Lansing Eastern High School Presents:

# "What can I do to be a better football player?"



Information brochure on dieting and athletic supplements.

This brochure is intended to answer many of the general questions that students and parents have about improving performance through the use of supplements.

For more specific information, please go to:

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http://www.ausport.gov.au/ais/nutrition

## What should you do?

Most nutritionists agree about where most teenage athletes should get their nutrients:

From their actual food!

During the football season, this is an example of the diet:

## Pre-competition/Pre-training ideas:

- Sufficient fluid to maintain hydration about 10-20 oz 4 hours prior along with some sodium (think sport drinks like Gatorade)
- Foods low in fat and fiber but high in carbohydrates (like all fruits, vegetables, wholewheat bread and pasta)
- Moderate in protein (low fat yogurt)

## Post-competition/Post-training ideas:

- Consume at least 130g of carbohydrates within the first 30 minutes after training (2 bagels and 2 large bananas)
- 24 oz of fluid per pound of weight loss (think Gatorade again)
- low or no fat and about 10g of protein (think yogurt and chocolate milk which contains whey)

#### You can also take in multivitamins.

- Take one a day
- This is useful if there is a deficiency in your diet
- A good source of vitamins in general



If there is a recommended diet for high school football players, this essentially outlines what should be expected.

## What about <u>supplements</u> to enhance performance?

Appropriate use of ergogenic aids should only be used after careful evaluation for safety, efficacy, potency and legality. LSD *does not endorse* the use of any supplements and has adopted the stance of the MHSAA, National Federation of High School Association, NCAA, Association of Professional Team Physicians and many other professional organizations regarding their use.

## **American Academy of Pediatrics**

- Has a policy statement condemning the use of ergogenic aids, including dietary supplements, by children and adolescents.

Since we still do not know the long-term effects of any supplement use or how they impact a growing/developing body, it is safer to avoid supplements altogether with the exception of the multivitamins.

Supplements are put into four categories by the AIS (Australian Institute). The first group being provided below has the most research to show that they work.

## **Group A Supplements:**

- Antioxidant vitamins C&E
- Bicarbonate and Citrate
- Caffeine
- Calcium Supplement
- Creatine
- Electrolyte replacement
- Iron Supplement

- Liquid meal supplements
- Multivitamins
- Probiotics
- Sports bars
- Sports drinks
- Sports gels
- Vitamin D

Any group A supplement use should be under the direction of a qualified nutritionist.

## What about *Creatine*?

#### **Benefits:**

- Provides improved performance in repeated bouts of high-intensity activity.
- Excellent for use in resistance training to increase lean body mass.

#### **Risks:**

- Weight gain and fluid retention.
- Potential impact on kidney/liver function.
- Athlete needs to be developed since long-term impact on younger athletes is still unknown.

The American College of Sports Medicine recommends creatine *not to be used* by persons under 18 years of age.

## What about Caffeine?

## **Benefits:**

- A stimulant
- Mobilizes fats for energy use
- Enhances endurance performance which would be useful for skilled position players

#### Risks:

- Can stimulate fluid loss/dehydration.
- Not everyone responds well to caffeine
- Heart rate will increase and motor control can be impaired (aggressive athletes with no control)

These are just a couple of supplements that are commonly used in competition for football. Both are not necessary to improve performance.

The next 3 groups of supplements should not be used under any circumstances for athletes in high school.

## **Group B Supplements:**

- HMB

- Colostrum
- B-alanine - Melatonin
- Probiotics (for immunity - Glucosamine

- Glutamine protection) - Ribose

These supplements above are still in the research phase and there is little information about the long-term affects these might have on adolescent bodies. In fact, we don't know enough to say that these supplements actually improve performance. Even though these supplements are legal, there is also a risk of contamination with banned supplements.

## **Group C Supplements:**

- Branched chain amino acids
- Carnitine
- Chromium picolinate
- Coenzyme Q10
- Cordyceps
- Cytochrome C
- Gamma-oryzanol & ferulic
- acid

- Ginseng
- Inosine - Lactaway
- Nitric Oxide Supplements
- Oxygenated water
- Pvruvate
- Rhodiola rosea
- ZMA

The effect of these supplements is unknown since they are not even being used for research! In fact, these supplements might even impair function. It is better to just avoid these supplements.

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## **Group D Supplements:**

These supplements are *banned* or are at high risk of being contaminated with substances that could lead to a positive drug test.

- Androstenedione
- 19-norandrostenediol
- 19-norandrostenedione DHEA
- Ephedra
- Strychnine
- Tribulus terrestris & other herbal testosterone supplements
- Glycerol

## **Anti-Doping Agencies/More** information

- World Anti-Doping Agency (WADA)
- United States Anti-Doping Agency (USADA)
  - ✓ http://www.usantidoping.org/
- USADA Drug Reference Hotline
  - ✓ http://www.usantidoping.org/athletes/d rug-reference-line.aspx

Let us make smart choices this year!