

Coordinated by:



### **PRESS RELEASE**

Madrid, 8th February 2015

According to the research 'Clustering of Dietary Patterns, Lifestyles, and Overweight among Spanish Children and Adolescents in the ANIBES Study'

# Children and adolescents with a healthier lifestyle follow a Mediterranean like dietary pattern

 This study focuses on identifying lifestyle and dietary patterns among the population of minors that participated in the ANIBES Study

Children and adolescents aged 9-17 years old included in the healthier lifestyle pattern follow a Mediterranean like dietary pattern. This is one of the conclusions of the study 'Clustering of Dietary Patterns, Lifestyles, and Overweight among Spanish Children and Adolescents in the ANIBES Study', which was recently published in the scientific journal Nutrients.

The study, developed by the <u>Spanish Nutrition Foundation</u> (FEN) and a scientific committee of experts has focused on identifying lifestyle and dietary patterns among the population of minors (9-17 years old) that participated in the ANIBES Study.

In this respect, four different dietary patterns were defined, among which the 'Mediterranean' Pattern stands out because of its similarity to the traditional Mediterranean diet. "It is characterized by a greater presence of vegetables, olive oil, fish, fruits, yoghurt and fermented milk products, as well as water, and a lower intake of other foods and beverages, processed meat products, sauces, bakery products, sugar-sweetened soft drinks and food supplements", explains Dr. Carmen Pérez-Rodrigo, President of the Spanish Society of Community Nutrition (SENC), who has been in charge of leading this part of the research within the ANIBES Study.

"Other patterns were also identified, such as the 'Sandwich' Dietary Pattern, characterized by high positive loadings on bread, processed meat products and cheese; the 'Pasta' Dietary Pattern, with high positive loadings on pasta, sauces and dressings, as well as baked goods, but with high negative loadings on legumes", continues to explain Dr. Pérez-Rodrigo. "Lastly, there is another dietary pattern called 'Milk-sugary foods', characterized by high positive loading on milk, sugar, sugary foods and food supplements".

With the participation of















Coordinated by:



With the participation of:













#### Healthier lifestyle pattern

This scientific research shows two lifestyle patterns after the analysis of dietary habits, physical activity, sedentary behaviors and sleep quality. This way, a Healthier Lifestyle Pattern was identified (characterized by high levels of physical activity, lower time spent in sedentary activities, higher sleep duration and healthier diet) and an Unhealthier Lifestyle Pattern, characterized by low physical activity and less adequate diet. This pattern includes a high proportion (32% of the total individuals) of the female population among 9 and 17 years old.



## Mean consumption of food and beverages groups

9-17 YEARS			i .		
		UNHEALTHIER UPESTYLE PATTERN	HEALTHIER LIFESTYLE PATTERN	UNHEALTHIER LIFESTYLE PATTERN	HEALTHIER LIFESTYLE PATTERN
		CHILDREN AND ADOLESCENT BOYS		CHILDREN AND ADOLESCENT GIRLS	
Olive oil (ml/d)	1	15.4 ± 0.1	17.7 ± 0.2**	15.5 ± 0.2	13.5 ±0.5**
Vegetables (g/d)	<del>qj</del> a	117.0 ± 1.0	137.0 ± 1.7**	128.0 ± 1.2	148.0 ±3.3**
Fruit (g/d)	6	88.7 ± 2.1	122.0 ± 2.8**	106.0 ± 2.0	147.0 ±6.1**
Pulses (g/d)	0	12.9 ± 0.1	13.3 ± 0.2	13.2 ± 0.1	13.4 ±0.2
Fish (g/d)	€3	37.8 ± 0.3	55.2 ± 0.5**	41.9 ± 0.2	80.4 ±0.7**
<b>Bread</b> (g/d)		95.5 ± 1.8	96.7 ± 3.1	80.8 ± 1.6	79.0 ±4.5
Pasta (g/d)	<b>*</b>	24.7 ± 0.8	23.8 ± 0.6	19.1 ± 0.2	15.5 ±0.6
Bakery products (g/d)	project.	48.3 ± 1.3	46.1 ± 2.3	41.1 ± 0.8	48.4 ±2.4
Sugar and sugary products (g/d)	<b>=</b>	23.8 ± 0.3	20.8 ± 0.6**	24.0 ± 0.6	24.1 ±1.8
Milk (g/d)	•	274.0 ± 2.8	247.0 ± 4.8**	208.0 ± 2.6	209.0 ±7.8
Cheese (g/d)	P	16.0 ± 0.4	17.2 ± 0.6	15.0 ± 0.4	21.9 ±0.9**
Yoghurt and fermented milk (g/d)	ď	51.8 ± 1.3	73.3 ± 2.2**	50.2 ± 1.6	69.1 ±4.8**
Meats (g/d)	<b>~</b>	105.0 ± 1.0	117.0 ± 1.5**	88.6 ± 1.2	79.4 ±2.7**
Cold and processed meats (g/d)	•	59.4 ± 0.9	51.4 ± 1.6	48.7 ± 0.9	50.6 ±2.9
<b>Water</b> (g/d)		582.0 ± 5.2	627.0 ± 9.3**	526.0 ± 0.8	629.0 ±2.3**
Sugared soft drinks (g/d)	萺	143.0 ± 3.8	98.1 ± 5.2**	95.6 ± 2.9	66.8 ±6.8**
Juices (g/d)	<u>&amp;</u>	115.0 ± 1.9	126.0 ± 3.5**	114.0 ± 1.9	159.0 ±5.3**
Sauces and dressings (g/d)		15.4 ± 0.2	15.8 ± 0.4**	14.0 ± 0.2	15.4 ±0.7

\*Mean (± standard error) \*\*P < 0.05

Pérez-Rodrigo C, Gil A, González-Gross M, Ortega RM, Serra-Majem Ll, Varela-Moreiras G, Aranceta-Bartrina J. Clustering of Dietary Patterns, Lifestyles, and Overweight among Spanish Children and Adolescents in the ANIBES Study. Nutrients, 2016;8(1,11):1-17; doi:10.3390/nu8010011



Coordinated by:



With the participation of













**Scientific Committee** 

- Prof. Javier Aranceta-Bartrina MD, PhD, Chairman of the Scientific Committee of the Spanish Society of Community Nutrition (SENC), Clinical Director of the Spanish Foundation for Nutritional Research (FIN) and Professor of Community Nutrition at the University of Navarra
- Prof. Ángel Gil, PhD, Chairman of the Iberoamerican Nutrition Foundation (FINUT), Director
  of the BioNit Scientific Group and Professor of Biochemistry and Molecular Biology at the
  University of Granada
- **Prof. Marcela González-Gross, PhD**, Vice President of the Spanish Nutrition Society (SEÑ), Head of the imFine Research Group and Professor of Sports Nutrition and Exercise Physiology at the Technical University of Madrid
- Prof. Rosa M<sup>a</sup> Ortega, PhD, Director of the VALORNUT Research Group and Professor of Nutrition at the Complutense University of Madrid
- Prof. Lluis Serra-Majem, MD, PhD, Chairman of the Spanish Foundation for Nutritional Research (FIN), Chairman of the Spanish Nutrition and Food Sciences Academy (AEN), and Professor of Preventive Medicine and Public Health at the University of Las Palmas de Gran Canaria
- Prof. Gregorio Varela-Moreiras, PhD, Chairman of the Spanish Nutrition Foundation (FEN), Director of the Nutrition and Food Sciences Research Group (CEUNUT) and Professor of Nutrition and Bromatology at CEU San Pablo University of Madrid

#### **Technical specifications of the ANIBES Study**

**Design:** Representative sample of the resident population in Spain (excluding Ceuta and Melilla) **Sample:** Individuals aged between 9 and 75 years old who live in municipalities with more than 2,000 inhabitants

**Universe:** 37 million inhabitants

Final sample: 2,009 individuals (2.23% error and 95% margin of confidence)

Random sample plus boost: 2,285 participants\*

\*Boost in the sample size was considered in order to obtain a correct representation

The final protocol of the ANIBES scientific study was previously approved by the Clinical Ethics Committee of the Autonomous Region of Madrid (Spain).

More information: FEN – ANIBES press office

Teresa del Pozo Tel. 91 590 14 37 | 661 672 019 tdelpozo@torresycarrera.com