USN SCHOOLS SAFE PRODUCTS PARENT/ATHLETE GUIDE



INTRODUCTION

This booklet includes the USN Schools products, how they work & what they are made up of.

We will also take a look at nutrition & supplementation relating to high school athletes specifically.

All USN School's products are formulated by a team of Registered Dietitians & Food Scientists & tested independently for quality & banned substances on a monthly basis.

Our scientifically-researched formulations ensure ultimate quality, efficacy & safety.



THE IMPORTANCE OF SPORT NUTRITION

It has been found that many high school athletes do not meet their energy & protein requirements to support their training volume.

Nutrition forms the basis of performance – in the classroom & on the field

Poor eating habits lead to:

- Poor athletic performance
- Low energy
- Lack of focus
- Delayed recovery
- Lack of endurance
- Weakened immunity

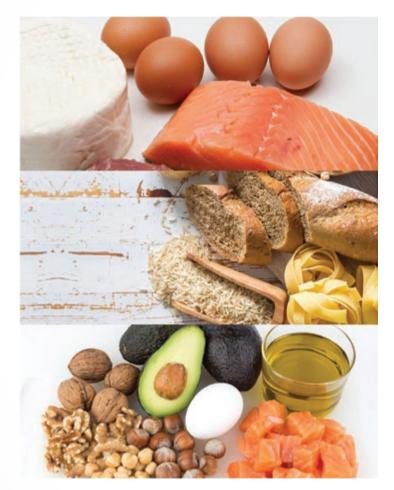
Athlete nutritional requirements depend on:

- Gender
- Exercise intensity & frequency
- Current weight & ideal weight
- Metabolism/body type



THE BASICS OF NUTRITION

- Carbohydrates provide direct fuel to the body & brain. Stored in glycogen. Examples: wheat, rice, potatoes, maize, bread, pasta, fruit
- Protein increase muscle recovery & building, speed up metabolism, necessary for normal body functions & immune function. Examples: meat, chicken, fish, legumes, soya, dairy, eggs
- Fat regulates hormone levels, keep you fuller for longer, necessary for normal body functions & provides energy. Examples: plant oils, nuts, seeds, margarine, butter, avocado
- Fibre regulates digestion, keeps blood sugar stable & increases satiety. Examples: beans, bran, seeds & nuts



WHY IS NUTRITIONAL SUPPLEMENTATION NECESSARY?

It's common for high school students to skip meals & snacks.

It is recommended that teenagers eat every 3-4 hours due to increased metabolism & energy used for concentration & focus during school, athletes have even greater nutritional requirements.

Supplementation offers a convenient, all-in-one method to get snacks & pre/post-workout nutrition in.

All supplements are designed differently & play a different role.

The USN range is recommended for high school students only.

Consuming the right supplements at the right time may play a positive role in:

- Body composition
- Energy & endurance
- Performance
- Focus
- Recovery



NUTRITION & PERFORMANCE

During training & events, the body has increased requirements:

- PROTEIN the right kind & amount. Enhances muscle repair & recovery.
- **ELECTROLYTES** for hydration & nerve cell functioning.
- **AMINO ACIDS** including glutamine & BCAA's to promote muscle repair, endurance & recovery.
- **CARBOHYDRATES** refuels the glycogen stores. High muscle glycogen increases performance capacity. Glycogen is the body's primary source of energy for short-term, high-intensity exercise. Carbohydrates also assist muscle recovery.



PRODUCTS

BCAA AMINO+

Leucine, isoleucine & valine are essential BCAA's (branched chain amino acids) & together provide direct fuel to muscle fibres & have a multi-action effect on:

- Energy
- Endurance & stamina
- Recovery

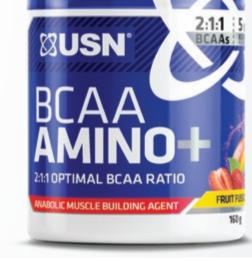
A great intra- & post-workout supplement to enhance performance & recovery. Ratio of BCAA – 2:1:1 – most researched, effectively absorbed ratio. Low in carbohydrates.

Contains potassium for proper muscle contraction & vitamin. B6 for nutrient transport & metabolism.

DIRECTIONS:

Mix 3 scoops with 400ml water, shake well & consume before & during workout. You may have one additional serving post-training for recovery.







HOW BCAA AMINO+ WORKS:

LEUCINE: 2500 mg plays a vital role in muscle protein synthesis & performance.

ISOLEUCINE: 1250 mg enhances energy production & accelerates muscle repair.

VALINE: 1250 mg blocks tryptophan from entering the brain during exercise – this "tricks" your body into thinking that you are not tired & enhances endurance.

GLUTAMINE: Supports immune system, aids in muscle repair & replenishes glycogen.

CITRULLINE MALATE: Non-essential amino acid but increases exercise performance & training capacity. Reduces lactic acid build up in muscles for recovery.

VITAMIN B6: Important for energy & protein metabolism. The transporter of the body.

POTASSIUM: Ensures proper muscle contraction.



MUSCLE FUEL STS

Muscle Fuel STS consists of a high protein blend with a 4-Stage Glycomatrix Carb System.

Added glutamine, taurine & BCAA's optimize strength, performance, energy & recovery.

Free from creatine & testosterone-boosting ingredients

- Muscle repair & recovery
- Maintenance of lean muscle mass
- Strength & endurance

USN's Muscle Fuel STS is free from stimulants & hormonal ingredients to provide safe, yet effective muscle support for your best performance.

DIRECTIONS:

For very active individuals under 60 kg body weight: 1 serving per day (1 scoop mixed with 300ml water). For very active individuals over 60 kg body weight have between 1 - 2 servings per day (1-2 scoops mixed with 300-600 ml water). Consume within 1 hour of exercise or as a light meal replacement.







Formulation includes (per 1 scoop - 60g):

5-STAGE SUSTAINED TRANSPORT SYSTEM PROTEIN MATRIX (STS): 20,2 g per serving, fast- & slow- releasing, aids muscle repair & growth, strength & performance & reduce fatigue.

4-STAGE GLYCOMATRIX CARB SYSTEM:

33 g, a blend of fast & slow releasing carbohydrates to replenish glycogen stores, provide energy & recovery.

BCAA'S:

4,1 g, enhances energy, endurance & recovery.

GLUTAMINE:

3,9 g, boosts immune system, muscle repair & energy.

TAURINE:

Amino acid which can be found in meat, fish & dairy. Reduces insulin resistance & may improve athletic performance.



BLUELAB[™] 100% WHEY PREMIUM PROTEIN

The USN BlueLab[™] is a first of it's kind – consumer-tested & feedback-driven product formulations.

Exciting & unique flavours based on consumer demand.

USN's BlueLabTM 100% Whey Premium Protein is a blend of whey protein isolate, hydrolysate & concentrate.

Whey is absorbed quicker than any other type of protein.

Exceptional amino acid profile to feed muscle fibres for growth & maintenance. Almost no carbohydrates & sugar.

Contains Tolerase[™] L to further boost absorption & digestibility, makes the product suitable for lactose intolerant individuals.

DIRECTIONS:

For individuals under 60 kg body weight: 1 serving per day (1 scoop mixed with 150-200ml water). For very active individuals over 60 kg body weight may have 1-2 servings per day (2 servings = 2 scoops mixed with 300-400 ml water). Consume within 1 hour of exercise.





ANVTIME





STRENGTH MUSCLE







BLUELAB[™] 100% WHEY PREMIUM PROTEIN

Formulation includes (per 1 scoop - 32g):

100% WHEY PROTEIN:

22,3 g absorbed quickly into muscle glycogen stores for muscle repair & recovery to maintain lean muscle mass.

LOW IN CARBOHYDRATES & SUGAR:

Only 2,8 g carbohydrates of which 0,8g sugar.

AMINO ACIDS :

4,8 g BCAA, exceptional profile to enhance protein transport into glycogen stores & enhances energy, endurance & recovery.

GLUTAMINE:

3,7 g, boosts immune system, energy & muscle repair.

$\mathsf{TOLERASE}^{\scriptscriptstyle\mathsf{TM}} \mathsf{L}:$

Breaks down any remnants of lactose in whey, enhances digestion & uptake, makes product suitable for lactose intolerant individuals.

SELENIUM:

Aids protein synthesis, growth & development.

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WINNER'S ENERG

Winner's EnerG is a great-tasting rehydration & recovery formulation. Glycogen, electrolytes & phosphates are depleted rapidly during intense physical activity.

Winner's EnerG aids in:

- Rapid rehydration
- Glycogen restoration
- Immediate energy
- Reduces risk of muscle cramping & stiffness
- Enhanced recovery

DIRECTIONS:

Mix 2 heaped tsp. mixed with 250ml water, consume 1-2 servings every hour during training longer than 1 hour. Drink 30-60 minutes before events, take 2-3 sips every 10-15 minutes.

Suitable for age 6 & above.

Formulation includes (per serving):

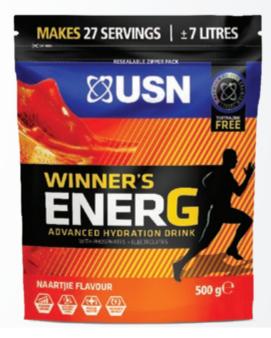
CARB MATRIX:

16 g of carbs, high energy, quick absorbing & rapidly digested carbohydrates to replenish glycogen stores & enhance energy & performance.

ELECTROLYTES :

Sodium, potassium, calcium, magnesium & phosphorus: maintains muscular & nervous system health, prevent cramping & assists recovery.





PURE GLUTAMINE

Glutamine is a conditionally-essential amino acid which is broken down & lost quickly during intense physical activity.

Glutamine makes up 61% of your muscle mass.

Supplementing with Pure Glutamine aids in:

- Strength
- Stamina
- Recovery & reduction of lactic acid (reduces stiffness)
- Boosts immunity

Our micronized form of Pure Glutamine is absorbed quickly (due to the small particle size).

1 tsp Pure Glutamine = 2500 mg glutamine

DIRECTIONS:

For individuals under 60 kg body weight, consume 1 serving per day. For individuals over 60 kg body weight consume 2 servings per day



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CRAMP BLOCK

A time-release source of minerals & electrolytes.

USN'S CRAMP BLOCK IS DESIGNED TO:

- Support muscle recovery & performance
- Reduce tiredness & fatigue
- Ensure electrolyte balance rehydration
- Reduce stiffness & cramping

DIRECTIONS (FOR VERY ACTIVE INDIVIDUALS BETWEEN AGE 15-18):

- For daily supplementation: take 2 tablets before bed
- Pre/during event: take 2 tablets 30mins before start of event, 1 tablet per hour of exercise
- Post-event: take 2 tablets 30mins after event & 2 before bed
- Phosphate loading: take 2 tablets twice per day prior to an event

Formulation includes (per 2 tablets):

SODIUM BICARBONATE:

Restores sodium levels lost through perspiration & maintains hydration.

VITAMIN B6:

Important for energy & protein metabolism. The transporter of the body.

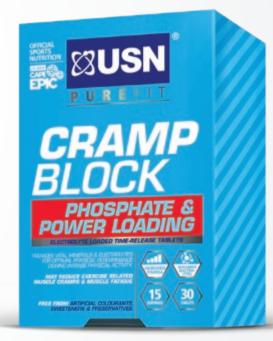
CALCIUM CARBONATE:

Strengthens bone density & helps to prevent muscle cramps.

MAGNESIUM CARBONATE:

Vital in the production of ATP (aerobic energy source), muscle recovery, role in muscle contraction & increasing skeletal strength.







Remember, excellent nutrition & supplementation are essential to reaching your training & performance goals.

YOU ARE YOUR ONLY LIMIT!

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