

Wellness Model of Aging

Diana Davis, M.Ed, RD

(Part 1 of a 12 part series on the Wellness Model of Aging)

In the last issue, you were introduced to some sweeping anti-aging concepts (go to www.healthtransformations.com, click on “Wellness Library”, click on “Anti-Aging” and see “Intro to Wellness Model of Aging” article for review) to help you step-up-to-the anti-aging platform as we delve into the 12 systems and/or factors that determine one’s rate of aging.

The first of the 12 factors/systems is your basal metabolic rate (BMR). If your BMR is not kept in check or restored via specific anti-aging strategies, it will ultimately lead to a progressive degeneration of your body’s cells. Your basal metabolic rate is defined as the bio-chemically processes in your body that build, repair and restore (i.e., anabolic) as well as breakdown and destroy (i.e., catabolic) cells and release energy, thereby generating heat. Basal refers to “at rest”, so it is a measurement of calories used for the anabolic and catabolic activity when your physical exertion is minimal. When we eat, get out of bed and move about and exercise, our metabolic rate runs into higher gear.

As we travel further down the metabolic rate highway, it’s important for you to understand some “gee-whiz” human physiology facts. According to quantum physics, your body will replace approximately 300 billion cells today (with the exception that nerve and brain cells do not replace themselves), and the quality of those cells are based on the food and drink you ingested, the supplements you consumed, your stress level, your mindfulness, and your hormonal milieu within the past 24 hours. So, I want you do an imagery exercise now! Try to think about everything you ate, drank, the nutraceuticals (i.e., vitamins, minerals, herbs, plant chemicals, hormone modulators.ect) you supplemented your diet with, and how you handled stress in the last 5 months. Why five months? Because the majority of your entire cell replication takes place in a period of five months! Now ask yourself, is it a balanced/attractive picture? It’s an important question to ask because it is sitting in your chair.

Every single second of every single moment of every single day your body is bio-chemically “at-work” repairing, rebuilding and restoring itself as well as tearing itself down. So what does all of this have to do with aging? Well according to studies at the USDA Human Nutrition Research Center on Aging (HNRCA) at Tufts, the metabolic rate drops 2% per decade starting at age 20. For example, if your BMR was 1500 calories at 20, it would burn approximately 30 less calories per day or 10,950 calories per year which can add up to over three solid pounds of body fat per year. Now take your hands, cup them together and imagine overfilling your cupped hands with blubber because that visually represents one pound of body fat. Now imagine 10 years later and you wonder where that extra 30 lbs came from? In addition, long-term studies from HNRCA bears the fact that the average person from 20 years on tend to lose about 3 kilograms (6.6 pounds) of lean muscle mass each decade of life and that the rate loss accelerates after age 45. Now do you realize why grandma can’t get off the couch without help or why she needs a walker to get around....her leg muscles have been atrophying for the past fifty years. Compounding these physiological statistical norms, factor in that many middle-aged people continue to eat the same amount of calories as they did in their 20s despite not possessing their “Oreo” metabolism anymore along with too little exercise. And there you have the equation for the vicious cycle of too much body fat and too little muscle. Besides the structural problems with too much fat and too little muscle, there are serious biochemical consequences that this body composition elicits which we will explore in the next issue.

Yea, yea, yea, I know what you're thinking... all of this leads to eat less and exercise more. Well yes, but I believe if people knew better they could do better, but there is so much more to this metabolic story of aging. Let's travel further down the metabolic highway. Remember I told you about all those scientific breakthroughs? This new wave of gerontology and anti-aging research has transformed our understanding of the aging process and illuminates an important metabolic fact: our catabolic metabolism begins to "outrun" our anabolic metabolism starting in our forties. Technically, it's a metabolic shift, if you will, from the anabolic, high-energy, repair and restore metabolism of youth to the progressively more catabolic, low-energy, break down, metabolism of older age. At about age 30, there is a balance of these two forces; whereas, after age 40, the catabolic part of our metabolism goes into a tailspin unless you attend to your metabolism differently than just following a prudent lifestyle.

Simply stated, you are aging because the 300 billion cells you are making everyday are weaker than the cells you are replacing *unless you are doing specific anti-aging strategies to put the breaks on this catabolic cycle and restore your anabolic metabolism*. The evidence is mounting. What is clearly coming to the forefront is what and how much you eat and drink (alcohol and coffee included), what you supplement your diet with (i.e., vitamins, minerals, antioxidants, phytochemicals, spices, herbs, hormone modulators, bio-identical hormones, etc.), how much you exercise (includes flexibility, core and strength training and aerobic exercise), how you respond to stress, how well and how much you sleep every night, and whether you are self-involved and have hostile, cynical thoughts about life or you think community and have mindfulness, happy thoughts about life dictate not only how you will feel today but how your body will treat you in the future! Stay young, stay open to new ideas and stay tuned for Part 2 of the Wellness Model of Aging.

To learn specific nutritional, fitness and behavioral strategies in order to attend and restore your metabolism contact Diana Davis, M.Ed, RD at www.healthtransformations.com and click on "contact Diana" or 541-610-9586. You can also send inquiries to The Wellness and Apothecary Center, P.O. Box 819 Sisters, OR 97759.