



## Nutrition requirements for women in sports- nutrition for women athletes

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### **Abstract**

*Nutrition is needed for everybody especially for sports persons; nutrition plays an imperative role in enhancing their performance. Supplemental nutrition drinks can be supportive to players both men & women. But the energy sports drinks are met with several challenges as being too alcoholic in temperaments as several drinks slow down the body metabolism of a player. Minerals & vitamins are necessary for sports people but there are certain restrictive limits for them. Sports drinks provide healthy balance of protein, carbohydrate, and fat but if taken in excess they have negative effects. There are hundreds of varieties of nutrients which are proved as amplifying performances of sports persons. There are several challenges to increased or unplanned intake of dosages of sports drinks indicate to varying levels of side effects on health.*

**Key Words:** Nutrition supplements , women athletes, negative impact , challenges of sports nutrients

### **Introduction**

Supplemental nutrition drinks can be supportive to players. Studies have shown that minerals & vitamins are necessary specially for sports women. Sports drinks provide healthy balance of protein, carbohydrate, and fat. There are innumerable varieties that are proved as amplifying performance of the player. There are several challenges to increased or unplanned intake of dosages of sports drinks indicate to varying levels of side effects on health.

**Benefits of Supplemental Nutritional drinks-**Supplemental nutrition drinks can be helpful for :

1. Sports athletes who struggle with a loss of appetite ,

2. Sports athletes who have difficulty in chewing

3. Sports athletes who have trouble preparing balanced meals,

4. Sports athletes who are recovering from surgery

5. Sports athletes who suffering on continuous illness.

(REHRER, N.J. (1994) The Maintenance of Fluid Balance during Exercise 2007).

But these drinks aren't delightful injection for nutrition. "The danger is that players find a lot of minerals and vitamins and come to the conclusion that additional intake escalates their sporting performance. Several of the players become addicts



to such nutrient intake. If they apply the supplemental drinks as meal substitutes that might prove desirable. It's not good to eat a full meal and then drink a supplement, unless the goal is to gain weight or stop weight loss. It's too many calories." Supplemental nutrition drinks provide a healthy balance of protein, carbohydrate, and fat. (REHRER, N.J. (1994) The Maintenance of Fluid Balance during Exercise 2007).

**Classification Sports drinks** -There are hundreds of varieties that fall into two general categories. Shakes, such as Boost are intended for oral consumption. These are formulated to meet general nutrition goals such as increased calories and protein. Some drinks are designed to be compatible with health conditions such as diabetes (Glucerna).

**Classification** - Sports drinks can be split into three major types:

1. Isotonic sports drinks which contain concentrations of salt & sugar as in human body
2. Hypertonic sports drinks which contain a higher concentration of salt & sugar
3. Hypertonic sports drinks which contain a lower concentration of salt and sugar than the human body.

Most sports drinks are moderately isotonic, having between 4 and 5 heaped teaspoons of sugar per five

ounce (13 and 19 grams per 250ml) serving.

Isotonic - quickly replaces fluids lost by sweating and supplies a boost of carbohydrate. This drink is the choice for most athletes - middle and long distance running or team sports. Glucose is the body's preferred source of energy therefore it may be appropriate to consume Isotonic drinks where the carbohydrate source is glucose in a concentration of 6% to 8% - e.g. Boots Isotonic, Lucozade Sport.

Hypotonic - quickly replaces fluids lost by sweating. Suitable for athletes who need fluid without the boost of carbohydrate e.g. jockeys and gymnasts.

Hypertonic - used to supplement daily carbohydrate intake normally after exercise to top up muscle glycogen stores. In ultra distance events, high levels of energy are required and Hypertonic drinks can be taken during exercise to meet the energy demands. If used during exercise Hypertonic drinks need to be used in conjunction with Isotonic drinks to replace fluids.

### **Shake Drinks**

Shakes are usually fortified with sugar to improve taste. Formulas are usually fortified with vitamins and blended with sugar to improve taste. Formulas are designed for more specific disease states such as cancer, chronic obstructive pulmonary disease and later-stage kidney disease. These drinks can be



consumed orally but aren't designed to taste good, and are often used in feeding tubes. Your doctor's okay to try a shake, but it's a good idea to ask your doctor if any of the ingredients will interfere with your medications. For example, some drinks contain vitamin K, and sudden changes in vitamin K intake may interfere with the effect of the blood thinner warfarin (Coumadin).

### **Supplemental nutrition shakes**

Supplemental nutrition shakes contain more than just healthy ingredients. Medical experts warn that players who can still eat may be risking too many extra calories by consuming these drinks. This can lead to weight gain and a list of complications associated with obesity, such as high blood pressure and diabetes. Potentially healthier option is a shake or fruit smoothie that is food-based and found in the refrigerated section of the grocery store. These tend to have minimum added sugars and are less processed, and they should not contain excessive amounts of vitamins and minerals, herbs, or other unnecessary supplemental ingredients. Some supplemental nutrition drinks add super protein, Naked juice protein Zone, and bolt house farms protein plus etc tend to cost more than the stable shake drinks.

### **The challenges**

Some Supplemental nutrition drinks provide a healthy balance of protein, carbohydrate and fat. But not all sports players are born with similar body temperaments & physical standards. The physical stamina patterns change from person to person. Thus Supplemental nutrition drinks might have differential impact & different degrees of difference of effect on persons. Sports drinks enhance heavy amount of vitamins & minerals as they are full of super protein & they help in weight gain which is accompanied by cholesterol gain. This is supportive to physical change of sports persons which might prove fatal for their futuristic sports presentation. Players should be very careful in selecting these drinks & they should keep in touch with their coaches trainers & professional Health advisers before adding these drinks to their daily nutrition routine.

### **Negative impact of sports drinks**

1. The nutrition experts advise that players might be risking too many extra calories by consuming the drinks. That can lead to weight gain and a list of complications associated with obesity, such as high blood pressure and diabetes. Besides there is always a danger of underperforming or over performing without consistency of performance.
2. vitamin K intake may interfere with the effect of the blood



- thinning & might interfere with normal blood vessel working
3. Formulas of sports drinks are designed to react against specific disease states such as cancer, chronic obstructive pulmonary disease and later – stage kidney disease hence payers suffering from these disorders might be risking their future .
  4. Research on sports / energy drinks state that are several of them are designed to be well-matched with health conditions such as diabetes (Glucerna) .
- Conclusion-** Thus supplemental energy drinks which the players wish to intake to amplify their performance even though is vital for boosting up their performance. The recent researches have shown that inadvertent intake of sports supplemental nutrition drinks has been adversely affecting them. Performance of the sports persons should emanate from rigorous practice & meticulous working towards skill enhancement not by any drinks. This intake might prove temporal but a sports person needs inherent passion towards sports.
- References ;**
1. Rehrer, n.j. (1994) the maintenance of fluid balance during exercise. International journal of sports medicine, vol. 15(3), p. 122-125
  2. Hamilton, a. (2005) sports drinks or water: what is the best choice for sports performers? Peak performance, 212, p.1-5
  3. Unknown (1993) the effect of different forms of fluid provision on exercise performance. International journal of sports medicine, 14, p. 298
  4. Milosevic, a. And kelly, m.j. And mclean, a.n. (1997) sports supplement drinks and dental health in competitive swimmers and cyclists. British dental journal 182, p. 303-308
  5. Galloway, s.d.r. And maughan, r.j. (2000) the effects of substrate and fluid provision on ergo regulatory and metabolic responses to prolonged exercise in a hot environment. Journal of sports sciences, 18 (5), p. 339-351
  6. Troop, r. (1994) drink your way to winning performances: the seven secrets of hydration, peak performance (august 1994), p. 11-12
  7. Coombes, j. S. & hamilton, k. L. (2000) the effectiveness of commercially available sports drinks. Sports medicine, 29 (3), p. 181-209
  8. Milosevic, a. (1997) sports drinks hazard to teeth. British journal of sports medicine, 31 (1), p. 28-30
  9. Maughan, r. J., and murray, r. (eds.) (2002). Sports drinks: basic science and practical aspects. Crc press.



10. Beashel, p. & taylor, j. (1996) advanced studies in physical education and sport. Uk: thomas nelson & sons ltd.
11. Beashel, p. & taylor, j. (1997) the world of sport examined. Uk: thomas nelson & sons ltd.
12. Bizley, k. (1994) examining physical education. Oxford; heinemann educational publishers
13. Davis, b. Et al. (2000) physical education and the study of sport. Uk: harcourt publishers ltd.
14. Galligan, f. Et al. (2000) advanced pe for edexcel. Oxford; heinemann educational publishers
15. Mc ARDLE, W. et al. (2000) Essentials of Exercise Physiology. 2nd ed. Philadelphia