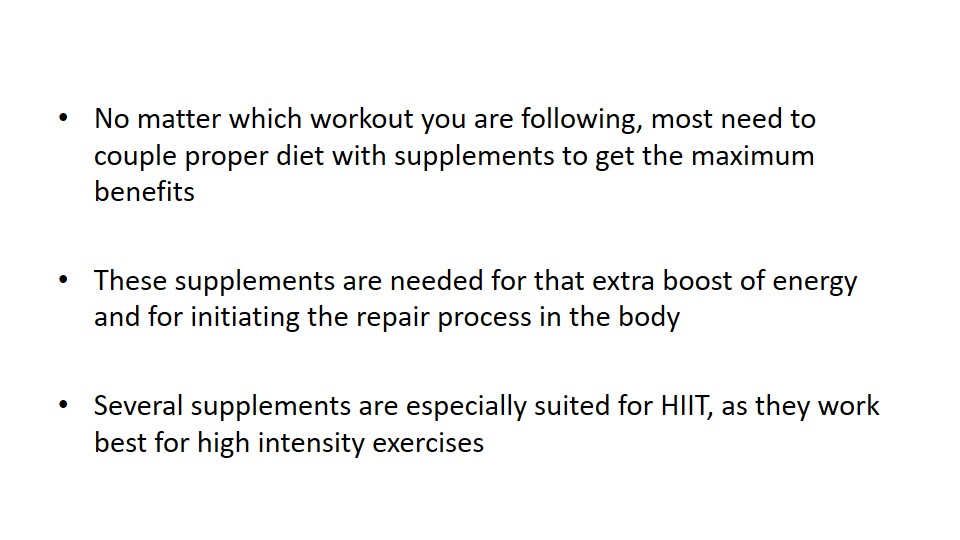
# Chapter 8: Supplements for HIIT

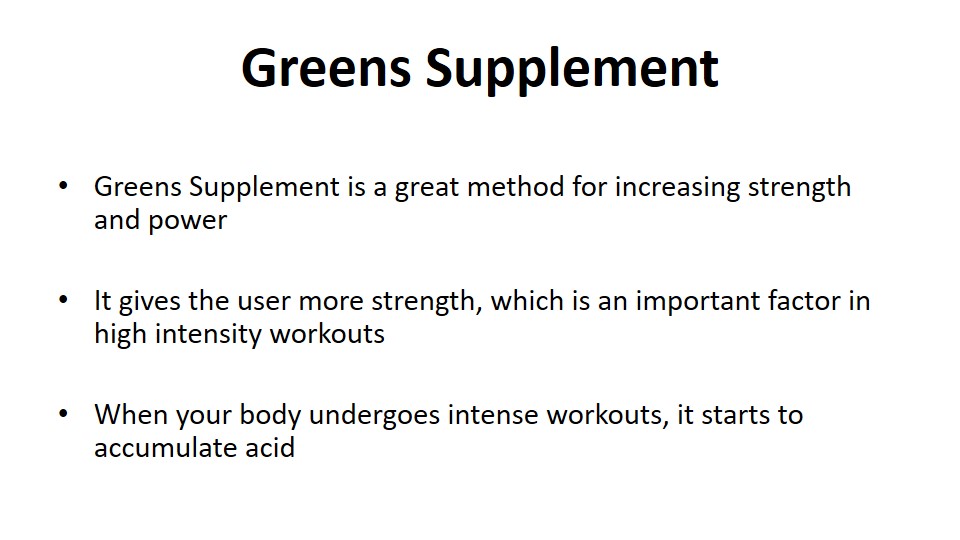


**S1:** In this video, we’ll talk about supplements for HIIT.



**S2:** No matter which workout you are following, most need to couple proper diet with supplements to get the maximum benefits. These supplements are needed for that extra boost of energy and for initiating the repair process in the body. Several supplements are especially suited for HIIT, as they work best for high intensity exercises.

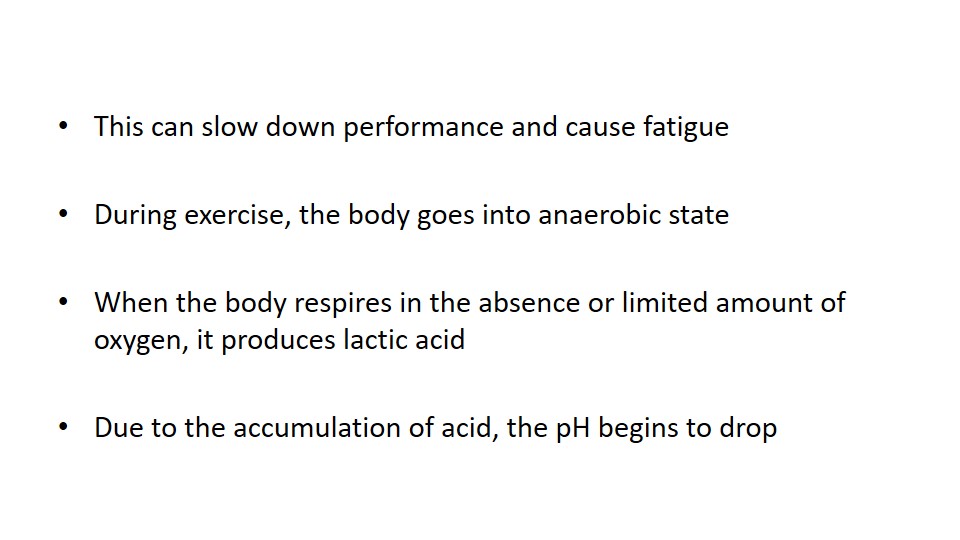
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## **S3:** Greens Supplement

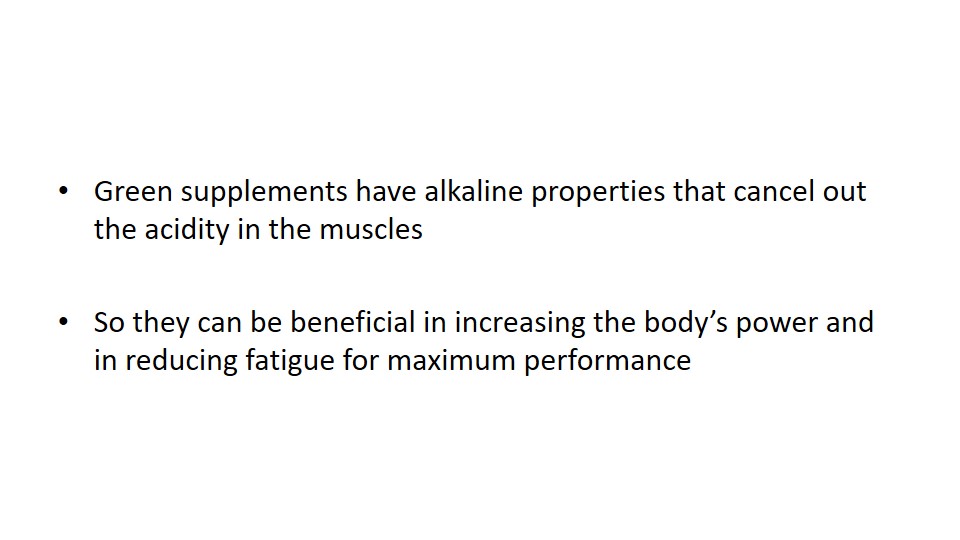
Greens Supplement is a great method for increasing strength and power. It gives the user more strength, which is an important factor in high intensity workouts.

When your body undergoes intense workouts, it starts to accumulate acid.



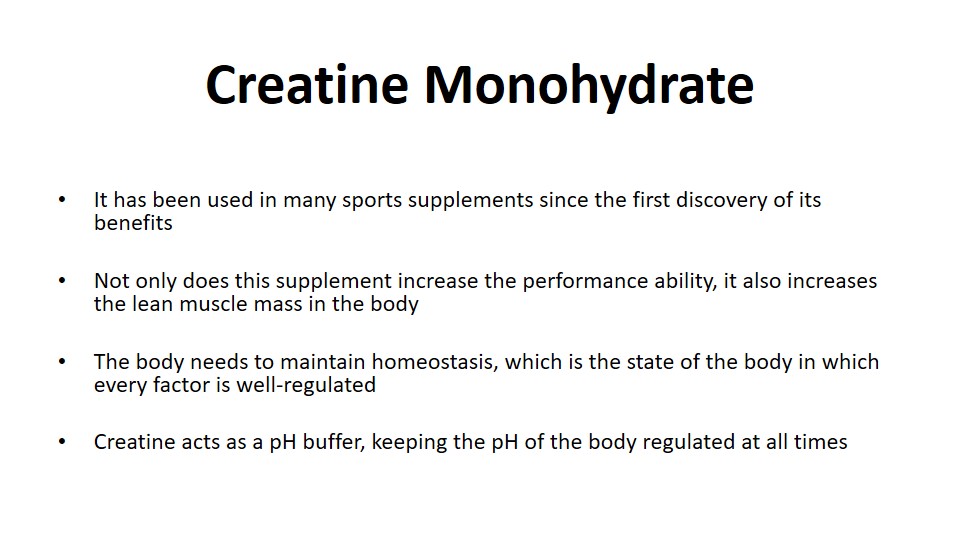
**S4:** This can slow down performance and cause fatigue. During exercise, the body goes into anaerobic state. When the body respires in the absence or limited amount of oxygen, it produces lactic acid.

Due to the accumulation of acid, the pH begins to drop. This makes the working mechanisms in the muscles stop. As a result of all this, the person feels fatigued and does not have the strength require for the next workout session.



**S5**: Green supplements have alkaline properties that cancel out the acidity in the muscles. So they can be beneficial in increasing the body’s power and in reducing fatigue for maximum performance.

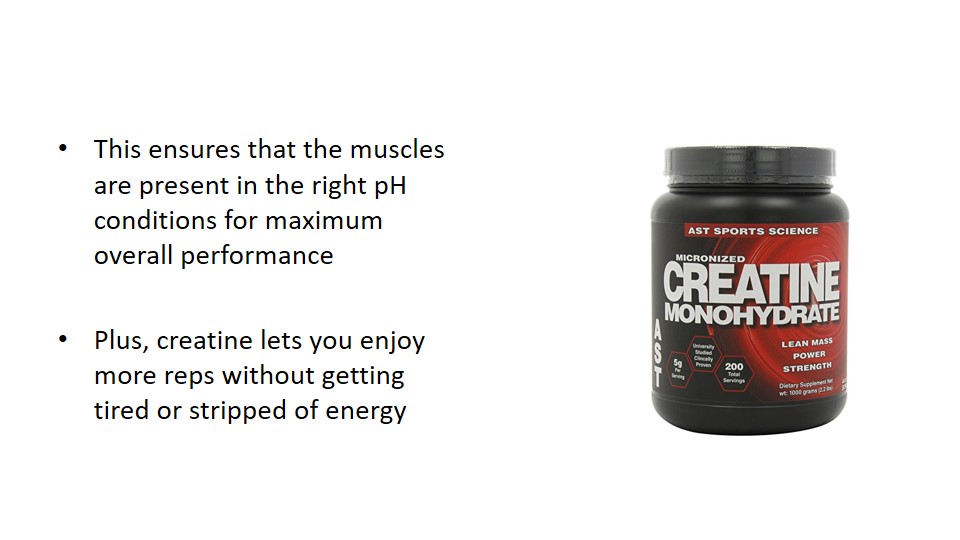
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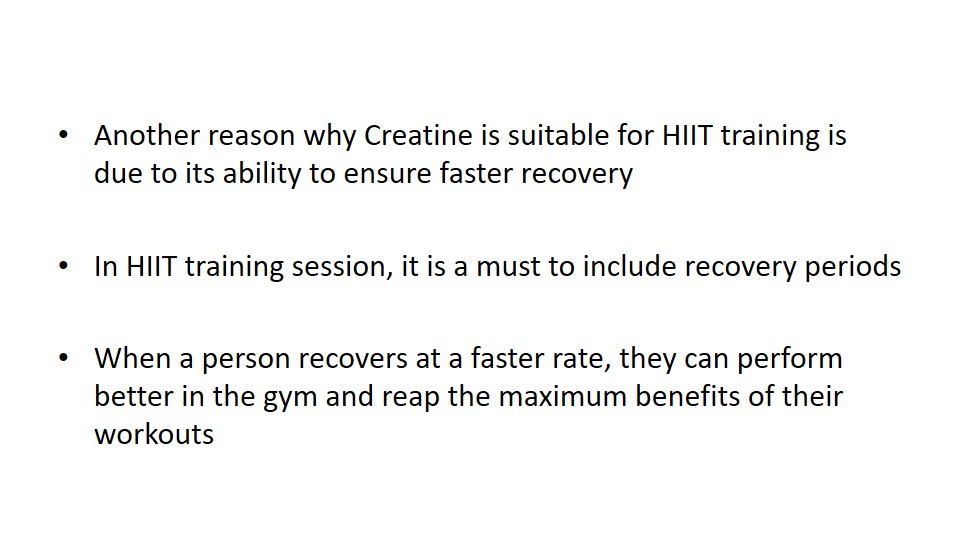
## **S6**: Creatine Monohydrate

There has been extensive research on creatine. It has been used in many sports supplements since the first discovery of its benefits. Not only does this supplement increase the performance ability, it also increases the lean muscle mass in the body.

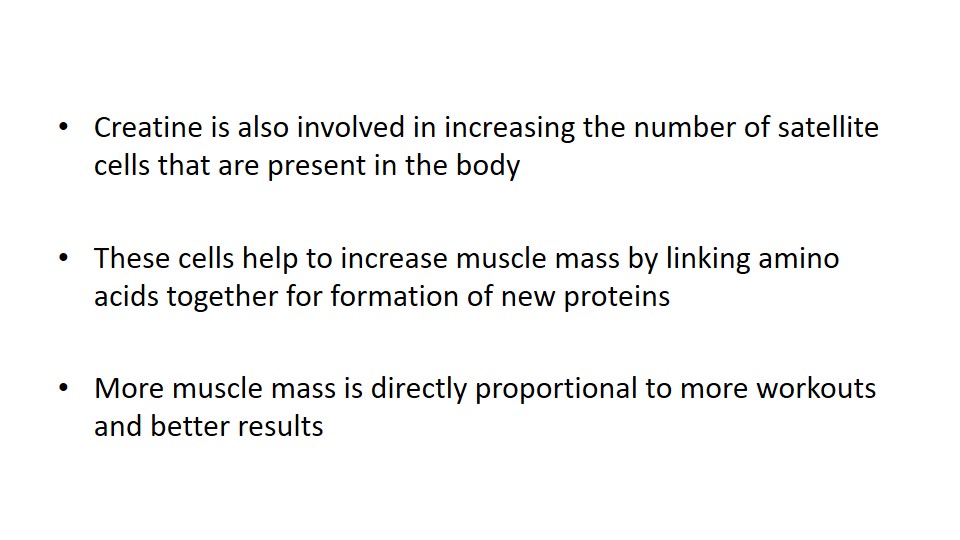
The body needs to maintain homeostasis, which is the state of the body in which every factor is well-regulated. Creatine acts as a pH buffer, keeping the pH of the body regulated at all times.



**S7:** This ensures that the muscles are present in the right pH conditions for maximum overall performance. Plus, creatine lets you enjoy more reps without getting tired or stripped of energy.

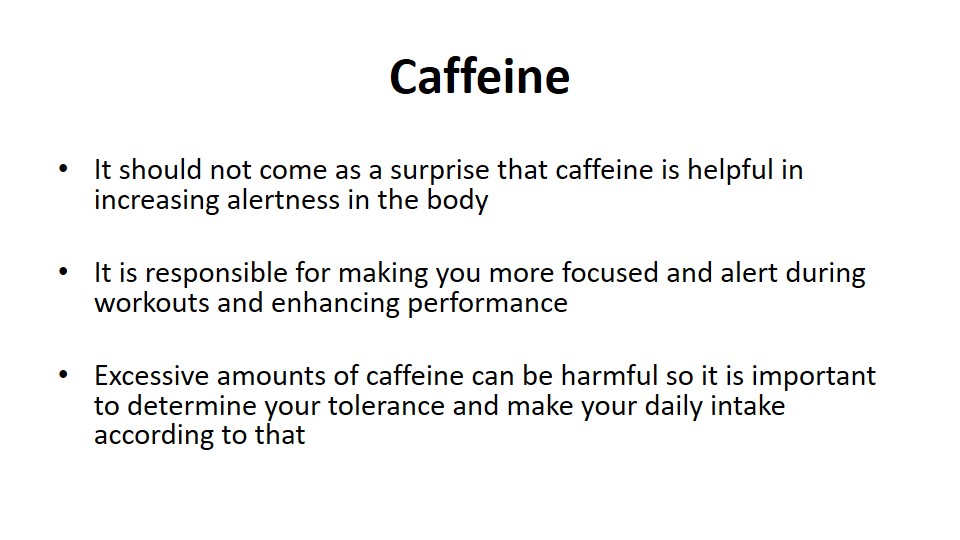


**S8:** Another reason why Creatine is suitable for HIIT training is due to its ability to ensure faster recovery. In HIIT training session, it is a must to include recovery periods. When a person recovers at a faster rate, they can perform better in the gym and reap the maximum benefits of their workouts.



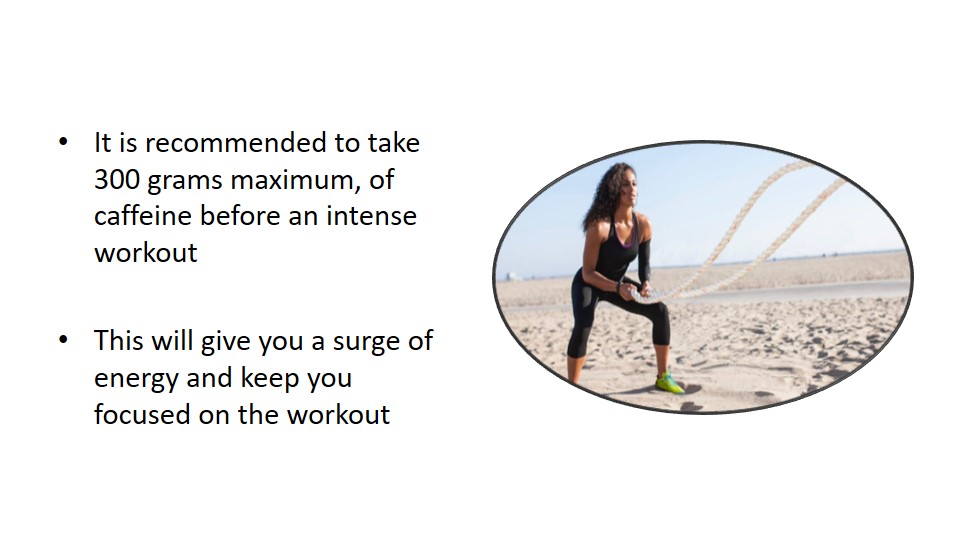
**S9:** Creatine is also involved in increasing the number of satellite cells that are present in the body. These cells help to increase muscle mass by linking amino acids together for formation of new proteins. More muscle mass is directly proportional to more workouts and better results.

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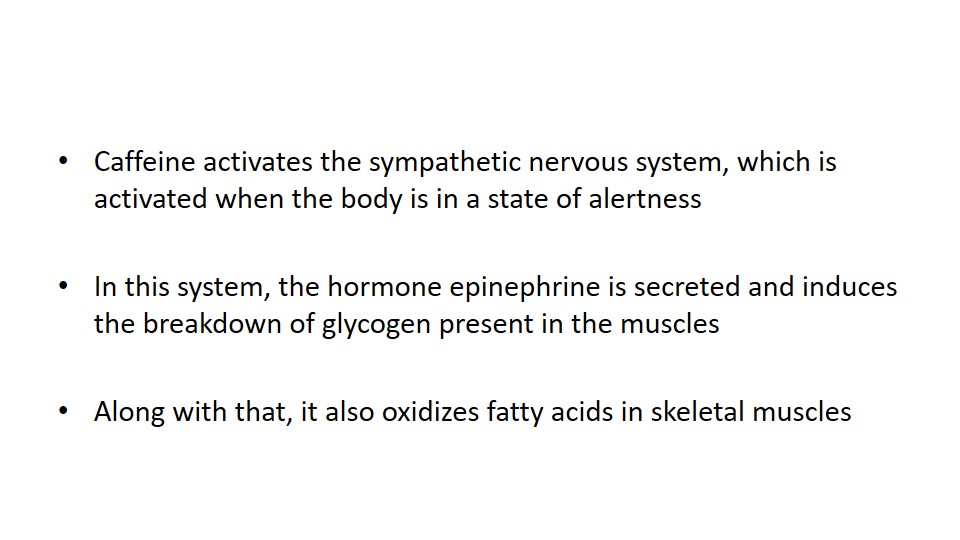


## Caffeine

**S10:** It should not come as a surprise that caffeine is helpful in increasing alertness in the body. It is responsible for making you more focused and alert during workouts and enhancing performance. Excessive amounts of caffeine can be harmful so it is important to determine your tolerance and make your daily intake according to that.



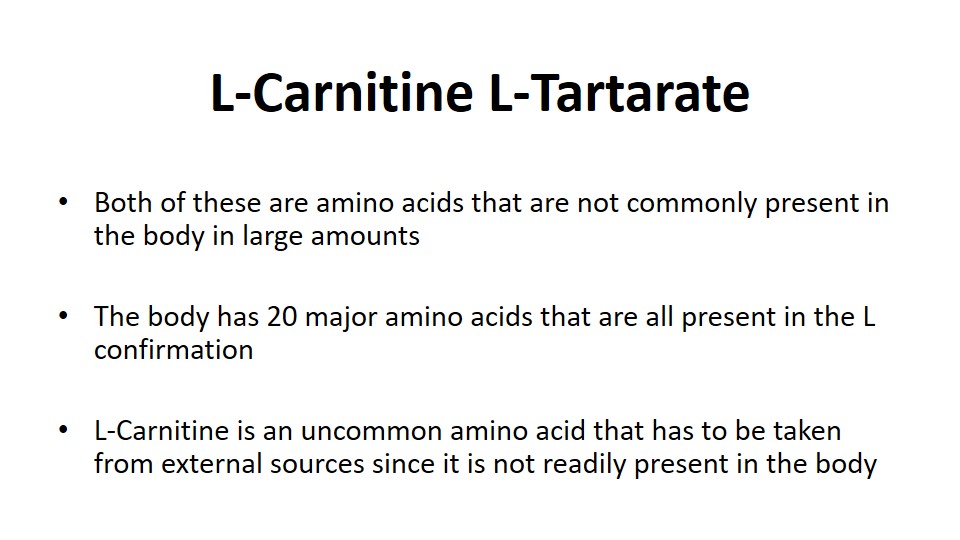
**S11:** It is recommended to take 300 grams maximum, of caffeine before an intense workout. This will give you a surge of energy and keep you focused on the workout.



**S12**: Caffeine activates the sympathetic nervous system, which is activated when the body is in a state of alertness. In this system, the hormone epinephrine is secreted and induces the breakdown of glycogen present in the muscles. Along with that, it also oxidizes fatty acids in skeletal muscles. Both these processes result in energy production that is later utilized for high intensity workouts.

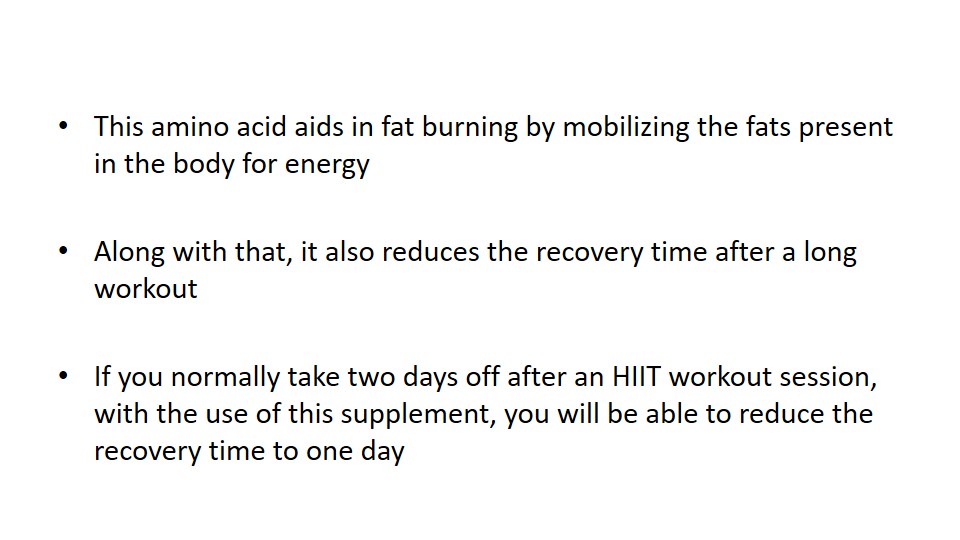
So, caffeine can increase endurance in the body and keep the body in a high-energy state at all times.

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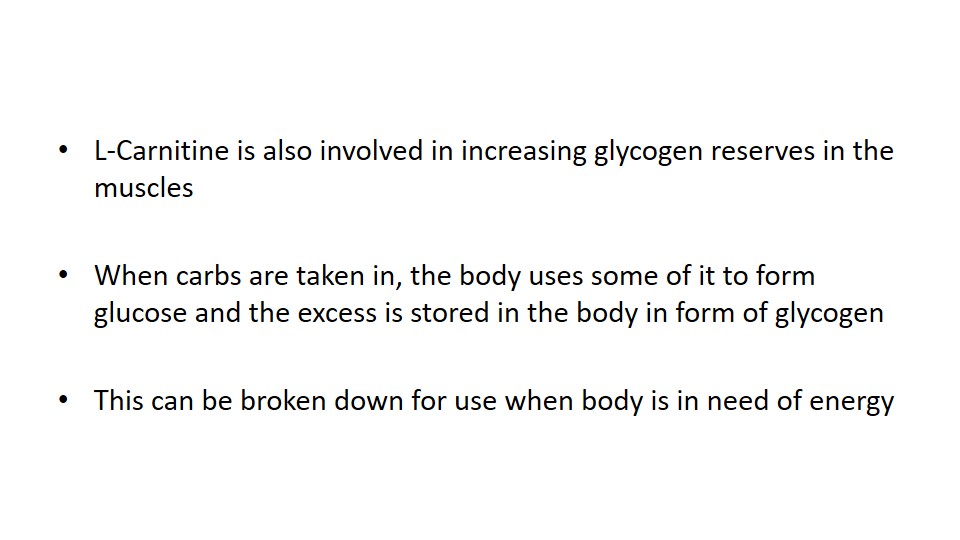


## **S13:** L-Carnitine L-Tartarate

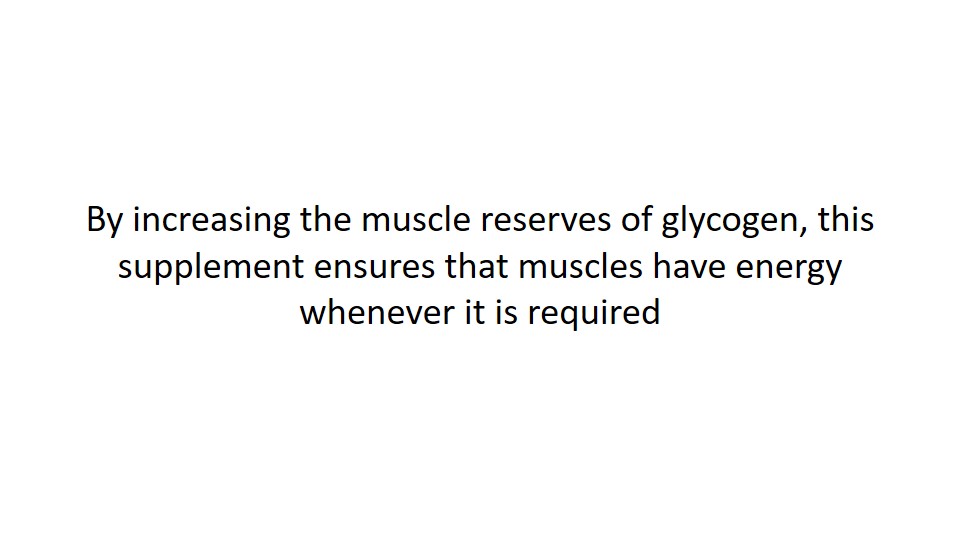
Both of these are amino acids that are not commonly present in the body in large amounts. The body has 20 major amino acids that are all present in the L confirmation. L-Carnitine is an uncommon amino acid that has to be taken from external sources since it is not readily present in the body.



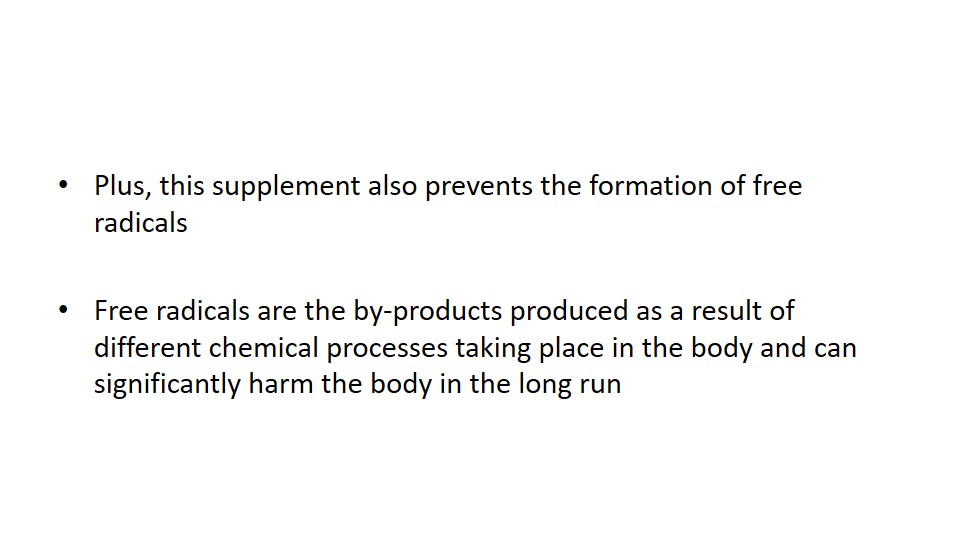
**S14:** This amino acid aids in fat burning by mobilizing the fats present in the body for energy. Along with that, it also reduces the recovery time after a long workout. If you normally take two days off after an HIIT workout session, with the use of this supplement, you will be able to reduce the recovery time to one day. This gives you more time to work out and have a lot more endurance.



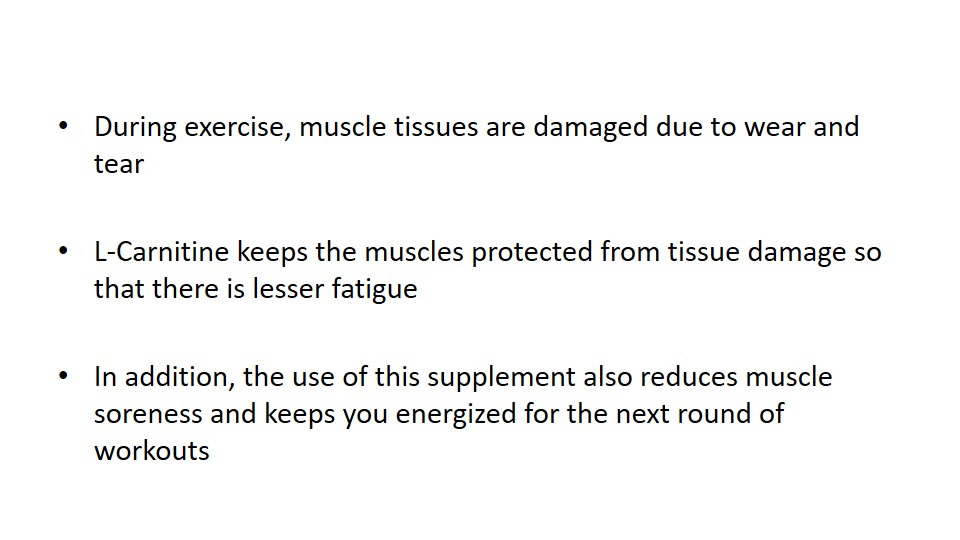
**S15:** L-Carnitine is also involved in increasing glycogen reserves in the muscles. When carbs are taken in, the body uses some of it to form glucose and the excess is stored in the body in form of glycogen. This can be broken down for use when body is in need of energy.



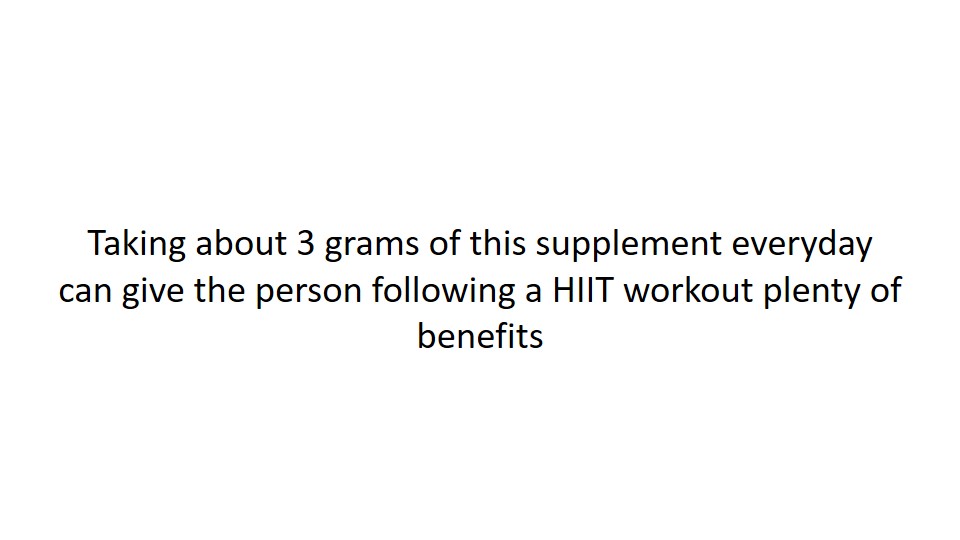
**S16**: By increasing the muscle reserves of glycogen, this supplement ensures that muscles have energy whenever it is required.



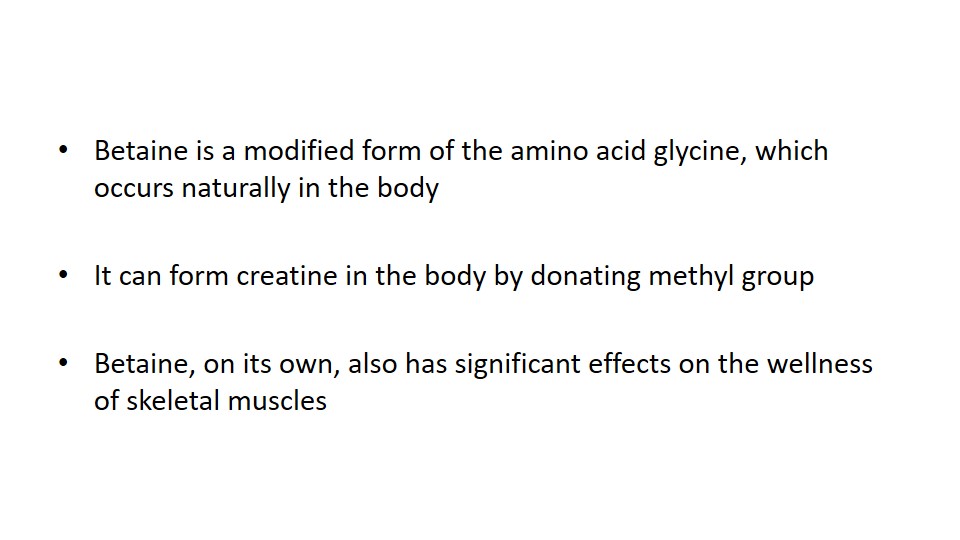
**S17**: Plus, this supplement also prevents the formation of free radicals. Free radicals are the by-products produced as a result of different chemical processes taking place in the body and can significantly harm the body in the long run.



**S18:** During exercise, muscle tissues are damaged due to wear and tear. L-Carnitine keeps the muscles protected from tissue damage so that there is lesser fatigue. In addition, the use of this supplement also reduces muscle soreness and keeps you energized for the next round of workouts.

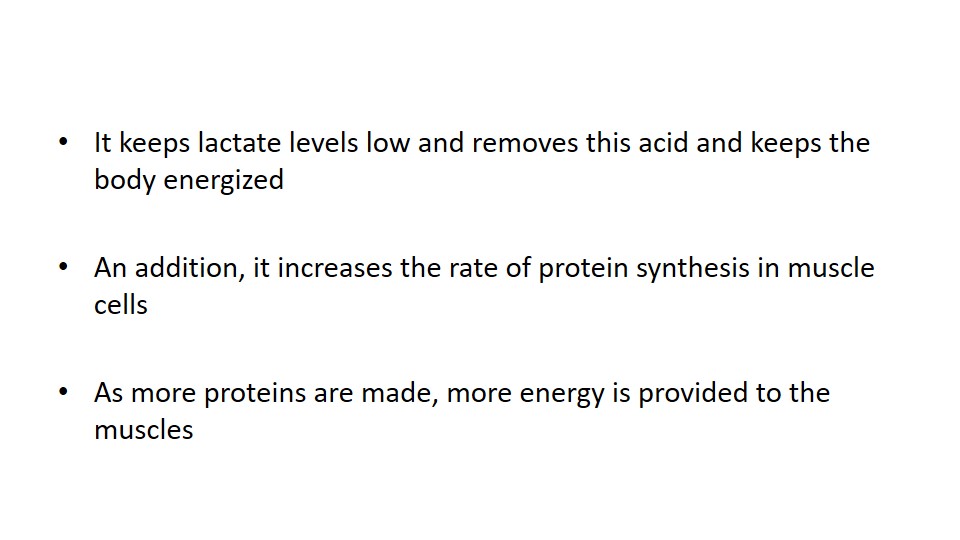


**S19:** Taking about 3 grams of this supplement everyday can give the person following a HIIT workout plenty of benefits.



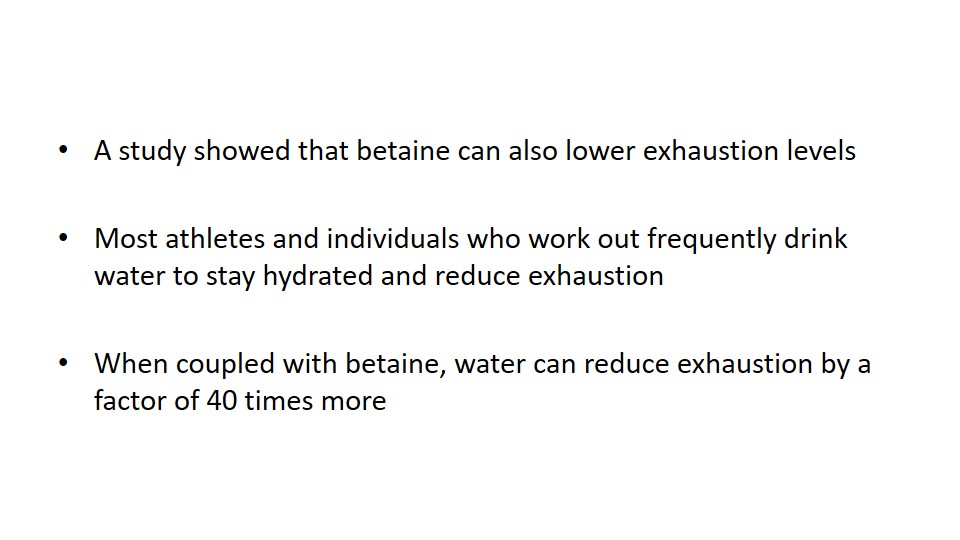
**S20**: Betaine is a modified form of the amino acid glycine, which occurs naturally in the body. It is also present in many foods including beet, shellfish and spinach. So while it is likely that you are taking some of this supplement in your diet chances are that it may not be enough.

Betaine can form creatine in the body by donating methyl group. And as mentioned earlier, creatine has plenty of benefits for anyone who works out. Betaine, on its own, also has significant effects on the wellness of skeletal muscles.



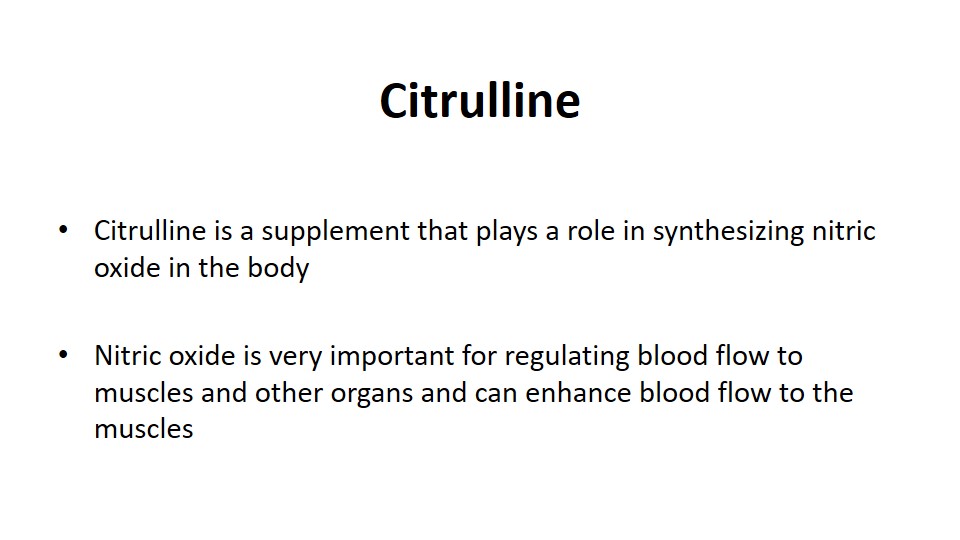
**S21:** It keeps lactate levels low and removes this acid and keeps the body energized.

An addition, it increases the rate of protein synthesis in muscle cells. As more proteins are made, more energy is provided to the muscles. Since proteins are involved in body’s natural repair mechanism, their ample amount is essential for reducing recovery time.

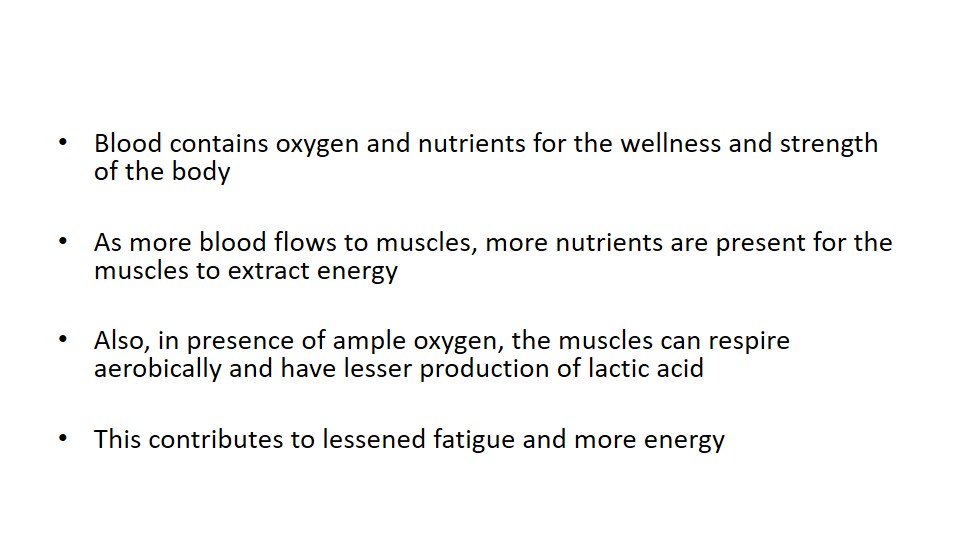


**S22:** A study showed that betaine can also lower exhaustion levels. Most athletes and individuals who work out frequently drink water to stay hydrated and reduce exhaustion. When coupled with betaine, water can reduce exhaustion by a factor of 40 times more.

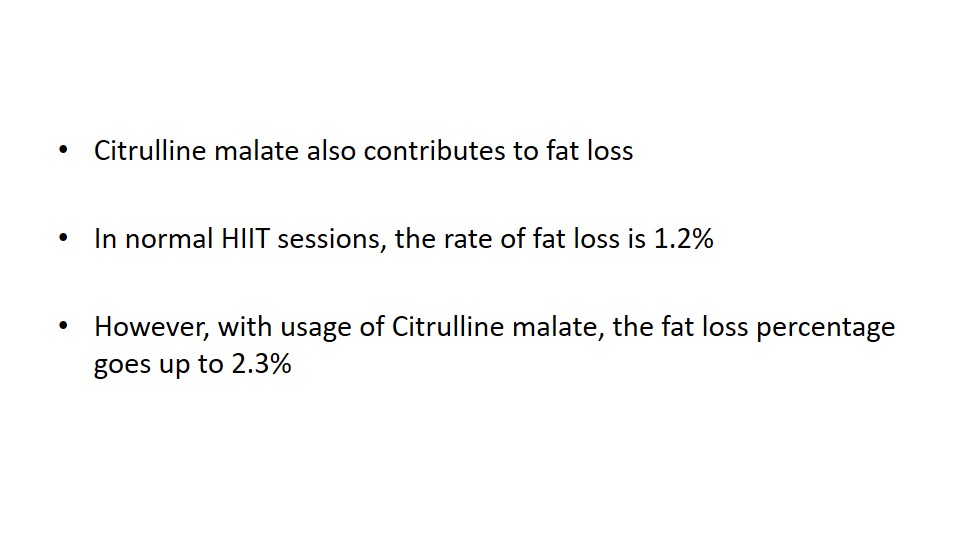
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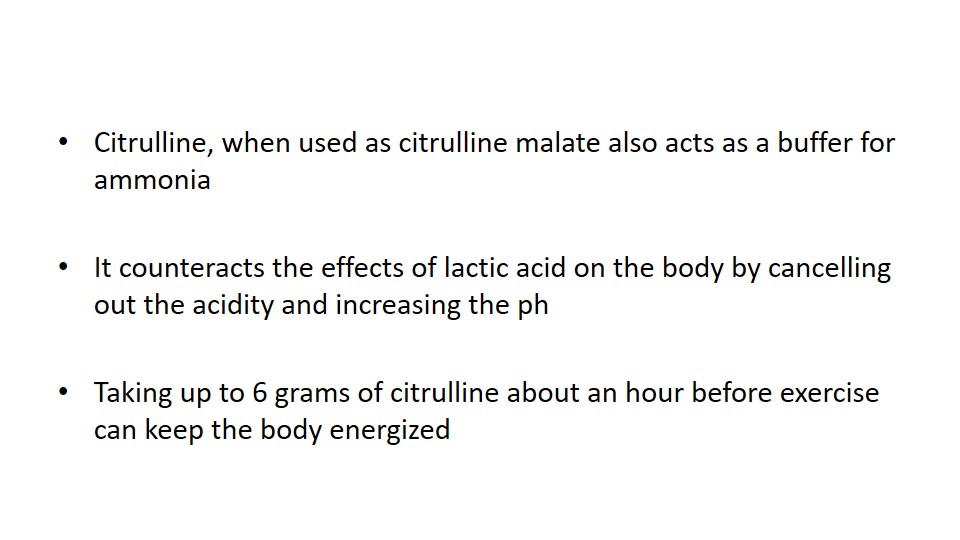
**S23**: Citrulline is a supplement that plays a role in synthesizing nitric oxide in the body. Nitric oxide is very important for regulating blood flow to muscles and other organs and can enhance blood flow to the muscles.



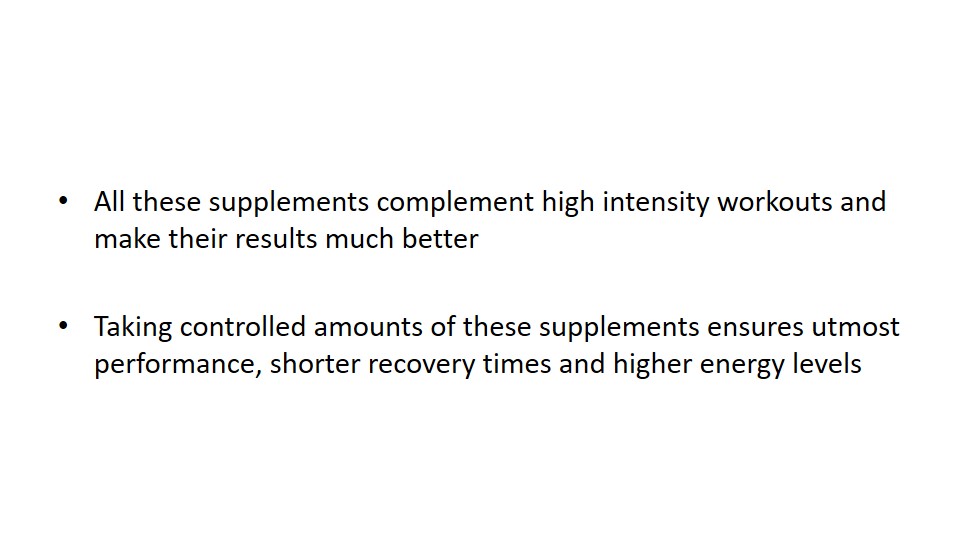
**S24**: Blood contains oxygen and nutrients for the wellness and strength of the body. As more blood flows to muscles, more nutrients are present for the muscles to extract energy. Also, in presence of ample oxygen, the muscles can respire aerobically and have lesser production of lactic acid. This contributes to lessened fatigue and more energy.



**S25:** Citrulline malate also contributes to fat loss. In normal HIIT sessions, the rate of fat loss is 1.2%. However, with usage of Citrulline malate, the fat loss percentage goes up to 2.3%.



**S26:** Citrulline, when used as citrulline malate also acts as a buffer for ammonia. It counteracts the effects of lactic acid on the body by cancelling out the acidity and increasing the ph. Taking up to 6 grams of citrulline about an hour before exercise can keep the body energized.



**S27:** All these supplements complement high intensity workouts and make their results much better. Taking controlled amounts of these supplements ensures utmost performance, shorter recovery times and higher energy levels.