NUTRITION & LABELING. A CRITICAL ISSUE TO BE FACED BY FUTURE HEALTH GRADUATES

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Abstract
For more than 40 years, social justice has been at the core of Spanish’s national health policy and so, health care services have become essentially free. But now, public sector seems to be unaffordable across Europe and the authorities are overwhelmed by a new challenge:

- On the one hand, citizens have the right to receive high-quality public services,
- On the other hand, the sustainability of the public sector is in doubt.

In this context, The European Commission firmly warns the population that chronic diseases (for instance, cardiovascular diseases, stroke and type-2 diabetes) are responsible for 87% of deaths occurring in Europe. Many of them are preventable just by avoiding smoking or alcohol abuse, discarding junk food and taking half an hour of exercise a day. It is also clear that diet-related diseases and those based on alcohol abuse smoking and lack of activity are the biggest killers in the first world. This is a global problem and those diseases do cost millions of dollars/euros/pounds to develop societies.

All these facts have sparked off an intense debate on self-care. For example, the European Institute for Science, Media and Democracy (EISMD), with the support of the European Union, has launched a macro-survey to find out the opinion of European citizens with regard to chronic diseases, and this is one of the four questions from the survey: "Should health care be provided to everyone for free, despite their choices in life-styles?"

This is a tricky question since it does look like all the responsibility of being healthy is only held on consumers; however, there are other features to take into account:

- First, fast food, which has taken over the whole first world. And the big brands, so powerful all around the world.
- Second, supermarkets and their big related companies. The food that they used to provide was largely fresh and local; now, most of the food is mainly processed and is full of all sorts of additives.
- Third, portion size: this is clearly a massive, massive problem. So is labelling. Consumers strive to get reliable nutritional information from labels but, in most of the cases, this is an impossible mission.
- And lastly, Governments, which are supposed to be the guarantors of population welfare. Unfortunately, they don’t behave in such a way on many occasions.

Consequently, there is a bunch of features in which health and education authorities and workers can take action in to reduce the incidence of chronic food-related diseases. Regarding labelling, not only should accurate nutritional information be available for consumers, but some educational interventions also need to be launched. The present work display a research project with the aim of preparing undergraduates in health-related issues (from Grades in Pharmacy and Biomedicine) to study the influence of labelling on the food chosen by the population as well as the reliability of labels according to contrasted health parameters.

Keywords: Innovation, nutrition labelling, healthy food, life-style.

1 INTRODUCTION
The “II Plan Propio de Docencia” from the University of Seville has provided an opportunity for most of the faculty of this University to improve their training and gain experience in innovative teaching techniques. The target has been to improve the quality of the imparted teaching to achieve a high
degree of excellence. These experiences have been framed within the new approved curricula, which imply a need to adapt them to the new Quality System and the accomplishment of new challenges. [1]

The educational system of the new curricula involves improving and implementing processes for the acquisition by our students of highly-valued competences. Thus, the learning process will lead to an improvement in the professional development of the undergraduates in a way that guarantees their future inclusion in the labor market. In addition, the participation and involvement of motivated faculty is required so as advance in new innovation projects. To this end, institutional support to these new methodologies is needed and fortunately, some economic backing strategies are collected in the "II Plan Propio de Docencia" from the University of Seville.

The purpose of the authors is the creation of new teaching-work projects, not only from an individual perspective of improvement, but also articulating interdisciplinary networks of teacher collaboration and creating a shared work space. Thus, the foundation of a group of university professors has triggered the articulation of different annual projects of innovation and scientific dissemination aimed at university students of degrees in science for their preparation for excellence. [2] In these projects, students are involved in the participation in scientific and dissemination activities that favour the development of a critical thought and their training as future experts in various fields, capable of contributing to a scientific vision of everyday reality. These extracurricular activities have been used as a working tool in a shared dissemination platform: the blog created ad hoc by professors from the Universities of Seville and Huelva has reached almost 5000 visits so far. [3] The latter online medium allows the student to become a science information source, articulating as well adequate communication skills depending on the social interlocutor to whom it is addressed.

This work proposes the consolidation of a faculty leading group in innovation, with precedents set in previous interdisciplinary collaborations such as the project "Dissemination of science in society. Research Seminars Addressed to University Students of Experimental Sciences" funded by the University of Seville ("II Plan Propio"), in which a deep discussion on "Scientific Dissemination: Toward a Deep Understanding of Our Reality" was undertaken.

With this background and having been the previous experiences enriching and positive for both, educators and undergraduates, it is aimed to launch the "II Conference on Dissemination of Research for Students of Experimental Sciences", being in this edition focused on "Myths and Truths about Labelling and Highly-Added-Value Scientific Terms". In this way, the student will be involved in obtaining accurate scientific information on consumer goods and developing their critical thinking against the widespread "half-truths" related to health, environment and personal care. This project is intended for students so that they would acquire the necessary skills to become accurate sources in science dissemination.

A critical issue: Nutrition & Labelling.

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2 METHODOLOGY

This project has been designed for students from the Universities of Huelva and Seville, with diverse academic degrees such as Industrial Chemical Engineering, Pharmacy, Double Degree in Pharmacy and Optics and Optometry, Chemistry and Degree in Basic and Experimental Biomedicine.

The objectives proposed with this project can be summarized as follows:

1 Students are to develop specific skills for research on scientific topics, specifically on the labeling of consumer goods and those pseudo-scientific terms used as advertising claims.

2 They are to analyze advertising related to consumer goods and develop the ability to select useful bibliography. It is also intended for them to become familiar with the resources available at the Universities of Huelva and Seville through the REBIUM (Network of University Libraries).

3 They are to archive and publish the results of this conference in the form of a poster, not only in idUS (a storage room of the University of Seville open to the national and international scientific community) but also by means of publishing a book of the activities developed. In such a way, the participants are expected to increase their skills in terms of presenting results, carry out this process in an attractive and rigorous manner and become good communicators and future advocates for the diffusion of Science.

2.1 Topics to investigate

In this section of the project, it will be proposed that students from different college careers such as Pharmacy, Education Sciences and Environmental Sciences help to dismantle the myths and truths behind:

- Food labeling for the general public or for selected sectors of the population such as athletes (drinks and energy foods), the elderly, children, middle-aged women, etc.
- Generic versus brand name drugs.
- Transgenic and organic foods
- Terms with added value related to health, beauty and environment and personal and domestic hygiene.

Teachers of different subjects will request from their students voluntary participation, expecting the participation of around 300 students from several centers and universities, for the implementation of the conference for Diffusion and Research. The development of the conference will have the following structure:
• The constitution of work teams of 2 or 3 students is suggested, although one-solo person teams will be accepted as long as issues of interest are addressed.

• The guiding thread will be the search for news related to the myths and truths in labeling, searching for recent information in different media, related to a greater or lesser extent to the different areas of knowledge. Each team will select the topic that finds most interesting and is the closest to their academic / professional training. The teams will prepare a report detailing the scientific basis of the chosen topic.

• Subsequently, the team will elaborate an explanatory poster for the dissemination of the main scientific bases on which the chosen news is centered; the poster is to be understood by non-specialized public.

• The posters will be published on a traveling scientific exhibition by different educational centers so that pre-university students can be attracted by the degrees in Sciences Experimental.

• The best presentations of each specialty will be chosen by votation. Official certificates of participation in these Conferences will be issued as well as other ones to the best works presented.

• Finally, the statistical data of the achieved participation will be collected, edited according to the degree, university, and center and topic. With this information, instructors will be able to reflect on the general interests of their students and their abilities to clearly express scientific concepts related to everyday events.

3 RESULTS
The main activities to be developed are summarized below:

a) September 2017
   1 Elaboration of informative posters about the Conferences.
   2 Dissemination of the Conference among students of different degrees.

b) October 2017
   3 Presentation of the selected theme for study.
   4 Elaboration by the teachers of the model template for the posters of the Conferences.

c) February 2018
   5 Presentation of the poster-type communications in the different faculties / schools involved.

d) March 2018
   6 Evaluation of the work done by the scientific committee. Improvement proposals.
   7 Review of work developed by students.

e) April 2018
   8 Congress and election of the best posters.
   9 Issuance of certificates of student participation and award-winning work.

f) May 2018
   10 Meeting of the 9 project teachers for the exchange of opinions and conclusions.
   11 Presentation of the final report of the executed project.

g) June 2018
   12 Publication of the work carried out in book form

4 CONCLUSIONS
In conclusion, we aim that students will be aware how important nutrition and labelling are in their lifestyle. In this paper we are focused on "Myths and Truths about Labelling and Highly-Added-Value Scientific Terms". In this way, the student will be involved in obtaining accurate scientific information
on consumer goods and developing their critical thinking against the widespread "half-truths" related to health, environment and personal care.

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REFERENCES


