



# Coconut juice: an energy booster

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Coconut milk has been a part of culinary items for centuries. Now it is readily available as a ready to drink beverage. Coconut milk, a liquid extracted from coconut kernel, mixed with water in right proportion, 'Coconut Juice' is increasingly becoming popular.

Coconut Juice, which is rich in Medium-chain triglyceride (MCT) fatty acids, is popular in sports nutrition. MCTs are composed of 3 medium chain fatty acids linked together by a single glycerol molecule. When MCT is consumed, it gets converted into monoglycerides and medium chain fatty acids (MCFAs), both of which possess powerful antimicrobial properties capable of destroying disease causing bacteria, fungi, viruses and parasites.

Athletes can use coconut juice to reduce and control their body weight. It also provides important minerals needed to maintain blood volume, regulate heart health and prevent dehydration or diarrhea. Studies have found that MCT fatty acids present in coconut milk increase energy expenditure and help enhance physical performance. Following exercise, muscles also need plenty of nutrients — including electrolytes like magnesium and potassium that are found in coconut milk — to repair broken down tissue and grow stronger.

Regular consumption of coconut juice increases energy levels of the body. MCTs present in the juice break down into Medium Chain Fatty Acids (MCFAs) and are easily absorbed by the energy-producing organelles of cells in our body, which increases metabolism. With MCFAs naturally present in coconut juice, its regular consumption produces more energy, which helps body perform better, thus leading to greater endurance. The fact that MCFAs digest immediately to produce energy and stimulate metabolism has led athletes to use coconut juice as a means to enhance their athletic performance.

Study to test the physical endurance was made on human beings. The study was made on conditioned cyclists, who were provided three kinds of energy drinks; an MCFA solution, a sports drink and a mixture of a sports drink and MCFA solution. The cyclists pedaled at 70% of maximum energy for two hours, then immediately embarked on a 40 kilometer time trial ride, which lasted about another hour. The ones who consumed the mixture of sports drink and MCFA solution delivered the highest performance during the time trial.

The researchers theorized that MCFAs gave the cyclists an additional source of energy, thus sparing stored glycogen. Glycogen is the energy stored in muscle

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tissue. This energy would have been used during the three hour ride. The higher the amount of glycogen in the muscles, the greater is the endurance of athletes. Many of the powdered sports drinks and energy bars sold at food stores contain MCTs to provide a quick source of energy. The MCFAs most often present in sports drinks and energy bars are in the form of MCT oil, which is a natural ingredient of coconut juice. This ingredient is usually listed as MCT on food, supplement and infant formula labels. Athletes and other active people looking for nutritional, non-drug methods to enhance their physical performance can opt for coconut juice.

Besides increasing energy levels, there are other important benefits of boosting metabolic rate i.e. it strengthens the immune system and protects the body from illness and also promotes quick healing. When metabolism is increased, cells function at higher rate of efficiency. This heals injuries quicker by replacing old and diseased cells with young new cells which are generated at an increased rate. The MCTs present in coconut juice can help lower inflammation, which is associated with painful conditions like arthritis and general joint or muscle aches and pains.

Studies generally, show that a single dose of MCFA mixtures has little measurable effect on energy and endurance levels. However the results were more significant when MCFAs were consumed as a part of daily diet. This also applies to those people who diet and feel low in energy because of food restriction. The MCTs present in the milk can do the same for them. If coconut juice is consumed regularly, it can provide a boost in their energy levels throughout the day. The boost in energy is not like the one who gets a kick from caffeine. It is more subtle than that, but lasts for a longer period. As mentioned earlier, the metabolism of the body is elevated and remains so for at least 24 hours.

With all these nutritional and energy benefits obtained from a single source, coconut juice is ready to bring a new prospect in the health beverage industry. It is a healthy dairy substitute and also a vegan food. A product which has been a part of culinary items for centuries is now increasingly being recognized as a natural and nutritious energy drink.

*References: 1. Bruce Fife, C.N., N.D (2004), The Coconut Oil Miracle, USA: Penguin Group.*