

## EDITORIAL

### It began with citrus

May 20, 1747 is an important milestone in the history of medicine (1). On this day, James Lind, surgeon of HMS *Salisbury*, started a series of experiments to clarify which of the treatments under discussion at that time would help against scurvy. At that time scurvy was widely distributed among seafarers. He allocated of twelve scorbutic patients to one of six treatment groups to receive various treatments in addition to the normal diet. The additional treatments were a quart of cider daily, twenty-five drops of vitriol (sulfuric acid), six spoonfuls of vinegar, half a pint of sea water, a spice paste that included garlic, mustard and peru balm, or two oranges and one lemon. The condition of the two sailors who ate the citrus fruit improved rapidly, whereas from the other treatments only the cider showed a slight effect. At the time, Lind could not know that the success of his treatment was caused by ascorbic acid; it would not be until the 1930s when it was isolated by Szent-Györgi.

Lind's findings, as published 1753 in his comprehensive 'Treatise of Scurvy', is the first example of a systematic study investigating the influence of nutrition on health and disease, the first clinical trial in nutritional medicine. Modern nutritional medicine is a broad field covering various aspects of nutrition and medicine. Today research is directed to the constituents of nutrition as well as total diets and their associations with both health and diseases, in the short, medium and long term. But the field is even more complex as the inter-

action of nutrients and different levels of nutritional status and individual genetic variations may influence outcomes.

Interest is firstly focused on the constituents structurally well-known over years such as carbohydrates, lipids, proteins, and minerals and among them particular attention is devoted to lipids. More recently studies have included the quantitatively minor, and still less intensively studied, constituents from different chemical classes, such as, e.g., phenolics as antioxidants or/and phytoprotectants, of which the protective compounds found in green tea are a typical example.

In modern medicine, there is practically no medical specialty in which nutrition is not relevant. Nutrition is of utmost importance in the area of internal medicine with the increasing problems of obesity and diabetes and their complications as well as various fields of oncology. Increasingly the response to and recovery from surgical intervention is seen as dependent on nutritional status and therapy. Additional examples of specialty areas where nutrition is making significant contributions include gastroenterology, e.g., with problems of inflammatory bowel diseases and gut microbiota, pediatrics with questions related to parenteral nutrition and more recently of the neuromodulatory effects of nutrition have been increasingly explored by neurochemists and neurobiologists. For dermatologists food allergies have been increasing in prevalence in recent years. The '-omics' of our days are further highlights of nutritional medicine: nutrigenomics, metabolomics and, increasingly studied, lipidomics are typical examples. Finally, we should not forget that the importance of nutrition has caught the imagination of the general public and there

is now an immense global market for nutrition supplements. Here further research is required to give an answer to the questions that are so far mostly unanswered: 'what are the risks and benefits of supplements for the consumer?'

As varied as the areas of topics covered by nutritional medicine, so are the many avenues available for publication. In most cases, the influence of nutrition on health and disease is included, albeit sometimes rather uncomfortably, in purely medically oriented journals, with only a few more recent journals emphasizing an interdisciplinary approach to the field. In this last category we are proud to include our new journal '*Nutrition and Medicine*' (NUME), covering the broad spectrum of all fields of nutritional medicine. It will be not only directed to nutrition/disease problems of industrial countries but also include topics of relevance to the Third World reflecting the associations of under- and over-nutrition and with health and disease. Finally, we will not forget the intensively discussed aspects of nutrition as a treatment modality in medicine. It seems to be modern, but it isn't; as we have the advice of Hippocrates in his aphorism 'let thy food be thy medicine and thy medicine be thy food' dating back to the 4<sup>th</sup> century BC. Then in the 12<sup>th</sup> century Myoan Eisai, literally known as 'Zen master Eisai', recommended green tea as a remedy.

For this new journal we have deliberately selected an Open Access strategy, as we are convinced that authors should retain the copyright to their intellectual efforts while the wider scientific and lay communities will benefit from rapid dissemination of peer-reviewed scientific information. With Würzburg University Press (WUP) we have an effective non-profit organization as publisher in the background

to support the new journal. On this occasion we would like to express our sincerest thanks to all colleagues from WUP for their commitment demonstrated in the course of launching '*Nutrition and Medicine*' (NUME).

We thank our readers in advance for their confidence in our work.

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- (1) Carlisle, Rodney. *Scientific American Inventions and Discoveries: All the milestones in ingenuity – from the discovery of fire to the invention of microwave oven*. Hoboken, NJ: Wiley; 2004. p 393.