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THE NUTRI-SPEC LETTER

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From:
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Dear Doctor,

Two months ago you were given the new NUTRI-SPEC DIPHASIC NUTRITION PLAN. This new protocol represents, for your patients who are over age 32, a way to …

TAKE THEM TO AN EVEN HIGHER LEVEL OF PERSONAL POWER AND RESISTANCE TO AGING.

You have learned in the last two Letters that resistance to the aging process is a function of one's adaptative capacity. You have learned further that any particular individual's adaptative capacity is a function of that person's ability to maintain metabolic balance plus vital reserves.

The maintenance of metabolic balance is a concept familiar to all NUTRI-SPEC practitioners. We know there are Five Metabolic Control Systems continuously at work in maintaining the essential functions of glycemic control, normal oxidative metabolism, ideal pH, and the ideal concentrations and movements of biologically active water. We have a testing and analysis system that gives us an individualized therapeutic regimen to optimize each individual patient's state of metabolic balance.

What we introduced two months ago is the second component of adaptative capacity – vital reserves. You have learned that there can be a loss of vital reserves in response to any major stressor. But, we all steadily lose vital reserves with age such that, independent of our state of metabolic imbalance, we can be victimized by any kind of stressor. Furthermore, the stressors that relentlessly take their toll as we age year after year will be of both anabolic and catabolic character.

With a loss of vital reserves we lose enough adaptative capacity that our defenses are weakened. There will, with aging, be an insidious spread of both anabolic and catabolic pathologies throughout our bodies. We suffer the effects of ever decreasing resistance against pathological hyperplasia (anabolic pathology), and against pathological disintegration (catabolic pathology).

Examples of anabolic pathological hyperplasia include:

- tumors
- hypertrophic boney exostoses
- fibrotic deposits in soft tissues
- osteo arthritis
- sclerosis of the vascular system

Examples of catabolic pathological disintegration include:

- muscular atrophy
- osteoporosis
- rheumatoid arthritis
- wide spread oxidative free radical damage (lipid peroxidation (fatty acids) and glycation (sugars)), which is expressed as:

  - oxidative damage to blood vessel walls (which is a precursor to the anabolic hyperplasia of arterial sclerosis)

  - oxidative damage to the genetic material intracellularly (which decreases regenerative capacity and, predisposes to mutation)

  - oxidative damage to the mitochondria of cells (decreasing energetic capacity)

  - oxidative damage to brain cells (leading to senile dementia)

  - oxidative damage to connective tissue throughout the body (a precursor to the anabolic response of cross linking of connective tissue)

In other words, there is both an anabolic and a catabolic component to aging. Or, more accurately, there is a failure of both anti-anabolic and anti-catabolic defense that typifies all aging processes.

Your goal as a NUTRI-SPEC practitioner now becomes one of maximizing each patient's adaptative capacity by not only restoring metabolic balance, but by increasing vital reserves.

Specifically how are you going to increase each patient's vital reserves? For you patients over 32 years of age, your NUTRI-SPEC Diphasic Nutrition Plan will do the trick. The way it works is simply by giving your patients a tremendous boost to their anti-anabolic defenses, and an equally powerful boost to their anti-catabolic defenses, and timing each booster so as to facilitate the normal diphasic diurnal cycle. The supplements you give your patients in the morning are designed to maximize the defense against pathological hyperplasia, and are timed to coincide with the anti-anabolic phase of a normal, healthy (youthful) cycling metabolism. Each nutrient that you give the patients in the evening is a powerful defense against pathological disintegration, and is timed to coincide with what should be the body's own natural surge of anti-catabolic forces.

The critical point for you to have learned from the last two Letters is that the drop in vital reserves as we grow older need not be blamed on such a general and nebulous entity as "the aging process." Rather it can be specifically identified that the mechanism that fails as vital reserves fade away is the loss in amplitude of the normal diurnal cycle.

The closest we can come to the "Fountain of Youth" for ourselves and our patients, is to do everything we can to maintain a high amplitude in our daily diphasic cycle. Last month we gave you four graphs to illustrate the impact of a flattened (decreased amplitude) cycle on a person's health. We showed graphically what can be done with your new NUTRI-SPEC protocol to pump up your patients' daily cycles.

Where do we get this idea to focus on increasing the amplitude of the diurnal cycle to maximize our defenses against Father Time? Nearly 20 years of watching the numbers on hundreds or even thousands of patients undergoing NUTRI-SPEC testing and treatment showed clearly the truth in the formula:

ADAPTATIVE CAPACITY = METABOLIC BALANCE + VITAL RESERVES.

The older the patients were, the less metabolic balance played a role in their adaptative capacity, and the more some unidentified factor was at play. The flat (low amplitude) graphs of their objective test results showed clearly that these people just had no capacity to defend themselves against anything. While their individual test results bounced all over the place, the over-all patterns of metabolic imbalance were extremely resistant to change. It became clear to us, based on our objective evidence, that the primary mechanism of aging was the ever decreasing ability to cycle in anti-anabolic and anti-catabolic defense.

Is there evidence in the scientific literature to support our contention that fading ability to cycle is the primary mechanism behind aging? You betcha:

1. Yin D. Is carbonyl detoxification an important anti-aging process during sleep?. Med Hypotheses. 2000, Apr;54(4):519-22.

This study discusses the importance of maintaining a diurnal cycle to prevent aging. It is pointed out that there is inevitable toxification by biological garbage. This metabolic waste includes a particularly large number of toxic carbonyls, created by free radicals, glycation, and other post translational side-reactions during various stresses and diseases. The accumulation of these toxic substances and their cross linking products leads to the formation of different age pigments such as lipofuscin, lens cataracts, and cross linked collagen in joints and ligaments. There is a diurnal fluctuation in the concentrations of these toxic carbonyls. At night, during sleep, there is a reversal of the covalently bound toxic proteins and nucleic acids. This toxification/cleaning cycle explains the biochemical necessity for sleep to prevent aging.

2. Hofman M.A. The human circadian clock and aging. Chronobiol Int. 2000, May; 17(3):245-59.

The hormone vaso pressin, one of the most abundant peptides in the hypothalamus, exhibits a diurnal rhythm, with low values at night and peak values during the early morning. However, with advancing age, these diurnal fluctuations deteriorate, leading to a disrupted cycle with a reduced amplitude in elderly people. This study concludes that the synthesis of peptides in the human hypothalamus exhibits an endogenous circadian rhythmicity, and that the temporal organization of these rhythms becomes progressively disturbed in old age.

3. Richardson G, Tate B. Hormonal and pharmacological manipulation of the circadian clock. Sleep. 2000, May 1; 23 Suppl 3:S77-85.

This study showed that shift workers suffer a serious disruption in their diurnal cycle. The physiological and pathological ramifications are significant. The study showed that chronic shift work is an independent risk factor for the development of both cardiovascular disease and gastro intestinal diseases.

4. Atkinson G, Reilly T. Effects of age and time of day on preferred work rates during prolonged exercise. Chronobiol Int. 1995, Apr; 12(2):121-34.

This study showed that during prolonged bicycling exercise there was extreme diurnal variation in mean work rate over an 80 minute exercise period in subjects aged 19-25, but in older subjects age 48-62 there was no diurnal variation in work rate over the 80 minute exercise period. In other words, not only do we see a decrease in exercise capacity in the aged (as we would certainly expect), but decreased performance is clearly associated with the loss of the capacity to cycle (no pun intended) with age.

5. Price G.M., et al. Nitrogen homeostasis in man: Influence of protein intake on the amplitude of diurnal cycling of body nitrogen. Clin Sci. 1994, Jan; 86(1):91-102.

This study showed that one of several ways to maintain a high amplitude in the diurnal cycle is with increased dietary protein intake. Based both on nitrogen and amino acid balances, the amplitude of the diurnal cycle in human adults increases with increasing dietary protein intake, and decreases with inadequate protein intake. In other words, increased dietary protein has neither an anabolic nor a catabolic effect – it increases the amplitude of both phases of the diurnal cycle.

6. Adreotti F, Kluft C. Circadian variation of fibrinolytic activity in blood. Chrono Biol Int. 1991; 8(5):336-51.

This study not only showed that spontaneous fibrinolytic activity in the blood followed a very clear diurnal pattern, peaking in the evening and reaching a low point in the morning, but, also showed that comparison of older subjects to younger ones showed a severely blunted diurnal increase in fibrinolytic activity in the aged. The point we are making, and which is confirmed by this and many other studies, is that many of the "diseases of aging," are specifically associated with the loss of the ability to cycle through both an anti-anabolic and anti-catabolic defensive phase as we grow older.

7. Taub J.M. Disturbances in diurnal rhythms following a night of reduced sleep. Int J Neurosci. 1981; 14(3-4):239-45.

This study showed that following a night of reduced sleep not only was wakefulness adversely impacted, along with performance in activities of daily living, but, the over-all amplitude of the diurnal rhythm of body temperature and many other parameters was flattened.

The above listed studies, plus countless others, show two things. First, that the loss of the ability to cycle is an integral part of the loss of vital reserves with aging. Second, it is seen that the hypothalamus is where all the action is when it comes to directing the body's diphasic

defenses against insidious degenerative diseases. Here is a summary of what you need to know from the literature to access your own "Fountain of Youth:"

1. Aberrant hormonal cycles are seen to be the effect, not the cause, of a failure to cycle. The loss of anti-anabolic and anti-catabolic defenses associated with hormone imbalances are simply the manifestations of a hypothalamus that is either over- or under-stimulated. Direct influences on the hypothalamus are the only way to address the causes of cycle disturbances.

2. The hypothalamus will maintain the highest possible amplitude of the diphasic cycle in response to appropriate light and dark stimulation. You and your patients want as much natural light (entering the eyes) as possible during the day; follow that by pure darkness for as much as eight hours every night.

3. In conjunction with the light/dark aspects of the cycle described above, adequate sleep is essential to maintaining a high amplitude cycle. Deficient sleep will cause an immediate drop in vital reserves, which is easily measured by a drop in body temperature, usually accompanied by a slower pulse, a loss of mental quickness, and failure of emotional equilibrium (not to mention decreased energy).

4. Increased dietary protein is another potent activator of the hypothalamus that facilitates a high amplitude cycle. The corollary to this statement is, of course, that a high carbohydrate diet devastates the hypothalamus, thus decreasing vital reserves and accelerating the aging process.

5. The final component of your "Fountain of Youth" NUTRI-SPEC regimen is your new Diphasic Nutrition Plan. Oxy A+, Diphasic A.M., and Complex P in the morning, balanced by Oxy D+, Diphasic P.M., and Complex S in the evening, will be as two happy, energetic children playing on a seesaw. Watch each end surging up and down in a joyful celebration of the rhythm of life.

You have dozens of patients who are fooling around with "health food store mentality" supplementation that, at best, is a waste of money, and at worst, actually decreases adaptative capacity. Give them some real personal power … with your NUTRI-SPEC DIPHASIC NUTRITION PLAN.

Sincerely,

Guy R. Schenker, D.C.