



---

## EDITORIAL (English version)

# Controversy in the management of clinical nutrition. The denied is valid now

## **Controversia en el manejo de la desnutrición clínica. Lo negado es válido ahora**

Jose-Ignacio Ulibarri, Antonio Mancha

*Unidad de Nutrición Clínica y Dietética. Hospital Universitario de La Princesa. Madrid. España (jubilados)*

\* Autor para correspondencia.  
Correo electrónico: [jiuliba@gmail.com](mailto:jiuliba@gmail.com) (Jose-Ignacio Ulibarri).

Received 13 january 2019; accepted 8 june 2019.

---

### How to cite this paper:

Ulibarri JI, Mancha A. Controversy in the management of clinical nutrition. The denied is valid now. JONNPR. 2019;4(8):746-52. DOI: 10.19230/jonnpr.2959

### Como citar este artículo:

Ulibarri JI, Mancha A. Controversia en el manejo de la desnutrición clínica. Lo negado es válido ahora. JONNPR. 2019;4(8):746-52. DOI: 10.19230/jonnpr.2959



This work is licensed under a Creative Commons  
Attribution-NonCommercial-ShareAlike 4.0 International License  
La revista no cobra tasas por el envío de trabajos,  
ni tampoco cuotas por la publicación de sus artículos.

### Keywords

*Clinical Undernutrition; Nutritional screening; screening; Nutritional risk; Clinical risk*

### Palabras clave

*Desnutrición Clínica; Cribado nutricional; Screening; Riesgo Nutricional; Riesgo Clínico*

The present text focuses on the management of Clinical Undernutrition (CU) in Europe in the XXI century.

After 30 years devoted to the study, research and debate in Spain to the early detection of undernutrition in the treated patient (which is referred to as Clinical Undernutrition- CU), unfortunately we have witnessed a rejection here in Europe of what in Japan and other Eastern countries has been established in the past 10 years as a reference for the assessment of both



nutritional risk as well as indicator of the prognosis of clinical outcomes in the different medical and surgical specialities.

In 1983, when we began to organize the clinical nutrition in our hospital La Princesa, in Madrid, in conjunction with a valuable team of professionals, we went through an initial stage in order to update the hospital setting including its structure, space and staff, with the main objective of ensuring the best feeding of patients. This led us to celebrate in 1988, the "First Conference on the Organization of Food and Nutrition in the Hospital", attended by more than 300 professionals responsible for the area in 82 hospitals across the country.

Special effort was placed in avoiding any added damage that could be caused during patients' hospitalization (CU) and so we focused our attention in assessing the nutritional status of patients from the moment of their arrival, including their possible causes. We designed a special protocol for assessing the Nutritional State (NSA) (VEN- Valoración del estado nutricional, in Spanish) that entailed a thorough clinical anamnesis with special emphasis on eating habits, physical check-up, including all sorts of clinical and antropometrical techniques as well as a variety of analytical parametres.

This NSA was applied to those patients that seem to suffer some kind of undernutrition or were at nutritional risk. It provided us of any information regarding any dysfunction of the organs or systems caused by the disease or its treatment until that moment, by means of estimating any reduction in parametres. However, it was not fast enough to monitor the changes occurring during the patient's hospitalization as a consequence of the treatment. We were unable to foresee if there was actually any improvement or worsening of the condition. Such a highly complex protocol (more thorough and precise than SGA) ended up being slower than the changes occurring during the clinical evolution of the patient, and hence we were left without the information needed, that is: **To closely monitor the clinical course in order to be able to apply the necessary adjustments in due time.** As a consequence, another strategy was to be found.

We decided to select those parametres which proved to be the most sensitive, fast and indicative among all used by NSA, based on observational studies. This left us with only those parametres that would ensure our objective, that is, to immediately detect and asses any changes experienced by the patient, either as a consequence of the illness or its treatment, considering also the response to the nutritional support. All anamnesis, antropometric and functional parametres were discarded one after the other; only the analitical parametres were left to be tested. Therefore, we set off to study those ones that already existed in the usual clinical check-ups.



The most sensitive parameters were plasma concentration of albumin, total cholesterol level and total lymphocyte count.

And with those we designed a practical, sensitive and efficient strategy for NUTRITIONAL RISK SCREENING that was capable of alerting us (in the internal environment, which is the liquid that surrounds the cell, which in some way has become deficient in nutrients) of any risk of somatic undernutrition.

We soon realized that we were actually assessing the NUTRITIONAL RISK since we were directly measuring any risk or changes at the homeostasis level. That was when the term was introduced as a way to address the complexity of illness + treatment + complications in the clinical setting.

Once statistically and epidemiologically validating our system, it was published in different scientific magazines and congresses of our field. Sixteen years ago we even managed to present it to the Spanish Health Minister, different Communities and numerous hospitals. However, it is still ignored by our highest scientific entities and, as a consequence of that (being the latter the official referents), by most of the academic and administrative entities that we approached (since the latter ones are considered as the authorities in the field).

To summarize the situation related to CONUT, we would like to mention that shortly before our retirement we had come to the solid conclusion that our method for the **prompt detection of nutritional risk was simultaneously showing us the development of clinical risk, an updated follow-up of the severity of the condition as well as integrating the detected homeostatic changes at the level the liquid that surrounds the cell; this being the site for nutrition of the cell itself**. Furthermore, it was capable of offering a highly predictive prognosis of what would eventually happen if no attempts were taken to correct that risk in due time, either by means of changing the kind of nutritional support, or modifying the therapeutic protocol in order to effectively adjust them to the needs of the patient.

Back then our initiative had coincided with that proposed by ESPEN in Europe which introduced purported nutritional screening systems, after turning a deaf ear to the specific request by OMS that only pre-diagnostic data should be used in the design of effective screening methods. Although ESPEN does include symptomatic data (as they can be useful for diagnosis), they are not so for preventing undernutrition, as required in the definition of screening that those same authors pretended to implement.

They claimed that the screening method had to be effective at selecting those conditions that would positively respond to nutritional support. However, that was another failed attempt at preventing undernutrition. In their proposal to the European Council (Appendix to



**Resolution RESAP(2003)3**, they state that in order to validate a screening method, the latter must necessarily be effective at justifying the use of nutritional support. With this statement **1,1.ii**, they claimed that they were able to identify those patients that would benefit from nutritional support and by doing so the method, instead of being used for risk screening, it turned into a diagnostic procedure. Therefore, all preventive potential was lost.

Furthermore, the scientific Society which is regarded as pioneer in the study of undernutrition promotes the idea that this serious condition is related to illness. We cannot agree with that because that approach does not take into account other causes even more pervasive than the illness itself, such as some of the treatments can be, especially the most aggressive ones, which are normally applied in hospitals.

This approach ignores the fact that during hospitalization the incidence of Clinical Undernutrition is normally doubled or tripled as a consequence of undernutrition related to the illness (produced by the therapeutic procedures), including hospitalization itself. These added complications cannot be prevented by the proposed methods because by adding nutritional support we are not addressing the root cause which is not the lack of nutrients but a metabolic alteration produced as a consequence of the treatment, which prevents nutrients from successfully reaching the cells. There seems to be a distorted view that only benefits those who fund scientific events and research.

On the other hand, by putting all the focus on the specificity of the screening methods, they fail to require the necessary sensitivity of the method in order to detect the condition in due time from its very origins. This way it seems impossible to monitor the clinical course at unison with the rapid changes caused by the disease and the therapy, including the nutritional support.

To summarize, after 15 years of ESPEN promoting and recommending varied procedures as screening systems for the treatment of clinical undernutrition, it is evident that they **are not authentic screening tools** because they are based on symptomatic data and therefore they are useless at preventing undernutrition. They are not even reliable diagnostic procedures, rather incomplete and imprecise, though highly expensive when it comes to staff, time and uncomforted for the patient.

For obvious reasons they have not yet been successfully implemented in any European country and hence the problem still remains, with a cost of around three thousand million of euros / year, as stated by ESPEN. This without mentioning the fact that, by being less sensitive methods, they are only capable of detecting a certain amount of preventable cases that could be detected with a truly effective screening. Instead, they fail to consider the presymptomatic period, which could have been appropriately used had the analytical parametres been applied



and by which it could have been possible to address the causes on time as well as to decrease the amount of affected patients and the seriousness of disease, complications, comorbidity, cost and mortality.

On the contrary, the method that we designed at the end of XX century at La Princesa Hospital of Madrid for the control of nutrition in the cellular setting (CONUT) has only been implemented at a very low pace in Spain since it has witnessed a constant questioning and restrains whenever it was attempted as the nutritional risk screening method. In the meantime, there has been a steady increase in research surging mostly from Asian literature and papers that were based in this method as a Prognostic Index of Nutritional Risk because they realized that it was capable of detecting the risk as well as forecasting the future of the patients under study. We would also like to mention further uses in different pathologies and therapeutic procedures, all of which can effectively be controlled over a few days and, in a totally automatic manner, be able to monitor the clinical course of each patient in a personalized way without any further need of exploration or hassle to him, and at no extra cost to the Health System.

Table 1.

COST OF CLINICAL UNDERNUTRITION					
Parámetro	Population	Discharges 1000 hab	Discharges	Cost €	Increase 50-60%
Europe*	503,824,373	160.7	80,964,577	120x10 <sup>9</sup> €	192x10 <sup>9</sup> €
Spain	46,766,403	102.5	4,633,086	38,588 mills	61,741 mills
Madrid	6,498,560	138	681,194	5,673 mills	9,077 mills

*“Malnutrition can be prevented and treated and we as nutrition experts have a mission to do something about malnutrition in hospitals, care homes and communities”. October 2009 Prof. Ljungqvist, President of the ESPEN*

Regarding the economical aspect, our results coincide with those carried out in Spain by Pérez de la Cruz and the average taken from different international studies, where all show an average of 60% increase in the cost for the treatment of undernourished patients, as compared to the normally nourished ones.

Hospital Undernutrition in Spain has potentially been stated, according to SENPE's study called PREDYCES, at least 1.143 million Euros (XXXI SENPE Congress 2016). This, multiplied by the 16 years since our first proposal of our screening method, can be summarized in the absurd cost of 18.300 million Euros.

The budget for Proyecto CONUT was introduced by Dr. García de Lorenzo, who was the SENPE President at that time, to the Health Ministry in 2002 as an efficient tool for the



early detection of undernutrition in Spain. It was presented to public contest and it was estimated in 186.746 € with a limit of six months to be implemented since its approval.

The Project was rejected by the Ministry due to the fact that it affected all the Autonomous Communities. SENPE'S Science and Education Comitee decided not to back it and went on to close the team that had been created for implementing the VEN and Nutritional Screening protocols.

**In summary**, the method we have designed for the early detection of nutritional risk is a valuable one based on its objective, simplistic, effective, sensitive qualities as well as its capacity for prediction and monitoring.

There is an evident contradiction (even a deontological connotation, if we wish), between **our objective: "to predict the risk in order to prevent clinical undernutrition"** and the method proposed by ESPEN, all based on the diagnosis of already occurred events (which is not in line with the criteria settled by OMS).

We still consider our method to be a way better option even when though it has been negated by well-known Scientific Societies worldwide, whose protocols seem to be more aimed at benefitting the economic interests of a few, instead of having the professionals and their patients in mind.

### Conclusion:

We think that SENPE could bring a solution to the problem in Spain, which is primarily due to the ineffective screening methods (proposed by other European countries based on the protocols stated by ESPEN over the past 15 years) and secondarily caused by the lack of Dietitians in our hospitals. For that purpose, our Society should consider the following attempts:

- . Promoting CONUT as a method for an automated system that can successfully filter and immediately assess any nutritional and clinical risk right from the presymptomatic stages, and that can effectively cover all patients that require clinical tests.

- . Following ESPEN suggestions to confirm any undernutrition that may require nutritional support with simple procedures, for those patients where CONUT risk is 2 or above.

- . Whenever the deficiency cannot be confirmed, a more specific diagnostic method should be used for assessing the ethiopathogenesis, and this should be carried out by the professional in charge.

- . For those patients with a high CONUT risk (>8), the whole clinical Evaluation should be directly carried out.



---

. Suggest an active and continuous control of nutritional / clinical risk of the patient during all the clinical stay to properly **monitor nutritionally and clinically**, until the end of all treatment.

All this would determine an improvement in the quality of assistential value provided to patients, while reducing morbidity, mortality, re-hospitalization and assistential costs, thanks to implementing, at the same time, an automated system for the control of the clinical course that is still unknown in Europe. In addition, all the professionals would benefit from this innovative tool since it will help them at the moment of taking decisions, and even the National Health System will be benefitted by being able to successfully cut down on all assistential and administrative costs.