



## RENEWING TECHNIQUE

# Muscle Up Willpower

The muscles fibers in your body have stored energy in the form of creatine phosphates, triglycerides, and glycogen. When needed, glycogen is rapidly converted to glucose to power the muscles. But the energy stored in your muscles is limited. For example, when the glycogen in a muscle is depleted, it takes 30-60 minutes for your body to replenish the energy reserves. Exercise significantly influences the efficiency and capacity of energy storage in muscles. For example, endurance training enhances the muscles' ability to store glycogen and strength training helps muscle fibers to grow stronger.



Psychologists conducted an experiment called the Radish Test with a large group of college students. The group was split into two smaller groups and both groups were required to do the same things. They had to eat something given to them and then, after a short break, they had a set amount of time to count the occurrences of the letter "E" in a printed multi-page document. The only difference between the two groups was the item they ate before counting the letters in the document.

The test results were interesting. The students in one of the groups had found many more E's than the other. The group that had eaten a slice of apple scored far higher in their "E" count than the group that had been required to eat a sliced radish.

Neuroscientists are not sure what the biological mechanism for our willpower is, but clinical research, along with psychological studies like the Radish Test, all agree on some of the characteristics of willpower. Willpower has some of the same characteristics as muscle fibers. In both muscles and willpower, the strength is based on a limited supply of energy, and it takes time to replenish that strength when it is exhausted.

That's what the Radish Test proved. The reservoir of will power in both groups was the same. But the group that had to eat the radish used some of that power to force themselves to eat the radish. Then, when they had to do the tedious task of counting the letter "e" they found it very hard to finish the task. Some even quit counting before the time was out. But the group that ate the apple had used none of their

willpower reserves, so they were able to focus and stick to the boring task they were assigned.

Often, we waste our willpower reserves on insignificant things. If you discipline yourself to have a spotless car, or obsess over a perfect lawn, or push yourself to achieve some goal, is that use of your limited willpower worthwhile? Your willpower needs to be ready when real challenges come. The temptation to sin, or skip time with the Lord, or miss church, or put off reading your Bible are all more worthy uses of your willpower resources.

Clinical findings show there's another similarity between muscles and willpower. In both, strength can be increased by purposeful exercise.

If you struggle with weak willpower, you may find yourself finding sinful habits hard to resist. The Apostle Paul struggled with his willpower. In Romans 7:15 he wrote, "For I do not understand my own actions. For I do not do what I want, but I do the very thing I hate." We all can use stronger willpower, and exercising will strengthen us in those times of need.

Clinical research has shown that simple tasks can strengthen your willpower. For example, try brushing your teeth for two weeks using the opposite hand you usually use. It will be hard the first few days, but it will get easier each day.

When two weeks have passed, go back to your normal routine. The object is to build your willpower strength, not to force yourself into a new routine. Then choose another two-week task, like eating a radish each day, or wearing

your watch on the opposite hand. Temporary changes like these will help muscle-up your willpower for when it is needed for more important things.



Willpower activity is associated with your prefrontal cortex and its role in executive action. This means you have some level of control over it and its use. You can reserve it for important things and build its strength using simple exercises. These are ways your renewed mind can help you live a more holy life that is pleasing to God.