



PRESS RELEASE

Madrid, 21st September 2016

The scientific journal *Nutrición Hospitalaria* publishes the scientific study “Macronutrients contribution from beverages according to sex and age: findings from the ANIBES Study in Spain” conducted by the Spanish Nutrition Foundation (FEN)

The ANIBES Study analyzes the contribution of macronutrients from beverages

- **As for the contribution of non-alcoholic beverages to carbohydrates intake, though no differences between sexes were found, some differences were observed in certain age groups**

The scientific journal [Nutrición Hospitalaria](#) recently published the research “Macronutrients contribution from beverages according to sex and age: findings from the ANIBES Study in Spain”, conducted and coordinated by the [Spanish Nutrition Foundation \(FEN\)](#) and whose goal has been to evaluate the contribution to beverages macronutrients intake accurately, both alcoholic and non-alcoholic, in a representative sample among the Spanish population.

More specifically, the study analyzes the contribution of beverages to the total intake of proteins, lipids, carbohydrates, sugars, fiber and alcohol of the daily diet. Taking into account that seasonality in the consumption of beverages is very important, the fieldwork was performed from September to November, a period in which beverage consumption is more stable.

“As for the contribution of non-alcoholic beverages to carbohydrates intake, though no differences between sexes were found overall, some differences were observed in certain age groups. Therefore, carbohydrates contribution was much higher in younger populations. More specifically, the highest contribution from the non-alcoholic beverages to carbohydrates intake was observed in adolescents, where the total carbohydrates intake from beverages was $11.97 \pm 11.26\%$ for men and $13.77 \pm 10.55\%$ for women”, according to **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.

“As for children aged 9-12 years, carbohydrates intake from non-alcoholic beverages was $10.91 \pm 9.49\%$ for boys and $9.46 \pm 8.83\%$ for girls. In comparison, the lowest contribution of this macronutrient from beverages was observed in adults ($9.01 \pm 9.84\%$ for men and

With the participation of:



7.77 ± 8.73% for women) and in the elderly (4.22 ± 6.10% for men and 4.46 ± 6.56% for women)", continues Prof. Varela-Moreiras.

"Within the non-alcoholic beverages group, sugared soft drinks subgroup contributed 5.07 ± 8.19% of total carbohydrates for men aged 9-75 years and 4.17 ± 7.30% for women in the same age group. Juices and nectars were the following subgroup with a higher carbohydrates contribution in the total population (3.06 ± 5.71% for men and 2.76 ± 5.02% in women)", affirms Prof. Varela-Moreiras. Other non-alcoholic beverages subgroups represented a much smaller contribution to carbohydrates intake.

Sugar

A similar trend than the carbohydrates one was observed for sugar. According to Prof. Varela-Moreiras, "the highest contribution of sugars from the non-alcoholic beverages was observed in adolescents (28.13 ± 24.17% of total intake of this macronutrient for men and 29.83 ± 21.82% for women). In child population, the contribution was 23.14 ± 19.00% for children boys and 19.77 ± 17.35% for children girls. On the other hand, as for adults, this amount was 20.42 ± 20.35% for men and 16.95 ± 17.76% for women. In the elders age group, sugars contribution from beverages was 9.97 ± 14.63% for men and 9.33 ± 12.86% for women".

On the other hand, as for alcoholic beverages, the contribution of macronutrients to the total diet is low for carbohydrates and sugar. The main contribution of this group, as expected, is alcohol, being higher than from low alcohol content beverages (over 90%) and higher in men than in women.

Fiber, lipids and proteins

The contribution by beverages (both non-alcoholic and alcoholic) to proteins, lipids and fiber intake within the ANIBES Study could be considered as not very relevant when compared with previous analyzed macronutrients.

"Data from the study indicates that fiber is basically contributed by juices and nectars (men 0.53 ± 2.02% and women 0.44 ± 1.58%) and in a much lower proportion by energy drinks (men 0.04 ± 0.59% and women 0.05 ± 0.72%)", pointed out Prof. Varela-Moreiras.

"Regarding the contribution of proteins and lipids from beverages, there were differences between age and sex, but the amount contributed to the diet for these beverages groups is not relevant. More specifically, in relation to proteins, the group of non-alcoholic beverages was 0.93 ± 1.96% for men and 1.42 ± 2.54% for women, and regarding alcoholic beverages with low alcohol content, it was 0.49 ± 1.06% for men and 0.23 ± 0.62% for women. The contribution to lipids intake from the group of non-alcoholic beverages was 0.20 ± 1.38% for men and 0.48 ± 1.69% for women", remarked Prof. Varela-Moreiras. Alcoholic beverages did not contribute to the intake of this macronutrient.

Contribution of beverages to the total daily energy intake

According to the data from other research included in the ANIBES Study, "non-alcoholic beverages accounted for 2.9% of the total energy intake. As for alcoholic beverages, this figure was 2.3%, showing a lower contribution to energy intake in both cases. Within the non-alcoholic beverages group, the subgroup composed of sugared soft drinks

Coordinated by:



With the participation of:



Spanish Nutrition Society (SEIN)



Spanish Society of Community Nutrition (SENC)



Spanish Foundation for Nutritional Research (FIN)

ASEN

Asociación de Estudios Nutricionistas
Nutrition Studies Association (ASEN)



Improvement of Health by Fitness, Nutrition and Exercise Research Group

contributed 2.0% to the total energy intake (36 kcal/day out of 1,810 kcal/day), followed by juices and nectars, which contributed 1.3%”, concludes Prof. Varela-Moreiras.

What is ANIBES

The ANIBES Study is a cross-sectional research coordinated by the [Spanish Nutrition Foundation \(FEN\)](#) that gathers anthropometric data, macronutrients and micronutrients intake and their sources, as well as the level of physical activity and socioeconomic data in a representative sample of the Spanish population composed of 2,009 individuals aged between 9 and 75 years old.

Ruiz E, Rodríguez P, Ávila JM, Valero T, del Pozo S, Varela-Moreiras G, on behalf of the ANIBES Research Group. Macronutrients contribution from beverages according to sex and age: findings from the ANIBES Study in Spain. *Nutr Hosp*, 2016;13:33(3):52-59; doi:10.20960/ nh.317.

Scientific Committee of the ANIBES Study

- **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 Associate 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^a Ortega PhD**, Director of the VALORNUT Research Group and Professor of Nutrition at the Complutense University of Madrid
- **Prof. Lluís 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

Coordinated by:



With the participation of:





Technical specifications of the ANIBES Study

Design: Representative sample of the resident population in Spain (excluding Ceuta and Melilla)

Total sample: Individuals aged between 18 and 64 years old who live in municipalities with more than 2,000 inhabitants

Universe: 37 million inhabitants

Final sample: 2,009 individuals aged between 9 and 75 years old. For this study the sample was of 1,665 individuals aged between 18 and 64 years old (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).

For more information:
FEN – ANIBES Press Office

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

Coordinated by:



With the participation of:



Spanish Nutrition Society (SEN)



Spanish Society of Community Nutrition (SENC)



Spanish Foundation for Nutritional Research (FIN)



Nutrition Studies Association (ASEN)



Improvement of Health by Fitness, Nutrition and Exercise Research Group

>>>