

# Clinical nutrition enters a new era

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A remarkable strengthening of nutritional prevention,<sup>1</sup> diagnosis<sup>2</sup> and management<sup>3</sup> has taken place recently,<sup>4,5</sup> for several reasons.

## A new nutritional science

The first reason is that there is a new nutritional science in progress that gives a stronger imperative to discovering what patients eat and to providing tools to achieve a more acceptable change in food intake.<sup>5</sup> Particularly, the measurement of food variety as a score<sup>6,7</sup> readily identifies problem eating and, in a cultural context, encourages diversification of intake with several health benefits. The phytochemical composition of plant foods, and its relevance to health makes an added case for a food based approach to clinical nutrition and to dietary guidelines.<sup>8,9</sup> We are beginning to think about phytochemical deficiency disorders, like inadequate phytoestrogen intake in menopausal women, or inadequate non provitamin carotenoid intake (eg. lycopene, lutein and zeaxanthin in maculopathy).<sup>10</sup>

## New nutrient functions

The next reason is that there are new functions being described for known essential nutrients, such as, folic acid, vitamins B<sub>6</sub> and B<sub>12</sub> in preventing homocysteinaemia and macrovascular disease; the role of vitamin K dependent proteins in macrovascular disease<sup>11</sup> and in cognitive impairment; the role of selenium in myocardial and thyroid function and in spermatogenesis.<sup>12</sup>

## Nutritional contributors

Another reason is that an increasing number of health problems are being found to have nutritional contributors, for

example, the menopause, dementia, frailty, immune dysfunction, and ageing.<sup>13,14,15</sup>

## Changing food supply

A fourth reason is that the food supply is rapidly changing. There are new products and new cuisines that are capable of decreasing the disease burden, and, at the same time, with the potential to create new health problems.

Convenience has led to de-skilling in food preparation. People are less able to be discerning about food choice and do not have an understanding of food safety.

Thus, food safety, both microbiological and toxicological, has re-emerged as a major issue for clinicians as health educators, diagnosticians and therapists.

Socioeconomic factors also continue to leave some groups in contemporary developed society with unsatisfactory food security — the poor, the homeless, the isolated, and the aged.

## Health promotion through food

Opportunities for this are both promising and pressing, with preferred body composition (fat, lean tissue and bone) and its related health benefits (less obesity, diabetes, cardiovascular disease, cancer, osteoporosis and healthy ageing) being high on the agenda.

Finally, an increasingly ecological view of food and health is emerging, because of the need for sustainability of the food supply and because our own physiology is evidently more environmentally dependent than we thought.

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