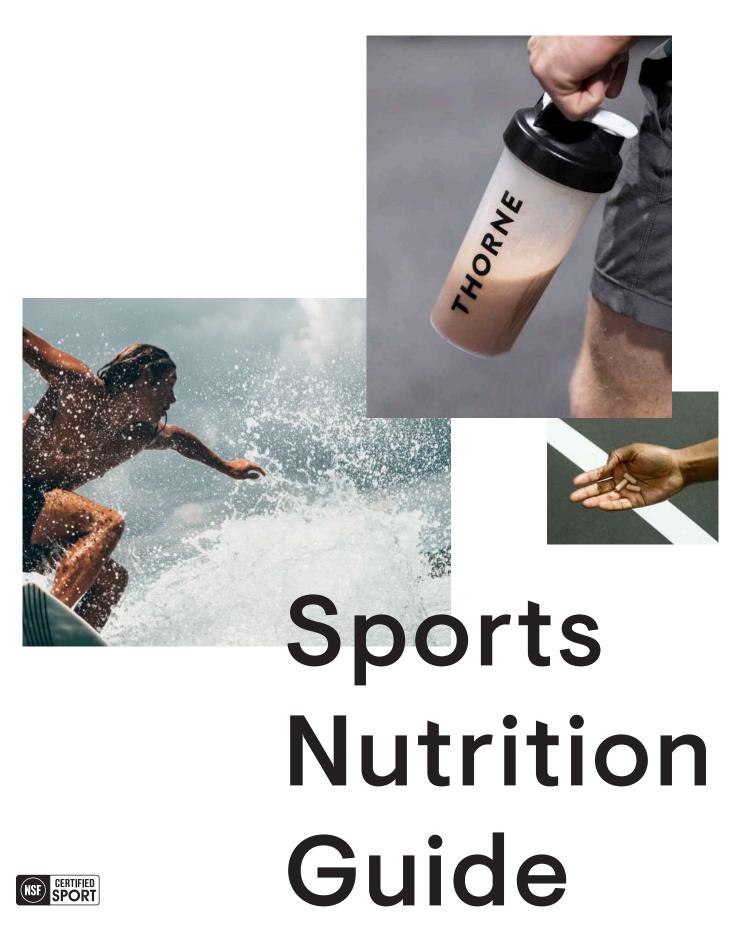
### THORNE



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## Introduction

Whether you are a professional athlete or just competing against yourself, proper nutrition plays an integral role in helping you achieve your fitness goals and prevent injury. This guide provides dietary and nutritional supplement recommendations for supporting optimal performance and recovery.

#### What is NSF Certified for Sport®?

Thorne offers an extensive line of NSF Certified for Sport formulations that will give you peace of mind as you strive to reach new heights.

This rigorous certification ensures that every batch of Thorne's NSF Certified for Sport supplements have been third-party tested by NSF International to verify that each product contains exactly what the label claims it does, in the amounts listed, without any of the nearly 300 substances banned from competition by major athletic organizations. The NSF Certified for Sport seal helps athletes make safer decisions in their choice of supplementation and is the only independent third-party certification program recognized by MLB, NHL, and CFL.

/ Note: All Thorne nutritional supplements mentioned in this guide are NSF Certified for Sport.





#### Dietary considerations to meet "macro" targets

#### Protein

Evidence indicates that athletes need higher daily protein intakes to maintain lean muscle mass and to support muscle growth and repair. The American College of Sports Medicine recommends that both endurance athletes and body builders aim to consume 1.2-2.0 grams of protein per kilogram of body weight daily, which is the equivalent of 82-136 grams of protein daily for a 150-pound (68 kg) person.<sup>12</sup>

Aim to consume a variety of protein sources (3-5 servings daily):

0,	Eggs (2 eggs: 12 g)
	Chicken or turkey (3 oz: 26 g)
∞ <sub>/</sub>	Wild salmon (4 oz: 24 g)
<i>ا</i>	Grass-fed steak (5 oz: 30 g)
1an _	90% lean ground beef or bison (4 oz: 30 g)
₽,	Cheddar cheese (1 oz: 6 g)
	Extra firm tofu (3 oz: 11 g)
	Tempeh (3 oz: 19 g)
\$	Black beans (1 cup: 14 g)
\$	Chickpeas (1 cup: 11 g)
φ_	Lentils (1 cup: 18 g)
ب	Quinoa (1 cup: 8 g)
	Nuts (2 tbsp peanut/almond butter or 3 tbsp chopped: 7 g)

Note: Choose oven-roasted and freshly cooked meat over cured or processed meats when possible. Pair beans and legumes with a whole grain to make a complete protein.



#### Carbohydrates

As the body's primary source of energy, carbohydrates should account for 45-65 percent of daily caloric intake. Aim to consume complex carbohydrates from whole grains, legumes, and a variety of vegetables and fruits (fresh and dried) in all colors of the rainbow.

Individuals who consistently train for one hour or more daily should consume 5-7 grams of carbohydrates per kilogram of body weight.<sup>2</sup> A 150-pound person (68 kg), therefore, would need approximately 340-476 grams of carbohydrates daily to sustain their needs. Athletes who exercise more than four hours daily should aim for 8-12 grams of carbohydrates per kilogram of body weight daily.<sup>2</sup>

Carbs to consider (5-7 servings daily):

- Fruits (1 medium banana: 27 g; 1 cup blueberries: 21 g)
- ♥ / Vegetables (1 baked sweet potato: 31 g; 1 cup cooked broccoli: 11 g)
- Brown rice (1 cup: 52 g)
- ₩ ✓ Quinoa (1 cup: 39 g)
- $\Omega_{\prime}$  Whole grain bread (2 slices: 23 g)
- Whole grain pasta (2 oz uncooked: 44 g)
- Oatmeal (1 cup cooked: 28 g)

#### Fats

Fats should account for 20-35 percent of daily caloric intake and primarily come from mono- and polyunsaturated sources that are liquid at room temperature, like olive oil, and from whole foods, like fatty fish, nuts, seeds, and avocado. Omega-3 fatty acids are essential for maintaining a healthy inflammatory response in the body\*. Fatty fish is recommended as an ideal source of essential omega-3 fats, with flaxseed and chia seed being good vegetarian options.

Beneficial fats to choose from (2-4 servings daily):

- ℃ / Fatty fish (4 oz wild salmon: 5 g)
- ::: / Seeds (1 tbsp chia seeds: 3 g)
- Nuts or nut butter (1 tbsp peanut or almond butter: 8 g)
- Avocado (¼ avocado: 5 g)
- Extra virgin olive oil or pitted olives (1 tsp EVOO or 10 olives: 4.5 g)

Listed amounts of protein, carbohydrates, and fat per serving are approximate.







## Foundational supplements to support micro- and macronutrient intake

#### **Basic Nutrients 2/Day**

Foundation\*

Complete multi-vitamin/mineral supplement in a convenient two-capsule per day formulation.

or

#### **Multi-Vitamin Elite**

Foundation\* / Recover\* / Balance\*

Advanced multi-vitamin/mineral bundle with an AM formula to promote energy production and a PM blend to support recovery.\*

#### Whey Protein Isolate

Foundation\* / Recover\*

An easy-to-digest formula available in chocolate and vanilla flavors to help you achieve your protein intake goals.

#### **Collagen Fit**

Foundation\* / Recover\*

Unflavored collagen peptides mix easily into your favorite beverage for joint, ligament, and tendon support.\*

#### Super EPA

Foundation\* / Balance\* / Mental focus\* / Immune function\*

Omega-3 fatty acids support cardiovascular health and help maintain a healthy inflammatory response in the muscles and joints.\*

#### NiaCel® 400

Foundation\* / Prepare\*

Support for cellular energy production, athletic performance, and lean body composition.\*





## Smoothie recipes with Thorne's Whey Protein Isolate

Find additional smoothie inspiration in <u>Thorne's Protein Powder</u> <u>Wellness Guide</u>.

#### Banana berry protein power smoothie

#### Ingredients

2 scoops	Whey Protein Isolate - Vanilla			
2 cups	Liquid of choice (low-fat milk, coconut milk, almond milk,			
	soymilk, macadamia nut milk)			
1 cup	Blueberries (fresh or frozen)			
1	Banana (fresh or frozen)			
1⁄2	Avocado (fresh or frozen)			
1 tbsp	Chia or flaxseed			
1 cup	Ice			

#### Directions

Blend ingredients in blender until smooth.

#### Peanut butter cup protein power smoothie

Ingredient	S
2 scoops	Whey Protein Isolate - Chocolate
2 cups	Liquid of choice (low-fat milk, coconut milk, almond milk,
	soymilk, macadamia nut milk)
1	Banana (fresh or frozen)
1 tbsp	Peanut or almond butter
1 tbsp	Chia or flaxseed
1 cup	Ice

#### Directions

Blend ingredients in blender until smooth.

**Note:** A scoop of Thorne's Collagen Fit can be added to a protein smoothie for additional joint, ligament, and tendon support\*

# Pre-workout nutrition





#### **Dietary considerations**

#### 4-6 hours before a workout:

Consume a balanced meal of protein, healthy fats, and complex carbohydrates.

#### 1-4 hours before a workout:

For exercise that is longer than 60 minutes, eat a carbohydrate-focused snack before exercising.

Skip foods high in fat, protein, or fiber that could cause gastrointestinal discomfort during exercise.

#### Nutritional supplements to consider

Consider integrating one or more of these Thorne formulas into your pre-workout routine.

#### **Pre-Workout Elite**

Prepare\* / Mental focus\*

Optimize focus, strength, output, and recovery.\*

#### **Beta Alanine-SR**

Prepare\* / Recover\* / Balance\*

Helps you train harder for longer with support for muscle output and endurance.\*

#### Creatine

Prepare\* / Fuel\* / Recover\* / Mental focus\*

Support for endurance and cellular energy production.\*

#### Pre-workout smoothie

#### Ingredients

1½ cups	Orange juice
1 cup	Mixed berries (fresh or frozen)
1 scoop	Pre-Workout Elite
1 scoop	Creatine
1 cup	lce

#### Directions

Blend ingredients in blender until smooth. Consume 15-30 minutes before a work out.

## During your workout

#### **Dietary considerations**

Easy to utilize, simple carbohydrates (like fresh fruits) are a great way to refuel during a strenuous workout, particularly for exercise lasting longer than two hours.

Excessive sweating during a workout indicates a loss of electrolytes that will need to be replenished during or after activity.

#### Nutritional supplements to consider

#### **Catalyte**®

Fuel\* / Recover\*

Lemon-lime flavored electrolyte replacement for supporting performance, endurance, and recovery.\*

#### **Amino Complex**

Fuel\* / Recover\*

Clinically validated formula that includes essential amino acids and branched-chain amino acids (BCAAs) to promote muscle mass and enhance cellular energy production.\*





## Post-workout





#### **Dietary considerations**

Consume a high-protein meal or snack (15-25 grams) within one hour of completing your workout.

Consider weighing yourself before and immediately after a workout. A deficit will indicate water loss that needs to be replenished.

/ Note: Each pound lost should be replaced with 16 ounces of fluids.

#### Nutritional supplements to consider

#### **RecoveryPro**®

Recover\*

Chocolate-flavored whey protein powder with additional nutrients to promote restful sleep.\*

#### **L-Glutamine Powder**

Recover\* / Gut health\*

Supports post-exercise muscle cell repair and promotes gastrointestinal and immune health.\*

#### Curcumin Phytosome 1000 mg

Recover\* / Balance\* / Gut health\*

Support for alleviating joint stiffness and muscle soreness and promoting a healthy inflammatory response.\*

## Supporting sleep & stress for optimal performance and recovery<sup>\*</sup>



#### Lifestyle considerations

Achieving a restful 7-8 hours of sleep each night is important for tissue repair. It is estimated that **one in three** adults does not get an ideal amount of sleep, and for athletes, this can impact performance and increase risk of injury. In addition, stress can interfere with the ability to attain deep and restful sleep. Managing physical, mental, and emotional stress is critical to both recovery and performance.

To support calm and restful sleep, consider Thorne's Sleep Bundle for Athletes, which includes RecoveryPro<sup>®</sup>, Melaton-3<sup>™</sup>, and Multi-Vitamin Elite.\*

Intense physical activity places a heavy load of oxidative stress on the body, which occurs when there is an imbalance between antioxidants and pro-oxidative factors. Consume a variety of colorful fruits and vegetables as well as foods rich in polyphenols and antioxidants, such as dark-colored berries and green tea, to support the body's antioxidant stores.

Thorne's Glutathione-SR, a sustained-release form of glutathione, helps the body respond to physical activity and provides antioxidant support for the liver, brain, heart, lung, and eyes.\*

#### Nighttime hot cocoa

 Ingredients

 1 scoop
 RecoveryPro

 1½ cups
 Hot or cold water or milk of choice

#### Directions

Mix thoroughly and consume around bedtime to support restful sleep and recovery.\*



## Sample macro meal plans for athletes





#### Overview

Approximate nutritional needs for a 150-pound athlete engaging in one hour or more of high-intensity exercise daily:

Total calories:	3,000 kcal
Protein:	82-136 grams
Carbohydrates:	340-476 grams
Fats:	68-117 grams

**Note:** To easily track daily macronutrient intake, try a website or phone app like MyFitnessPal or Cronometer.

#### Omnivore one-day menu idea

#### **Breakfast**

Total Calories: 829 / Protein: 31 g / Carbohydrates: 120 g / Fat: 29 g

- / 2 eggs cooked to preference
- / Whole grain bagel with 2 tbsp peanut butter
- / 1 cup grapes, 1 banana (medium)

#### Snack

Total calories: 253 / Protein: 3 g / Carbohydrates: 60 g / Fat: <1 g

/ Pre-workout fruit smoothie (recipe in "Pre-workout nutrition" section)

#### Lunch

1

Total calories: 653 / Protein: 36 g / Carbohydrates: 56 g / Fat: 33 g

#### Chicken salad recipe

- **3 oz** Roasted or canned chicken
- 11/2 tbsp Mayonnaise
  - Apple (medium), finely diced
- 2 tbsp Chopped walnuts
- 1 Carrot, chopped
- 1 Celery stalk, chopped

Mix all ingredients together and serve on 2 slices whole grain bread.

#### Snack

Total calories: 499 / Protein: 20 g / Carbohydrates: 72 g / Fat: 17 g

- / 1 cup low-fat plain yogurt
- / ½ cup granola
- / 1 cup blueberries

#### Dinner

Total calories: 763 / Protein: 45 g / Carbohydrates: 99 g / Fat: 21 g

- / 4 oz grass-fed steak
- / 1 baked potato (medium) with chives and 1 tsp butter
- / 1 cup cooked broccoli
- / 1 cup cooked brown rice with 1 tsp olive oil

#### **Total Daily Intake**

Calories: 2,997 / Protein: 135 g / Carbohydrates: 407 g / Fat: 100 g

## Sample macro meal plans for athletes



#### Vegan one-day menu idea

#### **Breakfast**

Total Calories: 704 / Protein: 36 g / Carbohydrates: 105 g / Fat: 21 g

- / 4 oz silken tofu
- / 1 cup black beans sauteed in 1 tsp olive oil with onions, garlic, and spices; serve on whole wheat tortilla with 3 tbsp salsa and ¼ avocado
- / 1 apple (medium)

#### Snack

Total Calories: 435 / Protein: 15 g / Carbohydrates: 57 g / Fat: 19 g

- / 2 slices whole grain toast with 2 tbsp peanut butter
- / 1 cup grapes

#### Lunch

Total calories: 683 / Protein: 24 g / Carbohydrates: 88 g / Fat: 29 g

#### Quinoa salad recipe

1 cup	Cooked quinoa, cooled			
1⁄2	Cucumber, finely chopped			
¼ cup	Red onion, finely diced			
1 handful	Mint, finely chopped			
1 handful	Parsley, finely chopped			
1 cup	Canned garbanzo beans			
2 tbsp	Chopped pistachios			
1 tbsp	Extra virgin olive oil			
Etc	Juice of ½ lemon			
	Salt and pepper to taste			

Mix all ingredients together and serve.

#### Snack

Total calories: 498 / Protein: 7 g / Carbohydrates: 102 g / Fat: 11 g

- / 1 cup almond milk yogurt (plain)
- / ¼ cup granola
- / 1/2 cup blueberries
- / 1 medium banana

#### Dinner

Total calories: 661 / Protein: 41 g / Carbohydrates: 79 g / Fat 20 g

#### One pot lentils and brown rice recipe

½ cup	French lentils
½ cup	Brown rice
11/2 cups	Veggie broth
1 tbsp	Vegan butter
1 tbsp	Parsley

In a saucepan, combine lentils, rice, and broth, and bring to a boil. Reduce heat to low, and simmer for 20 minutes. Turn off the heat and stir in the vegan butter and parsley. Serve warm.

/ 1 cup cooked edamame, sprinkled with sea salt

#### **Total Daily Intake**

Calories: 2,981 / Protein: 123 g / Carbohydrates: 431 g / Fat: 100 g

#### Customize your stack with Thorne's extensive line of NSF Certified for Sport nutritional supplements to meet your unique training and sports performance goals.

## Thorne's NSF Certified for Sport® supplements

nts	Foundation*	Prepare*	Fuel*	Recover*	Balance*	Mental Focus*	Gut Health*	Immune Function*
Amino Complex (Berry or Lemon)			•	•				
B-Complex #6	•							
Basic Nutrients 2/Day	•							
Beta Alanine-SR		•		•	•			
Catalyte®			•	•				
Collagen Fit	•			•				
Creatine		•	•	•		•		
Curcumin Phytosome 1000 mg				•	•		•	
EnteroMend®					•		•	
FloraSport 20B®	•				•		•	•
Glutathione-SR					•			
Iron Bisglycinate	•							
L-Glutamine Powder				•			•	
Magnesium Bisglycinate	•			•				
Melaton-3™				•				
Multi-Vitamin Elite - A.M. and P.M.	•			•	•			
NiaCel <sup>®</sup> 400	•	•						
Pre-Workout Elite		•				•		
RecoveryPro®				•				
Super EPA	•				•	•		•
SynaQuell™ / SynaQuell+™		•		•	•	•		
Vitamin D-5,000	•							•
Whey Protein Isolate (Chocolate or Vanilla)	•			•				
Zinc Picolinate 30 mg	•							•

## A final word

Ensuring adequate nutrition is an integral part of every training protocol. Although this guide provides general recommendations, each individual's nutrient needs should be personalized to their unique preferences, activity level, age, and gender, including additional considerations for micronutrients, such as iron for menstruating athletes. A customized nutrition plan that features a healthy balance of macronutrients, micronutrients, and antioxidants will help you to reach your fitness goals and support optimal health and wellness.

#### **Take 5 Daily Articles**

- / <u>5 Nutrients to Add to Your Post-Workout Routine</u>
- / Pre-, During, and Post-Workout Nutrition
- / An Athlete's Nutrition: 3 Considerations for Endurance and Strength
- / Maximize Your Recovery Routine
- / Nutrition 101: Pre- and Post-Workout Nutrition

#### References

- 1. Phillips SM, Van Loon LJ. Dietary protein for athletes: From requirements to optimum adaptation. *J Sports Sci* 2011;29 Suppl 1:S29-S38. doi:10.1080/02640414.2011.619204
- 2. Thomas T, Erdman KA, Burke LM. Position of the Academy of Nutrition and Dietetics, Dieticians of Canada, and the American College of Sports Medicine: Nutrition and athletic performance. *J Acad Nutr Diets* 2017;117(1):146.

