

# **THE 33 BENEFITS OF REBOUND EXERCISE**

*C.F. Albert Carter*

The Miracle of Rebound Exercise, (A.L.M. Publishers) 1979

1. It provides an increased G-force (gravitational load), which strengthens the musculoskeletal systems.
2. It protects the joints from the chronic fatigue delivered by exercising on hard surfaces.
3. It helps manage body composition and improves muscle-to-fat ratio.
4. It increases capacity for respiration.
5. It circulates more oxygen to the tissues.
6. It establishes a better equilibrium between the oxygen required by the tissues and the oxygen made available.
7. It aids lymphatic circulation by stimulating the millions of one-way valves in the lymphatic system.
8. It tends to reduce the height to which the arterial pressures rise during exertion.
9. It lessens the time during which blood pressure remains abnormal after severe activity.
10. It assists in the rehabilitation of a heart problem.
11. It increases the functional activity of the red bone marrow in the production of red blood cells.
12. It improves resting metabolic rate so that more calories are burned for hours after exercise.
13. It causes muscles to perform work in moving fluids through the body to lighten the heart's load.
14. It decreases the volume of blood pooling in the veins of the cardiovascular system preventing chronic edema.
15. It encourages collateral circulation by increasing the capillary count in the muscles and decreasing the distance between the capillaries and the target cells.
16. It strengthens the heart and other muscles in the body so that they work more efficiently.
17. It allows the resting heart to beat less often.
18. It lowers circulating cholesterol and triglyceride levels.
19. It lowers low-density lipoprotein (bad) and increases high-density lipoprotein (good) within the blood holding off the incidence of coronary artery disease.
20. It promotes tissue repair.

21. It increases the mitochondria count within the muscle cells, essential for endurance.
22. It adds to the alkaline reserve of the body, which may be of significance in an emergency requiring prolonged effort.
23. It improves coordination between the proprioceptors in the joints, the transmission of nerve impulses to and from the brain, transmission of nerve impulses and responsiveness of the muscle fibers.
24. It improves the brain's responsiveness to the vestibular apparatus within the inner ear, thus improving balance.
25. It offers relief from neck and back pains, headaches, and other pain caused by lack of exercise.
26. It enhances digestion and elimination processes.
27. It allows for deeper and easier relaxation and sleep.
28. It results in better mental performance, with keener learning processes.
29. It curtails fatigue and menstrual discomfort for women.
30. It minimizes the number of colds, allergies, digestive disturbances, and abdominal problems.
31. It tends to slow down atrophy in the aging process.
32. It is an effective modality by which the user gains a sense of control and an improved self-image.
33. It is enjoyable!

*People who rebound find they are able to work longer, sleep better, and feel less tense and nervous. The effect is not just psychological, because the action of bouncing up and down against gravity, without trauma to the musculoskeletal system, it is one of the most beneficial aerobic exercises ever developed*

## **Rebounder, reboundology and reboundologist are terminologies established**

*By: Albert Carter*

Reboundology is based on the combined forces of gravity, acceleration and deceleration. The gravity is the force which attracts us to the ground. The unit of measure of this force is called G. 1 G corresponds to our weight here on Earth, when we stand still. When we accelerate the G force increases. When we decelerate the G decreases.

N.A.S.A has confirmed the ability of the human body to adjust to the change of gravity. When astronauts were sent to space for fourteen days, they lost 15% of their bone and muscle mass. Space rats lost 40% of their mass in only 7 days! Their problem has been how to re-condition the astronauts the most efficient way?

Well, Albert Einstein had already stated in 1911 that our body cells could not make the difference between gravity, acceleration and deceleration.

By combining the G force with the acceleration and deceleration while jumping repeatedly, we are subjecting our body to an oscillation between 0 G (at the top of the jump) and 2-4 G (at the impact). Each of our body cell is put under stress and is being told to adapt to a higher gravity. Thus, cells are getting stronger with rebound exercise.

N.A.S.A's scientist borrowed lymphocytes from astronauts and subjected them to a 3 G force in a laboratory centrifuge during 3 days. In that short time the cell membranes became 50% stronger than normal.

### ***What is Rebound Exercise?***

Here is the definition as given by Al Carter:

"The common denominator of all exercises is opposition to the gravitational pull of the earth. Even before birth, the human body grows strong enough to be able to resist the ever-present downward pull of Mother Earth. A child learns to crawl, walk, run, play and even throw balls by constantly competing with gravity.

Formal exercise methods are no different. To exercise the body, one will carry out various movements designed around gravity, utilizing everything from one's own body parts to fulcrums, levers, pulleys, inclined planes and even dead weights to challenge major muscle groups.

With Rebound Exercise, you also oppose gravity, but you also utilize two other natural dynamic forces found within our environment. Two forces which, for the most part, have been overlooked by other exercise methods. These forces are acceleration and deceleration. When your body stops its downward movement at the bottom of the bounce, the force of deceleration and gravity come into play. When the body begins its upward motion, acceleration is added to the other two forces. The physical human body doesn't recognize

these three different forces but simply accept the combination of the three forces as an increase of the gravitational pull of the earth. Logically, we know that increasing gravity is impossible, but the cells of the body don't. Because all the cells of the body have the capability to adjust to their environment, all of the cells of your body begin to adjust by becoming individually and collectively stronger.

Old fashioned exercise programs teach how you can strengthen the muscles of the body. Rebounding is an advanced exercise in that it is a cellular exercise. All cells of the body will become stronger. This includes all muscles, bones, skin, all connective tissues, all vital organs, muscles of digestion and elimination. Even the cells of the eyes are strengthened by rebounding."

### *The Healthy Cell Concept:*

This is probably the most significant discovery made by Al Carter. Here's the concept, in his own words:

"Each of us begins life in a single cell. After fertilization, the cell divides and transforms itself into two identical cells. Each cell carries the identical DNA programming with which it was endowed at the instant of conception. This incredible process of multiplication by division continues until at last the adult human is made up of a mass of 75 trillion highly intelligent cells. Each individual cell knows its business and performs its function in concert with all other cells. The Healthy Cell Concept precisely identifies the basic needs of the cell to be healthy. The Healthy Cell concept includes, Cell Food, Cell Environment, Cell Exercise, and Cell Communication.

For the incredible number of benefits inherent in Rebound Exercise I recommend securing your own copy of The New Miracles of Rebound Exercise. Suffice it to say that Rebound Exercise is a very important part of the Healthy Cell Concept. Only Rebounding fits the parameters of the perfect Cell Exercise.

The synergistic effect of the four vitally important parts of the Healthy Cell Concept on the human body is so phenomenal that health miracles are expected."

Let's take a more visual approach:

Let us consider a balloon filled with water. A human cell is just like this balloon.

Now watch what happens to this balloon / cell as you rebound using Kangoo Jumps rebound shoes.

Due to this same principle, Kangoo Jumps rebound shoes actually allow you to train all your muscles at the same time and increase bone density.

So really, this eliminates your need for elaborate or bulky fitness equipment which offers only one use.

You must remember that the formula for physical strength of connective tissue, even at the cell level, is:

$$\text{Stress} \times \text{Repetition} = \text{Strength}$$