

Freiburg Study

The Freiburg Study was conducted with 48 healthy human subjects of various ages. None of the test subjects had been diagnosed with any disease prior to the study. None were taking any type of medication.

However, according to their health markers, 24 of the subjects had metabolic syndrome—with blood pressure, cholesterol, or bodyweight that was elevated but all still within what doctors would consider a normal range.

The other 24 subjects had healthy markers closer to what would be considered ideal.

The methodology of the study consisted of taking blood from each individual subject. Blood samples were tested for free radical activity, cholesterol levels, blood lipid levels, C-reactive protein (which is a good indicator of heart health), glucose levels and insulin response, and inflammation.

Heart rate and blood pressure were also recorded.

Measurements were taken before and immediately after a specific prescribed amount of exercise. Subjects were asked to come to the laboratory having fasted for eight hours. The tests went on for a period of 12 weeks. Each subject was asked to not change anything about their lifestyle or diet during those 12 weeks, except to take the supplements given to them.

The supplements were Melaleuca's Peak Performance Packs, the same ones introduced at Melaleuca's worldwide Convention in May 2014.

First, to establish each person's baseline health metrics, extensive testing was conducted separately on each subject prior to taking the supplements.

The supplements were then administered along with a small roll of bread in order to aid digestion and to evaluate the body's insulin response.

Second, measurements were taken again, one hour after the subject first took the supplements. This was done with all 48 subjects.

Third, subjects were asked to take the supplements every day for a period of six weeks and return to the laboratory where the identical tests done with them prior to taking the supplements were repeated.

Finally, the subjects were asked to continue taking the supplement for an additional six weeks and then return again to undergo the same blood test as above.

The subjects' hearts were observed to not have had to work as hard to perform exactly the same exercise they had done prior to taking the supplement.

In fact, just one hour after using the supplement for the first time, an average reduction of heart rate by 5 beats per minute after the prescribed exercise was observed.

Such a result within one hour after taking the supplement is a significant finding. It is also medically important, because heart rate is an indicator of health. Indeed some researchers claim that a reduction in heart rate of one beat per minute will extend the average person's lifetime by approximately one year.

Therefore, a reduction of 5 beats per minute could extend that person's lifetime by approximately 5 years.

Besides the improvement in heart rate in the first hour, the following observations were also made:

A 10% reduction in free radicals during exercise.

A 27% significant reduction in blood sugar spike after eating.

The results after 1 hour were much greater than anticipated. But the results after 6 and 12 weeks were even more striking

The study showed significant improvements in total cholesterol, HDL, LDL, and triglyceride levels for the 48 subjects in the study.

In particular, the following improvements were observed after 6 weeks of consistent use of the supplement:

The 48 subjects recorded an average 7% reduction in total cholesterol in their blood, bringing the average down to within the ideal range.

Those subjects whose cholesterol levels were elevated recorded an even greater reduction of 8% in total cholesterol levels.

LDL (or bad cholesterol) dropped an average of 6.3% among the 48 subjects.

Again, subjects who had elevated LDL showed the greatest improvement.

The elevated group recorded an 11.2% drop in LDL cholesterol levels.

Also significant, study participants who had less than ideal HDL cholesterol levels recorded an average 18.3% increase in HDL (or good cholesterol).

An average of a 10% drop in triglycerides was recorded among the total population of 48 subjects.

But this drop was notably greater for people with slightly elevated triglycerides.

This group recorded an average decrease in triglycerides of more than 26%.

In addition, the 48 study subjects recorded an average of a 5% reduction in blood pressure after 6 weeks of continued use of the supplement.

Even more importantly, those who began the study with normal but slightly elevated blood pressure recorded a 6% reduction.

To provide further evidence that the supplements can help maintain healthy blood pressure, nitric oxide in the blood was also measured. Nitric oxide is the major metabolite responsible for maintaining healthy blood pressure. Again, the observed results were remarkable.

Among the 48 study subjects, levels of the nitric oxide in the blood doubled after 12 weeks of taking the supplements daily.

During the study, the impact of the supplements on blood sugar levels was evaluated after consumption of a bread roll. The results show a significant reduction in blood sugar spikes as soon as subjects took the supplements for the first time, with an increasingly greater reduction after several weeks of continual use of the supplements.

Indeed, the sugar spike was reduced by 27% the first day, 37% after 6 weeks, and 44% after 12 weeks of using the supplements.

A much healthier insulin response was also observed, especially among subjects who had preliminary signs of insulin resistance but were not diabetic.

Among this group a significant 21% drop was observed in the HOMA index, which is a measure of insulin sensitivity.

As subjects continued taking the nutrients in the supplements over time, the body's ability to efficiently produce energy appeared to significantly increase. This is because the heart did not need to work as hard to do the same amount of exercise. Part of the study was to take the pulse of the 48 subjects after exercising on an elliptical machine at a specific rate of revolutions per minute.

They were each tested before they had ever taken the supplements. They were tested again one hour after taking the supplements, and then again after six weeks and after 12 weeks of continued use of the supplements.

After 6 weeks of using the supplements the 48 subjects had an average heart rate of 8 fewer beats per minute than they had doing exactly the same exercise prior to taking the supplements.

After 12 weeks of taking the supplements, they could do the same exercise with a pulse of 9 fewer beats per minute.

Next, the amount of free radicals in the blood during rest and then during exercise was tested. Again, the results were outstanding. In the research, free radicals were measured as Reactive Oxygen Species, or ROS.

After six weeks of using the supplements, the 48 subjects recorded an average of a 21% reduction in ROS while resting and a 27% reduction in ROS during exercise.

Such a reduction in ROS from a simple nutritional supplement is unprecedented. No other supplement is known to have produced similar results.

Finally, significant results in inflammation response were observed for the 48 study subjects.

To measure the inflammation response, the level of high sensitivity C reactive protein, known as hs-CRP, was measured.

hs-CRP is regarded by the medical community as a very important predictor of heart health.

In fact, inflammation experts have determined that a CRP reading of 3.0 mg/L or higher, although still considered within the normal range, can triple a person's risk of heart disease.

The risk seems even greater in women than in men.

By contrast, people with extremely low levels of CRP, less than 0.5 mg/L, rarely have heart attacks.

With an average of the 48 healthy study subjects taken, a 30% improvement in inflammation resistance was recorded in just one hour after taking the supplements for the very first time.

But after 12 weeks of use, the reduction in inflammation response was much greater.

Subjects who had higher hs-CRP, but within normal range, recorded a significant 34% reduction in hs-CRP.

More importantly, the average of hs-CRP among these participants moved from a higher risk range to the much more healthy and moderate range.

In summary, after 6 and 12 weeks of using the supplements, the 48 test subjects on average improved significantly in every marker measured. Those with elevated markers improved to an even greater extent.