

The Executive Energy Report

by Howard M. Simon, MBA



Cellular energy drives every action in the body – from beating of the heart, to cognitive functions of the brain such as decision making, reaction time, focus and memory, to muscle actions, to breathing, all organ functions (such as liver, pancreas, gut, vascular, etc.), to immune response, healing and many more.

Whether you are an executive or professional who excels at directing an organization, **but works 60 to 80 hours on a good week**, an entrepreneur who often has to do everything, an attorney who spends hours at a computer preparing for a high intensity performance in court, a parent whose job never ends, an analyst who is competing with other smart, motivated professionals to get that rare promotion, an athlete or weekend warrior, a doctor, resident, or firefighter who works a 48 hour shift, your capacity to produce cellular energy is one of your greatest assets.

Just like a house or factory or car which uses energy for most everything, your body does not store much energy. It generates it on demand in organelles which exist in every cell called the mitochondria.

Maximum Vitality Five Vector Approach

Maximum Vitality takes a five-vector approach to supporting the body's energy needs:

1. Support mitochondria with healthy food and targeted nutrients
2. Help the body to produce more mitochondria (mitochondrial biogenesis)
3. Support healthy blood circulation for oxygen and nutrient availability
4. Protect mitochondria from environmental contaminants
5. Remove microcontaminants from mitochondria

We do not favor artificial stimulants for a jolt of energy. These include coffee, caffeine, energy drinks or pharmaceutical drugs.



Key Research Results

Published research has shown that healthy mitochondria provide energy for healthy functions in the body. All these benefits will help you live a life of success, good health, happiness, and gratitude.

- Healthy heart and muscle function^{1,2}
- Normal vascular function and blood pressure²
- Healthy cognitive function, including focus and memory^{4,7}
- Healthy energy levels¹⁵
- Less minor, occasional pain⁵
- Healthy, young skin^{3,9,10,11}
- Less frequent migraine headaches¹⁷
- Healthy weight and body mass^{3,14}
- Normal glucose metabolism^{1,2}
- Healthy DNA and cell replication^{4,6}
- Slow the aging process^{4,12,13}

What are Mitochondria and ATP?

Mitochondria are small, oval shaped organelles that convert energy from fats derived from whole food. I do not believe that hydrogenated fats (from processed foods) are of much use to the mitochondria. Mitochondria are the major energy production centers in cells.

Scientists estimate there are 15 to 70 trillion cells in the human body. Each cell contains 1,000 to 2,500 mitochondria. That multiplies out to 15 to 750 quadrillion mitochondria in the human body. Do you think supporting the mitochondria is valuable?

I stake my life, health, and vitality on it!

The ATP (Adenosine Triphosphate) production cycle, also known as the Krebs cycle, provides critical energy to every function in the body from beating of the heart to liver, kidney, brain and immune functions. The energy production portion of the cycle occurs in the mitochondria. Research has shown that increasing the energy available to the cells helps the body operate at its optimum level.



What Foods Provide the Most Energy?

My best answer is a variety of foods, which include protein, unprocessed fats, fruit, vegetables, nuts and seeds. There are so many diet recommendations which are beneficial, such as specific blood type diet, keto diet, Mediterranean diet, and many others based on your body type and what resonates with you.

Excellent proteins include fatty wild fish, such as salmon, animal liver which is high in vitamin B-12 and vitamin K-2, naturally fed animal protein, cheese, and eggs. Fruit such as bananas, avocados, apples, strawberries, oranges, and dark berries. Vegetables such as yams and sweet potatoes, beets, dark leafy greens, and even dark chocolate (with minimal sugar added). Nuts contain a blend of protein, fats and some carbs, peanut butter, and seeds are good sources for energy. Water with no chlorine is one of the best choices to drink, but avoid alkaline water at all cost.

Sometimes the answer to this question are the foods that you are not eating. Let me explain. If your diet is deficient in a particular micronutrient, that is likely because you are not consuming enough of the foods that contain that micronutrient. Your body needs a great diversity of micronutrients, some in very small quantity as cofactors in healthy energy production. You may be getting all the good fats, but just missing the coenzymes, such as coenzyme Q10 (CoQ10), which sparks the cellular energy cycle in the mitochondria.

What Promotes Endurance?

Endurance capacity reflects a combination of factors - muscle training, cognitive exercise, a healthy diet, healthy weight, robust mitochondrial capacity, and the will to achieve, excel and win.

We will leave many of these factors to your lifestyle choices. However, we can help you with robust mitochondrial capacity with our five vectors of mitochondrial support. They are introduced above and described below.

Are Your Mitochondria Implicated in Aging?

An inevitable consequence (if not a precursor) of aging is a **slow, insidious decline in cellular energy levels**. The outward effects often present as a sense of overall fatigue, depression, sexual dysfunction and a variety of diseases of aging. The internal effect of a cellular energy deficit is a greater vulnerability to a host of degenerative diseases. A chronic decrease in cellular metabolic energy is an underlying cause of many seemingly unrelated, age-related diseases. As humans grow older, systemic energy deprivation can inflict devastating degenerative effects throughout the body. This fact is often overlooked by the medical establishment, yet persuasive scientific evidence exists that correcting chronic cellular energy production may enable many of the infirmities of aging to be prevented or reversed.

The prime reason cells lose their energy-producing ability is that the powerhouses of the cells - the mitochondria - become dysfunctional due to nutritional deficiencies. Research has shown that coenzyme Q10 and alpha-lipoic acid are critical to maintaining optimal mitochondrial function and supporting high energy production.

Mitochondria age just as cells age. Mitochondria are replaced regularly by a process called mitochondrial biogenesis. However, as people age, this process becomes less efficient. Though, science has shown that a special vitamin-like micronutrient enhances the production of new mitochondria. It is called pyrroloquinoline quinone and abbreviated PQQ.

PQQ is a vitamin-like compound that exists naturally in soil and a variety of foods, including spinach, kiwi, soybeans and human breastmilk. So, if these raw foods are a regular part of your diet, you may not need to supplement.

Dangers of cellular energy deprivation should not be ignored. Every organ - from the heart to the kidneys to the skin; every process in the body - from walking to breathing to immune function to vision - is driven by energy produced in the cell's mitochondria. Proven ways exist to increase the effectiveness of cellular respiration and reduce the effects of aging. By eating a varied diet and key supplements when necessary,

energy production can be restored and maintained.



Energy for Body Functions



Normal Heart Function

The heart utilizes more energy than any other muscle in the body, thus the concentration of mitochondria within heart cells is higher than any other muscle group. Other than the brain, the heart is the most susceptible organ to environmental toxins, free-radical oxidative stress, heavy metal poisoning and episodic nutrient deficiencies. Yet it's also highly responsive to the benefits of targeted nutritional supplements.¹

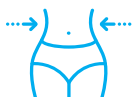
The heart needs a large amount of oxygenated blood flow and mitochondrial nutrients to continually meet its huge energy demands. The synergistic combination of Maximum Vitality® multi, E=MC² Endurance Formula™ and Vascular Flex™ - maximizes cardio mitochondrial energy production.



Enhanced Muscle Function

If a study could be done where the number of mitochondria per cell were counted and compared, I bet that the best athletes would have a higher number of mitochondria than a non-athlete. Likely, the best performing people in any field are likely to have a greater concentration of mitochondria in their cells.

Key to more mitochondria per cell is mitochondria biogenesis, triggered by an abundance of PQQ.



Normal Weight

Mitochondrial health and efficient metabolic processes go hand-in-hand with maintaining normal weight, glucose levels, and muscle mass.³

Researchers at Bastyr University in Washington State have identified a growing body of research that has shown a link between various disturbances in mitochondrial functioning and type 2 diabetes. Researchers identified the complexity of pancreatic mitochondrial functioning. Mitochondria are an integral part of the insulin system found in islet cells of the pancreas. This basic research into the pathogenesis of diabetes has led to the awareness of natural therapeutics, such as coenzyme Q10 and PQQ, that increase mitochondrial functioning in all cells, resulting in maintaining normal weight and glucose levels.¹⁴



Brain Health and Migraine Headache

Your brain uses more energy than any other organ in your body. Energy is key to memory, focus, reaction time, and healing and function of the Glymphatic system while sleeping.

The glymphatic system is a waste clearance pathway in the brain, in place of lymph vessels, dedicated to drain away soluble waste proteins and metabolic products. The glymphatic system is a network of vessels that clear waste from the central nervous system (CNS), mostly during sleep. Recent evidence suggests that the glymphatic system may be disrupted by lack of sleep and contribute to less than optimum brain performance.

Researchers have demonstrated that migraine patients have impaired mitochondrial function resulting in a reduction of energy production in brain tissue¹⁷. Research has also shown an increased risk of cardiovascular disease in men and women who suffered from migraines¹⁸.

Nutrients essential for mitochondrial energy production include magnesium, CoQ10, and PQQ. Controlled trials have demonstrated that supplementing with either magnesium or coenzyme Q10 can reduce the attack rate in migraine sufferers¹⁷, just as they benefit heart health¹.



Healthy Lungs

One of my doctor clients emailed me last week. She is a pediatrician in her 50's. She said she had been in the ICU for two weeks and was at home recuperating on oxygen. She asked what I would recommend to help restore the alveoli (tissue) in her lungs. My recommendation was to enhance mitochondrial energy production and provide the body with the proteins and amino acids that are used to build new tissue. Specific

products that can be used for this are E=MC2 Endurance™ Formula, Energy Spark™ (ubiquinol form of coenzyme Q10) and Whey to Strength™ protein formulas.



Immune Response and Healing

Surprise, cellular energy plays a critical role in immune response and healing. Generally, the more energy the body can bring to the process, the faster and more effective it will be.



Maximum Vitality's five-vector approach to supporting the body's energy needs

1. Support mitochondria with targeted nutrients

The primary source of energy nutrients is your diet. Eat a clean, balanced diet as we describe on the foundational health page. For those inevitable micronutrient gaps in even the best diet, we recommend a sophisticated

multivitamin such as Maximum Vitality® multi...

E=MC2 Endurance Formula™ directly supports the mitochondria, the vascular system and Nitric Oxide (NO) production with high absorption coenzyme Q10, PQQ, and other branded nutrients. Its long-term effect is to bring more oxygen and nutrients to the mitochondria, and to enhance mitochondrial biogenesis – the growth of new mitochondria.

Energy Spark™ provides Ubiquinol, the antioxidant form of CoQ10 to support mitochondrial ATP production process.

2. Help the body to produce more mitochondria (mitochondrial biogenesis)

PQQ, a critical component of E=MC2 Endurance Formula™, has been shown to support mitochondrial biogenesis, the production of new and more mitochondria, throughout the body.

3. Support healthy blood circulation for oxygen and nutrient availability

Vascular Flex™ supports circulation of oxygen and micronutrients, enabling healthy mitochondrial energy production.

4. Protect mitochondria from environmental contaminants

In the gut and all other organs and systems, your microbiome protects your body, including the fragile and prolific mitochondria, from environmental micro-contaminants. Support your microbiome with Gut Optimizer™ - Probiotics and Gut Optimizer™ - Colostrum.

5. Remove microcontaminants from mitochondria

Micro-Contaminant Detox Therapy™ was formulated to assist in the removal of heavy metals, other micro-contaminants, and support the liver in removal of waste from circulating in the body.



We recommend you start with a balanced diet and E=MC2 Endurance Formula™.

Just like any growth spurt, it takes a while for your body to increase the number of mitochondria and clear microcontaminants that have accumulated over a lifetime. Expect it to take a few months for a noticeable energy improvement.



About the Author

I “retired” from the corporate world in 1999. As one of many options I started a top-quality vitamin company, which I launched because I suffered a long-term personal health crisis that inspired me to help others. Rejuvenation Science® was born.

Through Rejuvenation Science, these sophisticated supplements were developed and sold exclusively to functional, regenerative medicine, and anti-aging doctors. With the rise of health consciousness and a global health crisis, we decided to bring these supplements to everyone under the Maximum Vitality label. Our supplements are designed to help you achieve your personal goals for optimum health and vitality.

From birth to my 40’s I was exposed to all kinds of environmental contaminants including oil wells, a major oil refinery, Los Angeles smog, second-hand smoke, chlorine and fluoride in our drinking water, misinformation about processed vegetable oil fats (margarine, corn oil, etc.), and sugar and artificial sweetener loaded soft drinks. I believe environmental contaminants were the cause of my colon problems.

As a result of my own health issues, I have learned so much about ways that diet, environment, and our microbiome affect health both positively and negatively. I enjoy putting my business background, love of science and research, to good use making an impact on people's lives and health.

Maximum Vitality is a way to give back, continue my research, and bring you a safe method to increase your health, vitality and performance at work, at home, and doing the things you love most.

I love what I'm doing now.

Due to a good surgeon, diet, exercise, a more balanced lifestyle, and targeted nutritional supplements, I made a full recovery within half a year of major surgery. Recovery included healing, restoring muscle mass, physical endurance, restoring brain volume, focus, concentration, and memory. I now educate physicians and play hours of 2-man beach volleyball with guys half my age on the weekends. Having been through all this, I feel like a winner every time I play. My friends are usually wrong by 10-20 years when they guess my age.

I'm very grateful for all I have learned and for my recovery and I am passionate about paying it forward. My mission is to help others achieve optimum health and vitality, even when the odds are against them. In gratitude, I decided to create Maximum Vitality to bring the knowledge and sophisticated supplements we created for physicians directly to consumers.

This is a very personal journey that I am inspired and delighted to share. I invite you to join me on your own path to health and success.

References

Four of my favorite books and one major paper summarize recent research and discuss the benefits of nutritional support of your mitochondria for optimal energy production and health.

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2. Reverse Heart Disease Now: Stop deadly cardiovascular plaque before it's too late. The newest cardiology breakthrough to halt arterial disease & high blood pressure, prevent heart attack & stroke, and reverse heart failure. Stephen T. Sinatra, M.D. and James C. Roberts, M.D. with Martin Zucker
3. Dr Perricone's 7 Secrets to Beauty, Health and Longevity: The Miracle of Cellular Rejuvenation; Nicholas Perricone, M.D.
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