

Richard F Walker

International Society for Applied Research in Aging (SARA)

### What's in a name?

I was recently invited by Dr. Paolo Marandola, a respected urologist with special interest in male aging, to contribute a manuscript for a new book he will be editing. The comprehensive publication, sponsored by Giovane Accademia Italiana Antieta (GAIA) Age-Management Foundation, Pavia, Italy, is tentatively entitled *The 'Manifesto' for a Long Life*. It addresses the diversity of issues associated with aging and its management. My contribution was to present some ideas on the evolution of medical practice from the "traditional" to an "anti-aging" approach. I was pleased with the subject because it seems obvious that the orientation of healthcare must evolve from curing disease to promoting wellness if it is to meet the social and economic needs of an ever expanding population of older individuals. In other words, the current reactive treatment approach must evolve to one that is more proactive.

Under the traditional approach, physicians treat symptoms of disease after it occurs. Perhaps patients would be better served if they were offered methods for sustaining health and avoiding disease or at least minimizing its impact on quality of life. This is not to say that the traditional approach to medicine is bad. To the contrary, advances in pharmaceutical sciences have produced drugs that are quite effective in reducing mortality and thereby extending life span. However, these products can also take a toll on patient vitality because suppression of symptoms to slow progression of specific diseases typically disregards secondary effects on the body as a whole. In other words, symptomatic treatments are disjointed and typically ignore holistic or integrated functions of the organism. As a result, they have the potential to cause untoward side effects and also to distort internal order or homeostasis.

In contrast, under the anti-aging approach, practitioners focus their attentions upon subtle aspects of age-related decay of whole body functions. Accordingly, they seek interventions that support and sustain homeostasis whose decline precedes development of intrinsic diseases of physiology and metabolism. In fact, during the past decade and more, this changing approach to medicine has brought a new focus that holds great promise of better and longer lives for human beings. Therefore upon beginning the task of writing, I faced the inevitable difficulty of dealing with the term "anti-aging" as a descriptive adjective for modern medicine. Unfortunately, the term itself is considered tainted by many professionals because it is associated with a history of sensational and misleading claims made by entrepreneurs to sell ineffective and sometimes dangerous nostrums. On the other hand, and despite its shortcomings "anti-aging" medicine has gained popularity and widespread name recognition. Thus, those actively involved in promoting the evolution of medical practice to a health-oriented approach face the conundrum of providing a new and appropriate name that is untainted, accurately descriptive, and yet meaningful to the general public.

Since most new names will be untainted except as representing a field previously tainted by unethical entrepreneurs, the challenge in adopting a new name is to ensure that it be relevant and easily recognized. In considering these issues it became immediately apparent that the commonly accepted name, "anti-aging medicine", is not appropriately descriptive. Taken literally, anti-aging means against aging. Any approach to medical practice that in general is "against aging" would be ineffective and even potentially harmful since aging is an integral part of any organism's life

beginning from the time of conception proceeding to any other time in its existence. All mortal organisms undergo continual, albeit very subtle, reorganization of form and function during every moment of their lives. This process of continual remodeling or change can be subdivided into two major stages. One stage is anabolic or constructive during which time there is a progressive improvement in structure and function. The other stage is catabolic or destructive during which time there is a gradual decay in structure and function. These two major stages of aging include:

- Development, which is the time from conception to sexual maturation, and the other is
- Senescence, which is the time remaining after sexual maturation has occurred until death.

Taken together, these stages constitute the whole process of aging so that clinical interventions intended to compensate for maladaptive age-related changes are required only by those who have passed beyond the stages of young maturity. Accordingly, in contrast to “anti-aging”, a more proper description of efforts to sustain health and vitality beyond maturity would be “anti-senescence” or “longevity medicine”. Both of these terms are accurately descriptive of efforts to sustain youthful health and vitality and thereby extend quality of life to the maximum. However, like anti-aging, anti-senescence has the negative connotation of being “against” something, it is cumbersome and senescence is not commonly used in lay terms. On the other hand, longevity medicine is not sufficiently descriptive to differentiate it from the traditional approach of treating disease. Surely, the use of penicillin resulted in longer life for victims of infection and increased population life span in general. Thus, longevity

medicine does not accurately differentiate the old from new therapeutic modalities.

Age-management recently gained some popularity, specifically through the efforts of Dr. Alan Mintz, CEO of Cenegenics Medical Institute (Las Vegas, NV) who publicly stated that “Cenegenics is not part of the anti-aging movement—nor does it claim to increase longevity or affect aging at cellular levels.” Thus, Dr. Mintz coined an alternative term for practitioners wanting to be cautious in defining their practice while at the same time denying its purpose. Also, age management has the sound of a field in which its practitioners should hold MBA degrees rather than MD’s and at best, it has little name recognition among the general public.

Finally, Dr. Marandola suggested the name “anabiotic” medicine, which at first sounded so much like “antibiotic” medicine that I feared it would invariably be confused as an infectious disease subspecialty. However, the word “anabiosis” which means “return to life” eliminates the negative connotation “anti” while conveying a generally appropriate and positive description of the health-oriented approach to medical practice. Nonetheless, the synonym for anabiosis is resuscitation which implies that treatments would be rejuvenating rather than sustaining of health and vitality. It could be argued that health-oriented therapies will be rejuvenating and resuscitating. There is currently a very respectable journal called Rejuvenation Research (previously named the Journal of Anti-Aging Medicine) whose title takes that position.

After spending much time considering alternatives to “anti-aging”, it seems that despite its shortcomings, no other name conveys the message quite as well and as succinctly as the original. It is too bad that the good guys didn’t find it first.