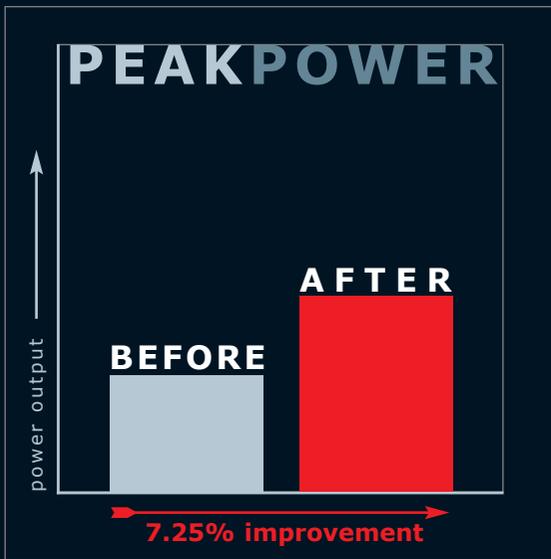


Increase your sprinting power by up to 7%



The effect of **KR10 creatine supplementation** on repeated sprint efforts in cycle ergometry

## YOUR SIS ENERGY SYSTEM

FUEL  
HYDRATION  
RECOVERY  
POWER SNACK  
PROTEIN

### PSP22 ENERGY

#### HIGH ENERGY

The choice to give you extra energy during exercise. Ideal for long work outs, carbo loading or when you need that extra boost. PSP22 is very versatile and can be used at high concentrations to give you the ultimate energy drink. PSP22 should be your choice for a fast and sustained energy boost. Ideal before, during or after exercise.

orange | blackcurrant | lemon | original



### GO ELECTROLYTE

#### HYPOTONIC ENERGY

Ideal for indoor work outs, exercise in the heat and any time when you are sweating heavily or dehydrating. Go provides fast rehydration, sustained energy and is ideal during or after exercise. Go puts back what you sweat out.

lemon&lime | blackcurrant | watermelon | tropical



### REGO RECOVERY

#### TOTAL RECOVERY

A carbohydrate and protein mix that helps speed up recovery from intense exercise and enables you to get the most out of each days training. Ideal for those who have training sessions close together.

strawberry | chocolate | banana



### GO-GEL

#### ENERGYBOOST

Go-Gel provides 25g of isotonic energy in a convenient fast-flow gel. Essential emergency rations on long rides.

orange | blackcurrant | tropical



### GO-BAR

#### POWERSNACK

THE power snack that's high in carbohydrates, rich in micro-nutrients and low in fat.

banana | chocolate&orange | cherry&vanilla | apple&blackcurrant



### REGO BUILD

#### DAY TIME MUSCLE GROWTH

### REGO NOCTE

#### NIGHT TIME MUSCLE GROWTH

### REGO RAPID

#### RAPID MUSCLE RECOVERY

Strawberry | Devon Toffee



## SUPPLEMENTS

#### CLA

ACTIVE ISOMERS OF CONJUGATED LINOLEIC ACID

#### GLUTAMINE

PHARMACEUTICAL GRADE GLUTAMINE

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LEF007



# KR10 Creatine Supplement

# 70% more power

**Increase** your sprinting  
power by **7%** in less than

**7 days**



**Creatine** appeared on the supplement market in the early 90's and it has created unprecedented numbers of scientific studies.

**Creatine** has been used by many thousands of athletes and generated much media coverage. Creatine supplementation does improve performance.

**Science in Sport** have been at the forefront of Creatine supplementation since the early 1990's and their KR10 brand has been proven in many scientific studies and been used effectively by athletes and sports people at all levels of competition.

**Science in Sport** only use pharmaceutical grade European manufactured Creatine that is then packed in their own drug free facility, it does not contravene any IOC regulations.

**Science in Sport** warranty that their products are free of contamination by banned substances. Warranty is available on [www.scienceinsport.com](http://www.scienceinsport.com).

**Creatine** supplementation should be considered by anyone serious about their sport.

**Science in Sport** Creatine is synthesized de novo from vegetarian ingredients and is therefore suitable for vegetarians.

## What is Creatine?

Creatine is a natural constituent of a normal diet. Muscle foods such as steak and sushi are often quoted as being high in Creatine. However, vegetarian sources do exist, juniper berries being a particularly good example. Creatine is found in high concentrations in human muscle where it plays an important part in the energy production process. Normally this Creatine is provided from the diet but the body does have the ability to manufacture Creatine from the amino acids Arginine, Glycine and Methionine.

It appears that because of the changes in people's dietary habits they are receiving less Creatine in their diet and have a sub optimal store of Creatine in the muscle. This is especially so for vegetarian athletes. By supplementing Creatine in the diet it is possible to increase the Creatine in muscle and improve performance.

## What does Creatine do?

Athletes require a continual supply of energy for high performance activity. This energy is supplied to the muscle in the form of ATP (Adenosine Triphosphate). There is barely enough ATP to fuel more than a second of strenuous activity.

The body manufactures ATP from carbohydrate, fat and protein in the diet. Fat can be used to make a lot of ATP but this is a slow process. The body can manufacture ATP from carbohydrate far more quickly but even the break down of carbohydrate by anaerobic glycolysis cannot provide ATP fast enough for very explosive events.

*When the body has a sudden increase in demand for energy it has to rely upon a bank of immediately available energy – the Creatine Phosphate Energy System.*

Creatine Phosphate can "donate" phosphate groups in order to re-charge ATP. The use of Creatine Phosphate to recharge ATP during sudden increases in energy demand gives time for Carbohydrate metabolism to be "fired up". Then during less intense periods the energy from carbohydrate metabolism can be used to pay back into the Creatine bank to recharge the Creatine Phosphate.

There is enough Creatine Phosphate to fuel about 5 seconds of a 100m sprint. As Creatine Phosphate can recycle ATP faster than Carbohydrate metabolism, the athlete can put out more power and accelerate faster when using Creatine Phosphate.

## Creatine Supplementation

Extensive research has shown that by supplementing the natural intake of Creatine, the amount of Creatine in the body can be increased to about 5g per kilogram of muscle. This increase results in an increase in athletic performance, particularly in repeated sprint type activities, interval training and weight training.

### How much to use when?

Most research has been undertaken using 5g doses taken 4 times a day, 20g a day in total. Doses of 5g produce a large rise of Creatine in the blood that "pushes" the Creatine into the muscle.

Taking a loading dose of 20g a day for 5 days produces a rapid rise in Creatine stores, and most athletes notice a difference immediately although some take a few days to "settle down". It is possible to produce the same end result by taking a single 5g dose once a day for 4 or 5 weeks and slowly ramp up stores.

Once Creatine stores are loaded athletes can choose to maintain levels by taking 2-5g a day, or doing a loading day once a week or fortnight. Alternatively you can let your levels taper back down and re-load after 2 or 3 months.

### Is there anything else I should consider?

It is important to keep hydrated and there is some evidence to suggest taking Creatine with Carbohydrate may improve the absorption. Many athletes obtain good results taking Creatine with GO Electrolyte sports fuel. Some individuals do not seem to respond to Creatine supplementation, it may be that they already have maximum stores so do not benefit from loading.

Taking on board extra Creatine has been shown to significantly increase lean muscle mass, although this may be due to extra water retention during the loading phase and may settle down later on. In sports where weight is a factor athletes need to consider the advantages over the disadvantage of extra weight.

If you are using Creatine you should also consider using the Science in Sport range of energy drinks....

#### **GO Electrolyte, PSP22 Energy and REGO Recovery**

Creatine is recharged to Creatine Phosphate using energy provided by carbohydrate metabolism. Increasing your Creatine stores will effectively increase your ability to use up carbohydrate.