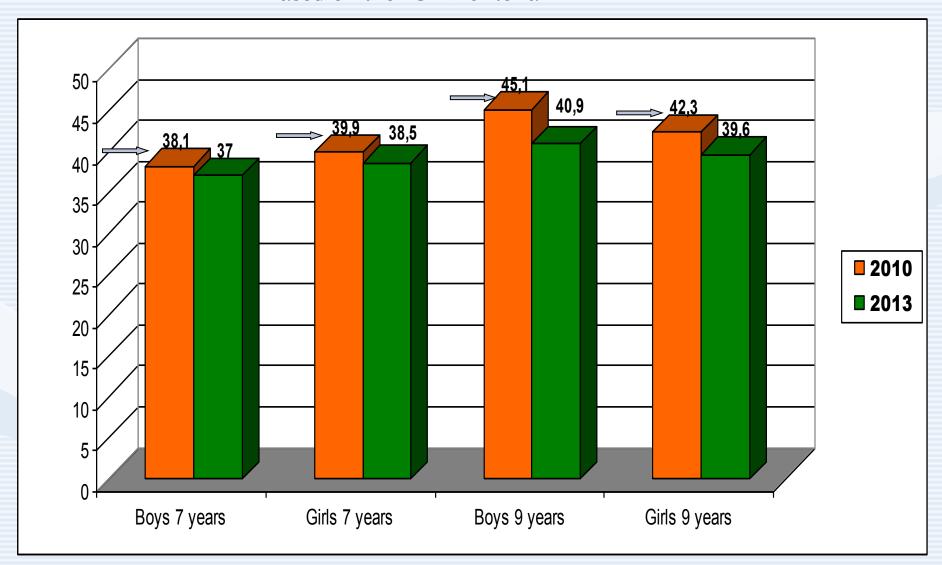
Trudy MA Wijnhoven et al ,WHO European Childhood Obesity Surveillance Initiative: body mass index and level of overweight among 6–9-year-old children from school year 2007/2008 to school year 2009/2010; submitted to BMC Public Health

### Prevalence (%) ± s.e. of obesity in 8 to 9-year-old children from 1997 to 2007



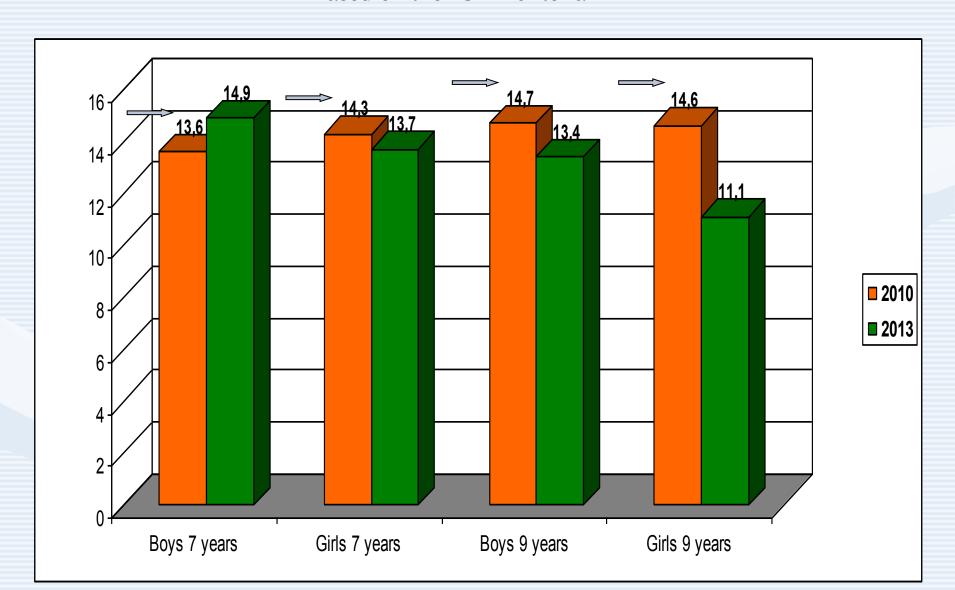
# Prevalence of overweight, incl. obesity – Comparison between 2009-2010 and 2012-2013 data

### Based on the IOTF criteria



# Prevalence of Obesity – Comparison between 2009-2010 and 2012-2013 data

### Based on the IOTF criteria











Toybox user log-in

### ESSENTIAL LINKS

#### Home

ToyBox-study

Partners

Workpackages

Outcomes

News/Events

Contacts

Photos & Videos



- FAQs
- Interactive Questionnaires
- Tips for Parents





Questionnaires

### ToyBox Home Page

#### WELCOME INTRO

**ToyBox-study** (Multifactorial evidence based approach using behavioural models in understanding and promoting fun, healthy food, play and policy for the prevention of obesity in early childhood) brings together a multidisciplinary team of 15 researchers from 10 countries across Europe aiming to build and evaluate a cost-effective kindergarten-based, family-involved intervention scheme to prevent obesity in early childhood, which could potentially be expanded on a pan-European scale.



#### NEWS

ToyBox Newsletter Winter 2013 More...>

ToyBox newsletter Spring 2012 More...>

ToyBox in Istanbul ECO2011

More...>



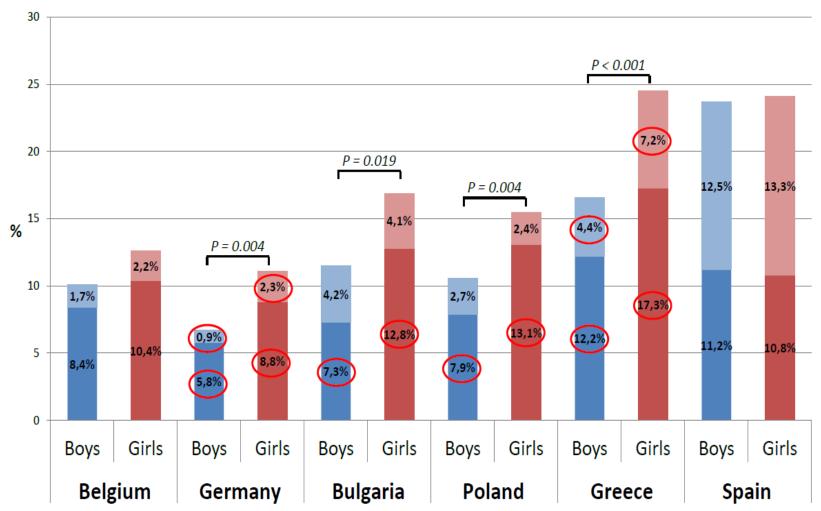


ToyBox is funded by the European Commission Seventh Framework Programme (FP7-KBBE-2009-3) under grant agreement no245200.



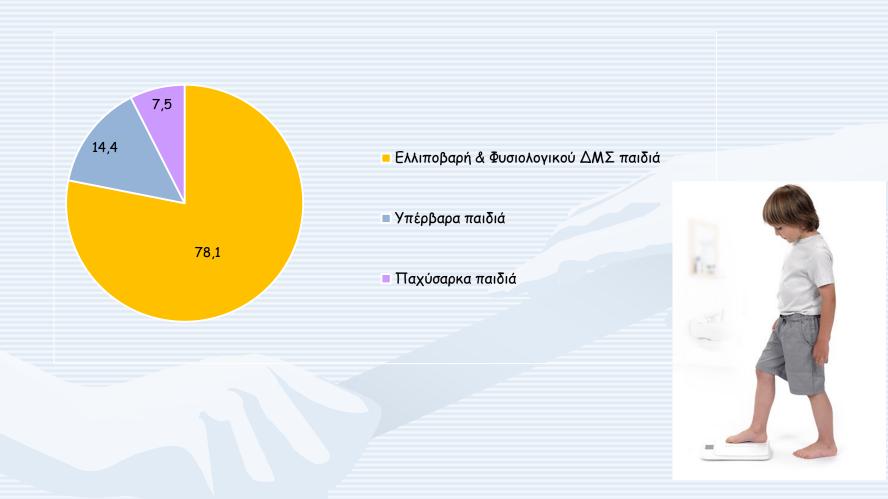
# Prevalence of overweight/obesity by country & gender







### Prevalence of childhood obesity in children age 4 (n=872) in Crete









της Ελλάδας και της Ευρωπαϊκής Ένωσης.





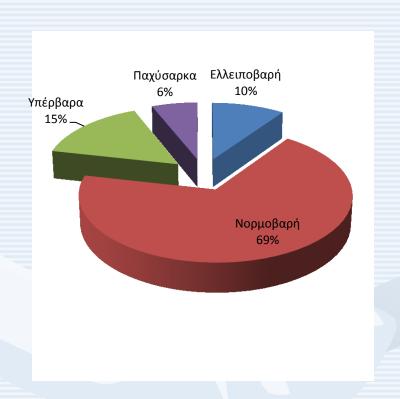


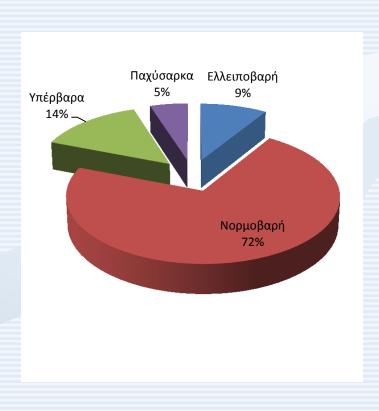


# Ποσοστά παχυσαρκίας σε αγόρια & κορίτσια(Nutri-kid)

### Αγόρια

### Κορίτσια

















the ENERGY-project

Partners

WorkPackages

Publications

Funding

### THE **ENERGY-**PROJECT >>

**ENERGY** stands for **EuropeaN** Energy balance **Research** to prevent excessive weight Gain among Youth and is supported by the European Commission through its 7th Framework program



#### WHAT?

We expect to develop an intervention scheme that is both school-based and family-involved, and aimed at the age group of 10-12 year olds. The most important intrinsic and extrinsic factors that determine energy-balance health behaviours will be identified, and translate into an evidence-based intervention scheme. This intervention scheme will be validated for improved capacity to encourage and sustain healthful eating and physical activity behaviours, and the results will be disseminated among key stakeholders including researchers, policy makers and the general population.

last update: 23.04.2013

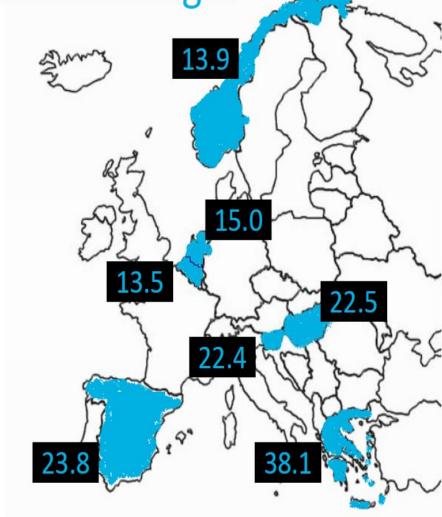
Results prevalence rate overweight

Overweight (%) girls

Mean: 21.4%

B,No<Gr,Hu,Sl,ES NI<Gr,Es Hu,Sl,Es<Gr





 Effective intervention in childhood obesity necessitates a better understanding of the factors related to its prevalence.



## Child breakfast

Every day	59,92
Most days	12,57
Some days	20,66
Never	5,09



# Vegetables

Every day	14,99
Most days	27,07
Some days	48,05
Never	6,72



## Fresh fruit

Every day	33,3
Most days	30,65
Some days	31,55
Never	2,48



- Overweight adolescents consumed more snacks (potato, chocolate bars, pizza, cheese pie, cream pie), more sugar, jam and honey and less legumes, vegetables, fruits than their non-overweight counterparts.
- Their food consumption pattern shows less adherence to the traditional Mediterranean diet and an adoption of a more westernized diet with the non-overweight group.

Hassapidou M, Fotiadou E, Maglara E and Papadopoulou SK (2006). Energy intake, diet composition, energy expenditure and body fatness of adolescents in Northern Greece.

Obesity, 14, 5, 855-862.

# Child going to school

S/he usually takes the school bus	5
S/he usually goes by public transport	1,45
S/he is usually brought by car	44,89
5/he usually rides a bicycle	0,26
5/he usually walks	45,96



### Child school distance

Less than 1 kilometre	65,84
1-2 kilometres	19,79
3-4 kilometres	6,07
5-6 kilometres	3,04
More than 6 kilometres	3,46



### School route safe?

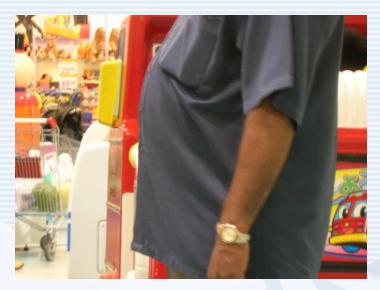
Yes	29,88
No	68,41



## Participation in sports

Yes	65,28
No	32,96

### Presence of an obese parent according to obesity status



	Obese parent				
	yes no				
Non-obese	37.1%	62.9%			
Obese	68.8%	31.3%			

p<0.001

# Cooker of children, according to their obesity status

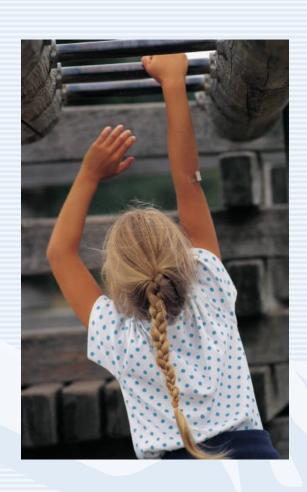
	Cooker					
	mother grand- mother father other					
Non-obese	95.0%	3.7%	0.8%	0.4%		
Obese	81.3%	18.8%	0.0%	0.0%		

p<0.05

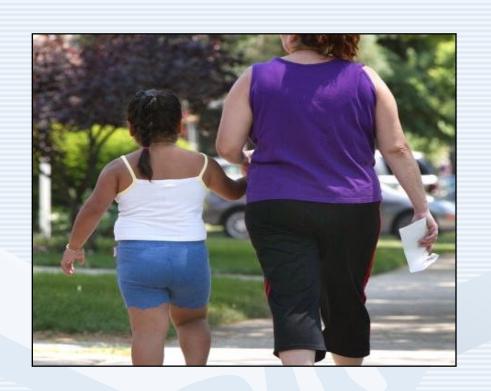




### Conclusions...



Obese children tend more to live under the surveillance of an obese parent and to eat grandmother's dishes compared to non-obese counter-parts.



 Weight loss programs are most successful when parents and their children are targeted to lose weight

# Actions —Programs for childhood Obesity



The Ministry of Health, recognizing that the issue of childhood obesity is a major public health problem, proceeded in the following actions:

• Sanitary Provision: "Food safety and Hygiene in school canteens"

Food choices in accordance with Meditteranean diet and recommendations of Pediatric societies

• Implementation of the European *School Fruit Scheme* (SFS) in cooperation with the Ministry of Rural Development and Food and the Ministry of Education

### Ministry of Health Programs

A/A Nα Nα	COD E	TITLE	INSTITUTE	PROJECT MANAGER	ENTRY DATE	EXPIRY DATE	WEBSITE
1	370545	Development of a National System for the Prevention of Overweight and Obesity in Childhood and Adolescence	University of Athens	Evangelia Harmandari, Associate Professor of Pediatrics	7/1/2012	7/1/2014	www.childhood- obesity.gr/
2		NATIONAL ACTION PLAN FOR PUBLIC HEALTH: ASESSMENT, PREVENTION AND TREATMENT OF CHILDHOOD OBESITY - ACTIONS FOR EXERCISE AND HEALTHY DIET	Aglaia Kyriakou Children's Hospital	Stefanos Mihalakos, Director of Growth and Development of Children's Hospital "P & A Kyriakou"	11/1/2010	12/31/2014	www.paidiaskisidiatr ofi.gr/
3		DEVELOPMENT OF NATIONAL NUTRITION GUIDES DIATROFIN	INSTITUTE OF PREVENTIVE, AND ENVIRONMENTA L MEDICINE	Prof Linou University of Athens	9/1/2011	8/31/2013	http://www.prolepsi s.gr
4	349580	Prevention and Early Diagnosis Program of Obesity and Neurodevelopmental disorders in children of preschool age in	University of Crete	Lida Hatzi, Lecturer in Epidemiology & Nutrition	5/1/2011	10/31/2014	www.child- obesity.gr

5	NON- ESPA	EU ZHN	MINISTRY OF EDUCATION	Harokopio university	2012	2017	http://eyzin.minedu .gov.gr/Pages/Hom e.aspx
6	NON- ESPA	PAIDEIATROFI	EPODE EUROPEAN NETWORK	Elena Stamou, National Coordinator			http://www.paideiat rofi.org/
	NON- ESPA	COSI (Childhood Obesity Surveillance Initiative)	WHO	Maria Hassapidou, Professor of Nutrition and Dietetics	2010, 2013		
8	NON- ESPA	Prevention of obesity in preschool age "Toy Box - study"	EU FUNDING	Ioannis Manios Associate professor,Harokopio University	2010	2014	http://www.toybox- study.eu
17	NON- ESPA	Intervention Program for the Family to Address Childhood Obesity	AGRICULTU RAL UNIVERSITY	Zampelas Antonis, Professor of Human Nutrition			http://www.schoolfo od.gr/home/index.h tml

### "ALKIONI"

# NATIONAL PROGRAM FOR THE PROMOTION OF BREAST FEEDING



αναζήτηση...

#### Παιδική Παχυσαρκία

- Ορισμός
- Συχνότητα Εμφάνισης
- Αίτια Εμφάνισης / Επιπτώσεις

#### Εθνικό Σχέδιο Δράσης

- ። Όραμα του Προγράμματος
- **::** Στόχοι Σχεδίου
- Δράσεις / Χρονοδιάγραμμα
- Σχολεία Δείγματος
- Προσδοκώμενα Ωφέλη
- **Επιστημονική Ομάδα**
- Ερευνητική Ομάδα
- **Ε**ρευνητική Ομάδα Β φάσης

#### Εξέλιξη / Αποτελέσματα

- **።** Δράσεις Ενημέρωσης Μαθητών
- Εξέλιξη / Σχολεία Α φάσης



#### Καλώς ήλθατε

Η Παρέμβαση «Εθνικό Σχέδιο Δράσης για τη Δημόσια Υγεία: Αποτύπωση, Πρόληψη και Αντιμετώπιση της Παιδικής Παχυσαρκίας – Δράσεις για την Άσκηση και την Υγιεινή Διατροφή», που συγχρηματοδοτείται από την ΕΕ και το Υπουργείο Υγείας και Κοινωνικής Αλληλεγγύης, αφορά στην υλοποίηση δράσεων αγωγής και προαγωγής της υγείας του παιδικού πληθυσμού σε όλη την επικράτεια, μετά από έρευνα των προσδιοριστικών παραγόντων της δημόσιας υγείας.

Κύριος στόχος είναι η αλλαγή γνώσεων, στάσεων και συμπεριφορών και η βελτίωση της ποιότητας ζωής του παιδικού και νεανικού πληθυσμού της χώρας μας με απώτερο σκοπό τη μείωση του επιπολασμού της παχυσαρκίας. Αυτό θα επιτευχθεί μέσω της υλοποίησης μιας σειράς ενεργειών αποτύπωσης, πρόληψης, αγωγής υγείας και προαγωγής της δημόσιας υγείας του παιδικού και εφηβικού πληθυσμού, σε δείγμα 40.000 παιδιών της χώρας.

## •• 00

#### Τελευταία Νέα

Συμμετοχή του 6ου Δημοτικού Σχολείου Μελισσίων στο Πρόγραμμα Νοσοκομείου Παίδων

#### Εξέλιξη μετρήσεων Α Φάσης

278 Σχολεία 100% 25890 Μαθητές











#### ☑





- » Preventive Medicine
- » Medical Research
- » Occupational Health
- » Environmental Health
- » Education
- » Statistics
- » Humanitarian Actions



### 



23 24 25 26 27 28

#### Newsletter

Μάθετε τις τακτικές δράσεις και τα τελευταία νέα της Prolepsis

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Newsletter History



Home Page » Programs » Development and Wide Dissemination of the General and Special National Dietary Guidelines - "EF Dia...Trofin"

31/12/2011 - 31/12/2013 Active

Development and Wide Dissemination of the General and Special National Dietary Guidelines - "EF Dia...Trofin"



The Institute of Preventive Medicine, Environmental and Occupational Health, Prolepsis, has undertaken the ambitious project of the development and the wide dissemination of the National Dietary Guidelines - "Ef Dia... Trofin".

This 2year project, launched in December 2011, is part of the Operational Programme "Human Resources Development 2007-2013" and is co-financed by the Hellenic Ministry of Health and the European Social Fund.

The national dietary guidelines address the alarming data regarding obesity in Greece and the fact that many Greeks don't follow the traditional Greek diet any more. The main objective is to provide simple and evidence-based information about people's needs for nutrients and food groups that should be consumed daily.

The program will develop dietary guidelines for the general adult population, as well as specific guidelines for children and adolescents, women (including pregnant and breast feeding women) and elderly.

The dietary guidelines will be based mainly on the Greek food culture, while the current economic situation will, also, be considered, taking into consideration the costs of different products. Moreover, the Greek dietary habits and traditions and the availability of product per season will be taken into account.





















**Πριν την είσοδό σας**, διαβάστε **εδώ** όλες τις απαραίτητες πληροφορίες σχετικά με τη διαδικασία **εγγραφής και χρήσης** της ηλεκτρονικής πλατφόρμας.



Novel family-based intervention program



Dietitians-Nutritionists,
 Psychologist,
 Trainer,
 Chef



Design, implementation and evaluation of a novel family-based intervention for the family for the management of childhood obesity.







### PAIDEIATROFI

Childhood Obesity Prevention Programme

a methodology to prevent childhood obesity, involving local stakeholders in a sustainable way

www.paideiatrofi.org info@paideiatrofi.org



































# Thank you ...

