



**RECOGNIZE TO RECOVER**

Presented By THORNE

# NUTRITION GUIDE: SUPPLEMENTS

We start with a food first philosophy when it comes to fueling athletes – informed choices and a well-designed nutrition plan can meet the nutritional needs of most healthy athletes. However, it is often challenging for athletes to design and put into action a complete fueling plan. Time constraints, access to fresh, whole foods and grocery stores, culinary and nutritional knowledge, underestimating the additional demands of sport, recovery, and growth, are all factors that lead many athletes to fall short of the recommended levels of nutrients. We believe with proper education and safeguards such as NSF Certified for Sport, supplements can be an option when food is not available.

An individual’s nutritional needs are as unique as his or her fingerprints, so understanding what causes nutritional needs to be different can help a person choose the best combination of foods and supplements to best meet his or her needs.

Factors influencing energy needs include exercise, recovery, illness, and metabolism, all of which can impact an individual’s calorie prescription. Stress levels, hormone fluctuations, and even environmental pollutants can all alter one’s specific nutrition needs.

Paying careful attention to the nutrient density of daily calories can help identify gaps in nutrient intake, and in these cases, nutritional supplements can be used to complement the diet.

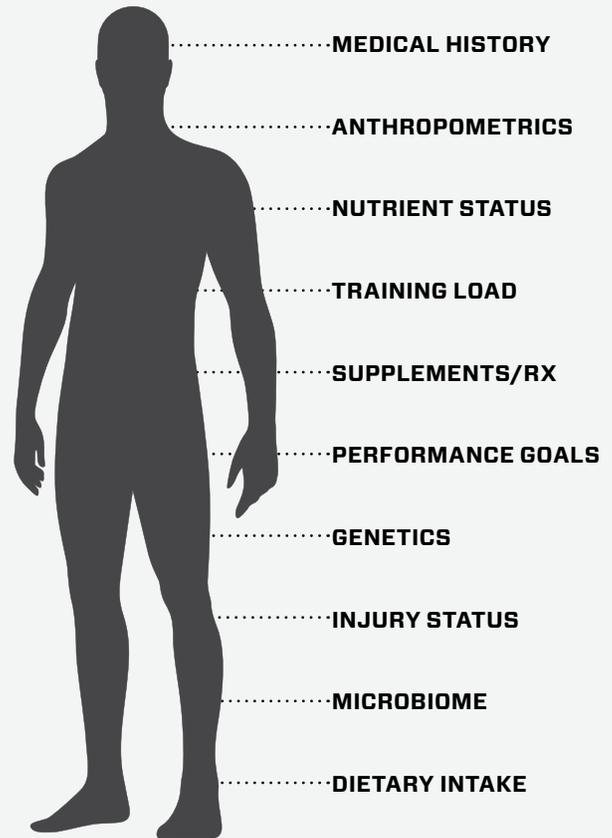
Additionally, there are subsets of athletes that may require supplementation to meet needs that are inadequate for reasons such as health conditions and allergies, religious guidelines, or dietary practices.

The timing and pace of certain sports make in-competition fueling with whole foods to be impossible or improbable; supplemental electrolytes and fuel sources may be preferable in these situations. Other nutrients, such as Vitamin D, are not easily obtained through the diet in adequate amounts. Consequently, taste and food behaviors of athletes tend to make probiotics and fish oil a convenient, and thus more highly acquired source of nutrients than eating adequate amounts of yogurt and omega-3 containing foods.

Due to the state of the current food supply and because very few Americans eat the recommended five daily servings of health-giving fruits and vegetables, many nutrition experts agree that a multi-vitamin/mineral supplement taken daily could help fill the nutrition gap.<sup>1</sup>

## ONE SIZE FITS ONE

The more you know about yourself, the more personalized your nutrition and supplementation can be.



1. Ward E. Addressing nutrition gaps with multivitamin and mineral supplements. Nutr J 2014;13:72.

2. Moore LV, Thompson FE. Adults meeting fruit and vegetable intake recommendations – United States, 2013. MMWR Morb Mortal Wkly Rep 2015 Jul 10;64(26):709-713.



RECOGNIZE TO RECOVER

Presented By THORNE

# SUPPLEMENTS

According to a report from the Centers for Disease Control and Prevention (CDC), Americans do not typically eat a diet that will provide them with all the nutrients they need. By their definition, Americans should be eating 1.5-2 cups of fruit daily and 2-3 cups of vegetables daily.

In 2013, a CDC survey conducted on a state-by-state basis showed that only 13.1 percent of the entire U.S. population met sufficient fruit intake. In this same survey, only 8.9 percent of adults met the recommended daily vegetable intake.

## Common vitamin and mineral deficiencies in the United States

A recent report from the CDC revealed some shocking statistics about the nutrient status of Americans. Some of the highlights of the report are:

**90  
MILLION**

Deficient in vitamin D

**18  
MILLION**

Deficient in vitamin B6

**30  
MILLION**

Deficient in vitamin B12

**16  
MILLION**

Deficient in vitamin C



### HEART HEALTH

B vitamins      Vitamin K  
Vitamin D      Vitamin E  
Magnesium



### HEALTHY AGING

Vitamin C      Vitamin K  
Vitamin E      Magnesium  
Vitamin D      Calcium



### BONE HEALTH

Vitamin D      Calcium  
Vitamin K      Boron  
Magnesium



### BRAIN HEALTH

B Vitamins      Vitamin E  
Vitamin D      Selenium



### IMMUNE SUPPORT

Vitamin A      Vitamin K  
Vitamin C      Zinc  
Vitamin D



### EYE HEALTH

Vitamin A  
Beta-carotene  
Zinc  
Selenium



RECOGNIZE TO RECOVER

Presented By THORNE

# SUPPLEMENTS

Consider the following head to toe assessment to help identify and mend gaps in your current fueling routine to ensure your ritual is complete.

## 1 | CHECK YOUR FOUNDATION

Before anything else, basic human needs must be met. Are you meeting your energy (calories), hydration, and essential vitamin and mineral needs? Take time to assess your total calorie needs and whether your current food choices meet your baseline nutrient needs.

## 2 | CHECK YOUR HABITS

Are you omitting large food groups from your diet, such as meat, dairy, vegetables, nuts, or grains? Identify which nutrients the missing group contains and then identify other sources of these nutrients.

## 3 | CHECK YOUR GUT

“You are what you eat” can be modified to, “You are what you eat – and what you can absorb.” Support healthy digestion with “good bacteria” from food or probiotics and enzymes that aid in the breakdown of food.

## 4 | CHECK YOUR ACTIVITY

As activity increases, the demand for energy and certain nutrients increase. So make sure you account for the extra calories and nutrients to help you maximize your efforts.

## 5 | CHECK YOUR HEAD

The brain requires a lot of energy and nutrients to perform the tasks required of it. Supporting the brain and the nervous system with the necessary nutrients to perform and recover is often overlooked.

## 6 | CHECK YOUR STRESS LEVEL

Stress comes in many forms – physical (training), environmental (chaotic or loud work environments), metabolic, or emotional. Be aware of sources of stress, the demands it places on your body, how your body responds, and what you can do about it.

## 7 | CHECK YOUR SLEEP

With a busy schedule, sleep is often suboptimal as a result of poor time management. Travel to and from competition can disrupt normal sleep patterns. While reliance on sleep aids and sedatives is not recommended, science supports strategies to help promote normal sleep and night time recovery. Strategies include protein before bed, limiting electronic screen time, and non-sedative supplements like melatonin when travel or schedule changes disrupt normal sleep schedules.

The more you know about you, the more personal your nutrition and supplement regimen becomes.

A smart supplementation plan can counteract suboptimal food intake, improve your health, reduce injury duration, and promote your quality of life.\* Arming yourself with data and information that is personal to you will allow you to truly make sure your fueling regimen is “one size fits one.”

## THREE OPTIONS FOR UPGRADE WHEN GAPS ARE IDENTIFIED

### Behavior Change

Changes in habits, compliance and eat/drink with intention.

### Upgrade Food Choices

Changes in food quality, quantity, and timing.

### Fill the Gaps

Additional complements to upgrade existing nutrition plans.



RECOGNIZE TO  
RECOVER

Presented By THORNE

# SUPPLEMENTS

## The Solution to Nutritional Gaps: Navigating the Supplement World

When food choices or behavior change is not possible, supplements are a solution to fill a nutritional gap, there are several factors to consider. It has become obvious the last few years that the quality control of nutrition supplements is sometimes very poor and a consumer may therefore not always get everything for which they think they are paying. For those players who compete at a level where drug testing is involved, there is another risk to consider when taking supplements: a positive test due to supplement contamination. We believe non-drug tested athletes should also have access to supplements free of banned substances. Taking all this information into account, a careful, cost-benefit analysis needs to be performed by anyone taking a supplement. If supplementation is a consideration, we recommend speaking to your physician, registered dietitian, or a sports medicine professional.

---

## Factors to look for when choosing a supplement company that is making high-quality, safe, and efficacious products:

### Third-Party Testing

Nutritional supplement brands can, and should, retain outside, independent companies to audit their manufacturing processes and test their products to ensure the FDA's cGMP's are being complied with, thus ensuring that the company's products contain the ingredients listed on the label in the amounts listed and don't contain any harmful ingredients. Current Good Manufacturing Practice (cGMPs) are a set of regulations that are enforced by the US Food and Drug Administration and provide guidelines that assure proper design, monitoring, and control of supplement manufacturing processes and the facilities they are made in.

### NSF Certification

NSF International has created an advanced certification program for supplements geared toward elite athletes. NSF International's Certified for Sport® program tests products for more than 200 substances banned by the World Anti-Doping Agency and the United States Anti-Doping Agency. A supplement product that bears the Certified for Sport seal ensures that the product contains exactly what the label claims it does, in the amounts listed, and nothing else.

### Realize There is No Cure-All

It is illegal for a supplement company to claim that any of its products prevent, cure, or treat any medical condition. Supplements are intended to complement the diet and to support overall health and well-being. Any express or implied claims that a product will prevent, cure, or treat a medical condition is a red flag that the manufacturer is not in compliance with the FDA's labeling regulations for nutritional supplements.

### Be Aware of Pseudo-Science

Companies often use phrases – such as “clinically proven” – that imply there's science behind their product. Many of these claims are not always backed by actual research. Be cautious of products claiming ancient formulas, cutting-edge science, miracle cures, or guarantees. A reputable and honest company will have contact information you can use to request further information for the research behind their claims.

### Take the Lead From Sports

Be aware of ingredients banned in sports by agencies like the World Anti-Doping Agency and the United States Anti-Doping Agency. While these ingredients are not always prohibited for general consumption, these organizations see a problem with the ingredients, which should be a red flag to you as a regular consumer. Do your research to see if you should ban these ingredients from your nutritional game plan.

### Watch Out for Warnings

Be wary of supplements with a long list of warnings or contraindications listed on the product label. Any serious adverse effects reported to a supplement company must be reported to the FDA by the supplement company.

### Be an Educated Consumer

Registered dietitians are trained to evaluate the need for, the effectiveness of, and safety of nutritional supplements. Always consult a health-care practitioner before starting a supplement regimen. The National Institutes of Health and the United States Anti-Doping Agency offer resources to help educate you on the supplement before using them. Always be sure to do the necessary homework on your supplement company before taking their products.



**RECOGNIZE TO RECOVER**

Presented By THORNE

# SUPPLEMENTS

## Putting It All Together - The Nutrition Routine

Establishing a well thought out nutrition routine can lead to better compliance and best support the needs of the athlete. When considering the number of different variables that can influence a soccer player's needs, an individual approach to both food choices and supplement choices is recommended. An individual's nutritional needs are as unique as his or her fingerprints, so understanding what causes nutritional needs to be different can help a person choose the best combination of foods and supplements to best meet his or her needs.

U.S. Soccer has partnered with Thorne Research as the Presenting Partner of Recognize to Recover, and U.S. Soccer's Official Nutritional Supplement Partner. Thorne is a personalized health solutions company dedicated to improving individual outcomes through science and technology. For 30 years, Thorne has led the nutritional supplement industry in providing researched-based, high-quality natural products, including foundational vitamins and minerals and therapeutic-focused nutritional supplements, many of which are third party tested to be free of banned substances.



### Foundational Supplements

Those supplements designed to help meet the daily needs of the human body

- Ascorbic Acid (Vitamin C)
- Basic Nutrients 2/Day (Multi-vitamin)
- D-5,000 (Vitamin D)
- Double Strength ZincPicolinate
- Florasport 20B (Probiotic)
- Iron Bysglycinate
- Magnesium Bysglycinate
- Multi-vitamin Elite
- (Enhanced Multi-Vitamin)
- Super EPA (Omega-3 Fish Oil)

### Performance Supplements

Those supplements designed to support physical activity and performance goals

- Beta-Alanine SR
- Cal-Mag Citrate (Calcium and Magnesium)
- Catalyte (Electrolytes)
- Creatine
- Niacel (Nicotinamide Riboside)

### Recovery Supplements

Those supplements designed to support recovery from training and physical activity

- Amino Complex (Amino Acid)
- Glucosamine & Chondroitin
- L-Glutamine Powder
- Melaton-3 (Melatonin)
- Meriva 500-SF (Curcumin)
- Whey Protein Isolate

\* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.