



## Letter to the Editor

### Letter to the editor concerning the article: reflections on a seminal article on malnutrition published in the *British Journal of Nutrition*, 2004

Dear Editor

In the article 'Reflections on a seminal article on malnutrition published in the *British Journal of Nutrition*, 2004' from Dr. Marinos Elia, accepted as pre-proof DOI '10.1017/S0007114522001155', authors talk about usefulness of the Malnutrition Universal Screening Tool (MUST).

Concerning this tool and its usefulness, we acknowledge the great impact it has had worldwide. However, we think that referring to MUST as a 'screening' tool is conceptually inappropriate if we accept WHO's description of screening, which requires the use of pre-symptomatic parameters<sup>(1,2)</sup>. The application of anthropometric variables, such as loss of weight in the last 3–6 months or BMI, implies arriving late to identifying the problem and would more accurately refer to diagnosis, rather than screening, of malnutrition that has been for a long time present and has already harmed the patient. Moreover, this tool operates both with objective and subjective parameters.

We agree with the authors of this paper that further work must be done in relation with care on the nutritional field. Nevertheless, we believe that intervention should be performed at the beginning of the process, identifying promptly nutritional risk and paying special attention to prevention, not waiting until the surge of symptoms with diagnostic methods such as MUST tool, no matter how simple and useful they are.

Therefore, knowing that every person is at risk of malnutrition when becoming ill, we recommend the use on a systematic basis of objective and easily applicable parameters that permit the identification of risk even before the appearance of symptoms.

In the 1990's at Hospital Universitario de La Princesa (Madrid, Spain), we searched for a way to alert on nutritional risk before the appearance of symptoms. Hence, we drove a series of observational studies, with the aim of selecting the most sensible parameters to identify this risk. Finally, anthropometric parameters were excluded when results were obtained and the most useful turned out to be three parameters which are commonly employed in clinical practice: albumin, total cholesterol and total lymphocyte count. These parameters have proved to be in good association with patient's nutritional status<sup>(3)</sup>.

Applying these three parameters, we elaborated an algorithm which, implemented in the computer system, could directly alert about the level of risk in adults and elderly<sup>(4,5)</sup>. This tool, which was named CONUT® was validated as a nutritional risk prognostic indicator initially. Years later it was subdued to re-validation, proving once again its usefulness<sup>(6)</sup>. As time has passed, we have realised that it analyses not only nutritional but also clinical risk

and prognosis, due to the fact that it identifies the nutritional risk of the cell stemmed from illness and treatments, which is reflected on clinical risk of the patient. Many articles have proved results in accordance to this in many environments, including cancer<sup>(7)</sup>, CVD<sup>(8)</sup> and COVID-19<sup>(9)</sup>.

Referring to time and ease of use, we would like to highlight that MUST requires 3–5 min of experienced professionals, limiting it to less than 1 min with the latest modifications, which is certainly a good improvement. However, CONUT® requires even less time and does not require previous learning, something that translates positively in patient care considering that this time can be applied to a more thorough diagnosis and treatment. In the case of CONUT®, the computer algorithm evaluates and quantifies automatically the clinical risk of the patient, translating into the final results prognosis.

Changing a diagnosis aim for prevention one can improve the poor clinical results obtained in the nutritional field so far, amending the criteria of the Scientific Societies that have until now focused on those patients which require nutritional support because of their critical status, selecting tools according to this touchstone.

It is well known that clinical malnutrition depends only partly on nourishment, and that it is the metabolic changes driven from illness and treatments, which cause the dystrophy, atrophy and death of those cells which do not receive enough nutrients. This effect is something that can be prevented if acting on time when knowing there is a risk for its surge, and not waiting for it to appear, moment that can be already late. This prevention is based on controlling homeostasis of the cell through blood plasma.

We would like to end emphasising that, just like Dr. Marinos Elia accurately expresses in his article, detection and action on malnutrition is basic for an adequate treatment and follow-up to guarantee quality care. Considering CONUT® index has great usefulness in detection, quantification, prognosis and monitoring of the risk derived from illness and treatments, we believe it's inclusion should be considered in the initial evaluation and follow-up of all patients.

In conclusion, patients, Healthcare Services and all of us who attend nutrition in clinical environments would benefit from paying more attention to trophic disorders consequence of illness and treatments in everyday clinical practice. As an old saying tells: 'prevention is much better than cure', so a radical twist should be considered on our way of focusing the problem, trying to act thoroughly and promptly on nutritional disorders of the cell, instead of skimming over it and acting when it's late. We

should also consider talking from now on about 'Clinical trophopathy' instead of 'malnutrition' to try not to confuse early prevention with treatment<sup>(10)</sup>.

Yours sincerely,  
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There are no conflicts of interest.

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