SPECIAL REPORT

RADICAL LONGEVITY

HEALING BREAKTHROUGHS

BIOLOGICAL VERSUS CHRONOLOGICAL AGE TESTS

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Your Real Age

Your functional, or biological age and your chronological age may be two very different things. Age is just a matter of perspective. You may be young at heart despite what the calendar says when your birthday rolls around.

But what does the functionality of your body say in comparison to the number of years you have walked on this planet? When your body is functioning optimally, it is much easier to forget about the passing years and to focus on the things which bring you joy now.
If you’re feeling the wear and tear of aging on your body, you can proactively take the reins of your own health journey and head into new territory. Your doctor can help you glean insights into your functional health through lab tests, checking your blood pressure, heart rate, vision, hearing and grip strength. Good nutrition, supplementation and mindful movement can all help to rejuvenate your mind and body. Medical science has made exceptional breakthroughs in the study of epigenetics and new insights are emerging regarding DNA markers such as telomeres that are markers of aging. But as I like to say, your DNA is not your destiny.

Although there are no completely definitive tests to help you identify your functional/biological age, there are some key assessments you can do in the comfort of your own home to help you identify areas that may need to be addressed in order for you to be at your biological best.

Here are a few areas to consider along with some suggested solutions to add youthful vitality to your life:
Cognitive Concerns

We have all become aware of the cognitive changes that can – but don’t have to – occur with aging, such as Alzheimer’s disease and other forms of dementia. Nutrition, physical and mental calisthenics and supplements play a major role here in reversing cognitive decline.
Series of 7s

Though not necessarily a diagnostic test, this exercise does require focus, concentration and memory – all of which are important indicators of mental acuity. Even if numbers are not your thing, give your brain a boost by practicing this exercise.

- Starting at 100, count backward from 100 by 7’s, subtracting 7 each time as you go along. (100, 93, 86, etc.)

Ruler Drop:

This test measures reaction time. Most younger people will grab it before the 6-inch mark. The reaction time and span seem to increase with age. People over 60 often catch it at 10 to 12 inches or miss it altogether.

- Grab a partner and ask them to hold a ruler or yardstick at the 12”-18” mark. Place your thumb and index finger just below and on either side of the other end (0”). Ask your partner to drop the stick randomly and without warning. Catch it as fast as you can. Record the mark where you caught it, repeat 3 times, and average your scores.
Sniff Test:

Interestingly, one of the ways age related neurodegeneration can be diagnosed is through loss of sense of smell. During one study of older people, researchers found that those who could not recognize at least four out of five common scents while blindfolded were two times as likely to develop dementia five years later. Do keep in mind that other factors unrelated to neurodegeneration can also affect olfactory decline. This test is an easy and fun way to determine if your sense of smell is up to par.

❑ Set at least 5 different common scented items on a table. Coffee, chocolate, lemon, vanilla, cinnamon and even peppermint mouthwash are all good choices. Ask a partner to help you and take turns blindfolding one another as you smell and name each item.

Address Cognitive Concerns Nutritionally:

❑ Make sure you get enough essential fatty acids in your diet, especially Omegas 3, 6, 7 and 9. I especially like a good quality fish oil and GLA from black currant seed oil.

❑ Enjoy the 3 B’s daily - blueberries, beets and broccoli.

❑ Avoid sugar and eat plenty of lean protein at each meal.

❑ Enjoy 1 to 2 cups of organic coffee per day - it not only adds pep to your step, it is also purported to strengthen long and short term memory as well as lower the risk of Alzheimer’s disease.

❑ Supplement with brain nutrients to help sharpen memory and focus and enhance youthful vitality. My go-to is Uni Key Health’s Ultra H-3 Plus.
Feeling Flexible

Many of us tend to lose flexibility and muscle mass as we age. Sore and stiff joints can really mess with our mojo, and loss of strength can make everyday tasks more difficult. But good old exercise such as stretching, walking and resistance training as well as gentle yoga or dancing can go a long way in maintaining strong and supple muscles. These strength and flexibility tests will turn you in the right direction.
Chair Rise:
On average, people tend to be able to do one less of these per decade and none after age 90. Women in their 60s should be able to do 11 or 12, and men of that age a minimum of 12 to 14.

- Have a timer handy and place an armless chair against a wall to hold it steady. While seated in the center of the chair, keep your back straight, feet on the floor and arms folded across your chest. Set the timer and see how many times you can rise to standing straight up and then sitting down in 30 seconds – without using your arms.

Floor Sitting and Rising:
Very few people over the age of 50 are able to score a perfect 10 points on this one, and many young people struggle to do it perfectly as well. But studies show that for every point you do score, there is a 21 percent decrease in your risk of dying over the next 5 years. If you can do only 3 or less, you may have an increased risk.

- Take your shoes off and stand straight, then lower yourself to a cross legged position on the floor, without using your hands or touching your knees to the floor, if possible. Then stand up again without using your hands. Give yourself 10 points if you can do this perfectly but subtract one point every time you use your hands or knees, and ½ point if you lose your balance.
Good old exercise is really the only way to slow age-related muscle loss and restore flexibility to a stiff body. Find a routine that works for you and includes resistance training. There are many online resources available today if you can’t get to a gym or class. I love rebounding on a small trampoline as a great way to get in some gentle exercise and it doesn’t take up much space in my home. Nutritional support can help too.

**Nutritional Support:**

- Eat foods high in selenium such as Brazil nuts, walnuts and shiitake mushrooms.
- Make sure to get 100 grams of quality lean protein per day. One easy way to ensure this is to blend up a smoothie with protein powder every morning. My [Whey Protein](#) and plant-based [Body Protein](#) are some of the cleanest options available and you’ll get 20 grams of protein in just one scoop.
- Consider adding collagen, bone broth and four prunes to your daily diet as well.
- For optimum nutritional support, I also recommend 2000-5000 IU daily of Vitamin D and [Osteo-Key from Uni Key Health](#).
Breathing Beautifully

There is nothing like breathing in a deep draught of cool, fresh air to fill your lungs with an uplifting sense of wellbeing. Lung function often decreases with age, but practicing deep breathing exercises can bring significant improvement. The following tried-and-true tests can give you an indication of how well you are breathing.
**Breath-Holding:**

Normal cardio-pulmonary reserve, or CPR, is indicated if you are able to hold your breath for more than 25 seconds. Limited CPR is shown at 15 to 20 seconds and if you can only hold your breath for less than 15 seconds your breathing is considered very poor.

- Take a full but not really deep breath. Set a timer and hold your breath for as long as you can. Stop the timer when you need to exhale.

**Match Test:**

With normal lung capacity, you should be able to blow out a match at 6 inches away from your face. On average, many people in their 40s and 50s can only blow a match out at 7 to 8 inches. Young people can often douse the light as far as 12 inches away.

- Light a match and hold it about a foot away in front of you. With your mouth wide open, and without pursing your lips like you normally would, try to blow out the flame. Keep slowly moving it toward you until you can extinguish it with your breath. Measure the distance from your face.

Cardiovascular exercise is a great way to improve lung function. Meditation practices such as yoga that focus on the breath are highly beneficial. Here is an easy and effective breathing technique that you can practice at home: Lie on your back and relax. Breath in deeply from your diaphragm and up through your chest. Hold for a few seconds and exhale slowly, squeezing your abdominal muscles to push out all of the air. Repeat for 5-10 cycles.
Equitable Equilibrium

Balance and stability issues often lead to falls as we age. Our equilibrium is formed by a delicate dance between sight, touch, proprioception of muscles and the organs of our inner ears. Many experts consider the following tests, especially the eyes closed variation, some of the best biomarkers of aging as they may indicate changes in the sensory and nervous systems.

On average, people under 60 can balance with eyes open for around 60 seconds. After that, times drop by about 10 seconds per decade. With eyes closed, average time is 12-15 seconds for younger people, 8 seconds after age 50, 4 after 60, 3 after 70 and 0 to 2 seconds after age 80. Less than 10 seconds with eyes open indicates your balance is impaired and 5 seconds or less could lead to increased risk of falls.
One-Legged Standing:

- Stand barefoot on a hard-surfaced floor. Cross your arms and lift one leg, bending the knee about 45 degrees. Set a timer or count to see how long you can stand in that position. Stop timing when the raised leg touches the floor or your other leg, or you have to uncross your arms.

Eyes Closed Variation:

- This one is much more difficult than the first one. It’s a good idea to be near a chair or countertop or have a partner nearby in case you start to fall. Begin as before but close your eyes after you raise your foot. Open your eyes and stop the timer when you have to move your arms or legs to restore balance.

A couple of simple ways to practice good balance involve standing on one foot while doing everyday things like brushing your teeth, washing dishes or watching tv. And walking in a straight line, heel to toe, with one foot directly in front of the other might make you giggle but will improve your equilibrium. Practicing tai chi and yoga has been proven to improve balance and reduce risk of falling.
Supple Skin

Don’t we all want to recapture the days of clear, taut, supple, glowing skin? While some wrinkling and sagging may be expected as we age, the health of our skin is an indicator of our overall well being and there is much we can do to take good care of it. This simple test will tell you how hydrated and supple your skin is and let you know if it is begging for a little love. Average times for your skin to flatten out and return to normal after the test: under age 30, 1 to 2 seconds. Age 30 to 44, 3 to 4 seconds. Age 45 to 50, 5 to 9 seconds. Age 60, 10 to 15 seconds. Age 70, 35-55 seconds. And over age 70, 56 plus seconds.
Skin Pinch:

- Pinch the skin on the back of your hand between your thumb and index finger for 5 seconds, then time how long it takes to flatten out and return to normal.

Staying well hydrated is a major boost for the look and feel of your skin. Nutritionally speaking, your skin is begging for Omega-6s. Take 2 tablespoons daily of hemp seed oil, safflower oil, sesame oil or Siberian pine nut oil. Take a good multivitamin and mineral supplement like the ones from Unikey Health Systems. I also highly recommend taking their GLA-90 product containing black currant seed oil at 2 grams per day to moisturize internally and provide stellar skin protection. Consider adding a healthy collagen supplement such as Great Lakes brand to your daily regimen as well. Healthy sweating through exercising or sitting in an infra-red spa is great for releasing toxins through the skin. Practice dry brushing to stimulate the movement of lymph beneath your skin, stimulate circulation and exfoliate away dead skin cells. And always make sure any products you use on your skin are as natural and free of toxins as possible.

Check out my specially formulated line of BeauCle Skin Care supplements.
Viable Vision

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Dark Adaptation:

It often becomes more difficult to adjust to the dark as we age. Younger people can often make out the objects in this test within a few seconds, although maximum dark adaptation from bright light takes about 20-30 minutes.

- Sit in a well-lit room and focus on an object such as a chair or bed about 8 feet away. Close the curtains and turn off the lights until the room is dark. Now see how long it takes for you to see the object again.

Be sure to get regular check ups to help stave off age-related eye disease. Supplements that support good vision are zinc, lutein and zeaxanthin. I also recommend a good vitamin C supplement such as Unikey’s Time-C for helping to maintain eye health. Lutein is excellent for helping to increase the density of the macula and improve contrast and glare sensitivity, especially in low and high-light conditions.
Now that you’ve tested yourself to find out what areas need improvement, ask yourself a few questions to help you assess your functional age. How are you faring when you compare yourself to others in your own age group? Can you walk as fast as you used to? If you had to walk 2 or 3 blocks to catch a bus would you make it in time? Are you able to climb up and down a flight of stairs without stopping and being too winded? Are you eating a nutritionally sound diet and taking supplements? How are you managing your stress levels? Are you getting good, sound sleep? Do you exercise regularly?

Your answers to these questions can give you great insight into your functional/biological age. Now you can map out your own road to the vibrant health and well being you deserve for many years to come.