

# CREATINE TECHNOLOGY – MAKE THE MOST OF IT!



Creatine is one of the most popular sports supplements alongside protein powders. It is used to create greater strength and power from your muscles, so you can push heavier weights and play sports with increasing energy levels. But how does it work and are all creatines the same?

Creatine is a nutrient made in our bodies from a combination of three amino acids – arginine, glycine and methionine and is found naturally in muscle tissue. It is manufactured naturally in the liver, kidneys and pancreas, then secreted into the blood for transport to muscle tissue.

Creatine exists in two different forms in our body – as free, chemically unbound creatine and creatine phosphate. Creatine phosphate is the active form in muscles. When muscles contract, the muscular fuel used for the contraction is a compound called ATP. This provides energy

by releasing one of its phosphate molecules, once released, ATP becomes ADP (adenosine diphosphate). Our bodies don't have a large reserve of ATP and in order to keep our muscle cells energised more ATP must be produced. Creatine phosphate carries out this role by donating its phosphate molecule to ADP, enabling it to become ATP again, where it fuels muscles.

Normal creatine products have a pH of 6.9 or less, which means it will convert to creatinine, when mixed with liquid, BEFORE reaching the muscle. As a result a fraction of the original dose makes it to the muscle cells.

NFS Kre-Alkalyn is the only creatine product with a pH above 7, because its molecules are synthesized with 'buffering' agents. It remains completely stable and reaches muscle cells at full strength.

