2016 SUPPLEMENT GUIDE

RATING SCALE

Excellent: This supplement's intended function is well-supported by a significant amount of scientific evidence. It can benefit most individuals, and is safe for use.

Great: This supplement has somewhat inconclusive findings, meaning some studies report positive changes following its use, while others report no change. The anecdotal evidence is favorable, and although more research is needed, it is still considered safe for use.

Good: There is currently minimal research available to support this ingredient's claims in a healthy population; however, it may be beneficial for individuals who are deficient in the ingredient. Anecdotal evidence is weak, but it is still considered safe for general use.

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SUPPLEMENTS INTENDED TO BUILD MUSCLE/INCREASE STRENGTH/RECOVERY

RATING

ADENOSINE TRIPHOSPHATE (ATP)

Function: Increases workout volume, muscle strength, and hypertrophy
COMMON DOSE: 225-400 mg per day
TIMING: Divided into equal doses, taken before breakfast and dinner

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RATING

ALANINE

Function: Increases muscle protein synthesis and glycogen resynthesis
COMMON DOSE: 1 g per kg of body weight
TIMING: Take half 20 minutes pre-workout and half throughout workout

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RATING

ALPHA-KETOISOCAPROIC ACID (KIC)

Function: Improves exercise recovery and glycogen resynthesis; insulin mimetic
COMMON DOSE: >0.1 g per kg per day
TIMING: Immediately post-exercise

RATING

ARGININE

Function: Increases nitric oxide and vasodilation; increases protein synthesis.
COMMON DOSE: 8 g per day
TIMING: Pre- and/or post-exercise

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SUPPLEMENTS INTENDED TO BUILD MUSCLE/INCREASE STRENGTH/RECOVERY

RATING

BETA-ALANINE

Function: Increases muscle strength and muscle power output
COMMON DOSE: 3.6-6.4 g per day
TIMING: Not time-dependent

RATING

BETA-HYDROXY-BETA-METHYLBUTYRATE (HMB)

Function: Increases muscle protein synthesis, hypertrophy, strength, and exercise recovery
COMMON DOSE: 3-6 g per day
TIMING: Immediately post-workout, or take half pre-workout and half post-workout

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RATING

BRANCHED-CHAIN AMINO ACIDS (BCAAS)

Function: Increases exercise capacity, protein synthesis, hypertrophy, and exercise recovery.
COMMON DOSE: 6-20 grams per day (ideally 2:1:1 ratio of leucine:isoleucine:valine)
TIMING: Take pre-workout and during workout

RATING

CHOLINE

Function: Improves energy, endurance performance, clarity, and exercise recovery
COMMON DOSE: 300-1200 mg per day
TIMING: Divided doses between meals or before exercise

RATING

CREATINE

Function: Increases lean body mass; Improves body composition
COMMON DOSE: 3-5 g per day
TIMING: Before or after exercise

RATING

D-RIBOSE

Function: Increases ATP resynthesis and muscle strength; reduces chronic fatigue; aids exercise recovery
COMMON DOSE: 5-15 g per day
TIMING: Post-exercise

RATING

GAMMA-MINOBUTYRIC ACID (GABA)

Function: Increases growth hormone; improves exercise recovery; promotes restful sleep
COMMON DOSE: 5-10 g per day
TIMING: 60 minutes before bedtime

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SUPPLEMENTS INTENDED TO BUILD MUSCLE/INCREASE STRENGTH/RECOVERY

RATING

GLUTAMINE

Function: Improves glycogen resynthesis
COMMON DOSE: 8 g per day
TIMING: Immediately post-exercise

RATING

GLYCINE-ARGININE KETOISOCAPROATE (GAKIC)

Function: Increases in muscular strength; delays muscle fatigue
COMMON DOSE: 11.2 g per day
TIMING: Not time-dependent

RATING

LEUCINE

Function: Increases protein synthesis and muscle hypertrophy; improves exercise recovery
COMMON DOSE: 0.5 g per kg of body weight per day
TIMING: Before, during, and/or after exercise

RATING

ORNITHINE-ALPHA-KETOGLUTARATE (OKG)

Function: Anticatabolic; Increases insulin and growth hormone; improves exercise recovery
COMMON DOSE: 20-30 g per day (~64% ornothine and 36% AKG)
TIMING: Immediately post-exercise

RATING

PHOSPHATIDYLSERINE (PS)

Function: Anticatabolic
COMMON DOSE: 800 mg per day
TIMING: Post-exercise

RATING

PROTEIN POWDERS

Function: Enhances recovery and muscle protein synthesis
COMMON DOSE: 20-30 g
TIMING: Post-workout

RATING

TAURINE

Function: Improves energy, insulin mimetic; antioxidant
COMMON DOSE: 100-500 mg per kg of body weight
TIMING: 30 minutes before workout

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SUPPLEMENTS INTENDED TO BUILD MUSCLE/INCREASE STRENGTH/RECOVERY

RATING

TRIBULUS TERRESTRIS

Function: Increases testosterone, strength, and energy
COMMON DOSE: 5-10 mg per kg of body weight
TIMING: Divide into two doses, and take with two meals

RATING

ZINC MONOMETHIONINE ASPARTATE (ZMA)

Function: Improves strength; enhances sleep quality and exercise recovery
COMMON DOSE: Look for ZMA supplements that contain 30 mg of zinc, 450 mg of magnesium, and 10.5 mg of vitamin B-6
TIMING: On an empty stomach before bed

2016 SUPPLEMENT GUIDE

SUPPLEMENTS INTENDED FOR WEIGHT LOSS, ENERGY, AND ENDURANCE

RATING

CAFFEINE

Function: Increases thermogenesis, lipolysis, and endurance performance
COMMON DOSE: 3-9 mg per kg of body weight
TIMING: 30-40 minutes before exercise

RATING

CHROMIUM

Function: Improves body composition
COMMON DOSE: 200-400 mcg per day
TIMING: Not time-dependent

RATING

CITRULLINE MALATE

Function: Increases ATP synsthesis and PCr resynthesis; delays muscular fatigue
COMMON DOSE: 6 g per day, divided
TIMING: Divided into 2 equal doses, taken before and after your workout

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RATING

CO-ENZYME Q10 (COQ10)

Function: Improves exercise recovery, endurance performance, and heart health
COMMON DOSE: 50-300 mg per day
TIMING: Not time-dependent

RATING

COLEUS FORSKOHLII

Function: Testosterone booster; assists fat loss
COMMON DOSE: 250 mg of 10% forskolin extract
TIMING: Take 250 mg twice daily

RATING

CONJUGATED LINOLEIC ACID (CLA)

Function: Decreases body fat
COMMON DOSE: 4.2 g per day, divided
TIMING: Divided into equal doses, taken with meals

RATING

CORDYCEPS

Function: Increases energy; improves endurance performance
COMMON DOSE: 1-3 g per day, divided
TIMING: Divided into equal doses, taken with meals

2016 SUPPLEMENT GUIDE

SUPPLEMENTS INTENDED TO IMPROVE MENTAL FUNCTION, MOOD, AND SLEEP

RATING

5-HYDROXYTRYPTOPHAN (5-HTP)

Function: Increases serotonin; promotes restful sleep; improves exercise recovery
COMMON DOSE: 100-300 mg
TIMING: 30-60 minutes before bedtime

RATING

ACETYL-L-CARNITINE

Function: Improves mild cognitive impairment
COMMON DOSE: 1.5-3.0 g per day
TIMING: Not time-dependent

RATING

DIMETHYLAMINOETHANOL (DMAE)

Function: Improves mental acuity
COMMON DOSE: 100-1000 mg per day
TIMING: Take in the morning with breakfast

RATING

GINKGO BILOBA

Function: Improves mental concentration
COMMON DOSE: 160-240 mg per day
TIMING: For cognitive enhancement, take 1-4 hours beforehand

RATING

KAVA-KAVA

Function: Reduces anxiety and stress
COMMON DOSE: 100-300 mg per day, divided
TIMING: Divide into equal portions to be taken with meals

RATING

L-THEANINE

Function: Reduces anxiety and stress; increases mental acuity
COMMON DOSE: 50-200 mg
TIMING: Take with caffeine to increase mental acuity

RATING

L-TRYPTOPHAN

Function: Increases production of melatonin; decreases time to fall asleep
COMMON DOSE: 2-5 g per day
TIMING: 60 minutes before bedtime

2016 SUPPLEMENT GUIDE

SUPPLEMENTS INTENDED TO IMPROVE MENTAL FUNCTION, MOOD, AND SLEEP

RATING

MELATONIN

Function: Sleep aid; promotes uninterrupted sleep
COMMON DOSE: 3-5 mg
TIMING: 60 minutes before bedtime

RATING

ST. JOHN'S WORT

Function: Improves mild to moderate depression
COMMON DOSE: 300 mg per dose
TIMING: Take 300 mg 3 times evenly spread throughout the day

RATING

TYROSINE

Function: Increases mental acuity, energy, and mood
COMMON DOSE: 50-150 mg per kg of body weight
TIMING: 60-90 minutes before exercise

RATING

VALERIAN ROOT

Function: Sleep aid; reduces anxiety
COMMON DOSE: 100-1800 mg per day
TIMING: 60 minutes before bedtime

2016 SUPPLEMENT GUIDE

VITAMINS, MINERALS, AND ANTIOXIDANTS

RATING

CALCIUM

Function: Supports bone health
COMMON DOSE: If deficient, aim for the RDA of 1000 mg per day
TIMING: Calcium carbonate should be taken at mealtime, either lunch or dinner; calcium citrate can be taken on an empty stomach between meals

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RATING

IRON

Function: Aids in immune function; improves oxygen-carrying capacity
COMMON DOSE: 8 mg for men; 18 mg for women
TIMING: Take in the morning with breakfast. Consume with vitamin C to increase absorption. Avoid taking with calcium

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RATING

LUTEIN

Function: Antioxidant; supports eye health
COMMON DOSE: 6-15 mg
TIMING: Not time-dependent

RATING

LYCOPENE

Function: Antioxidant; anticancer agent
COMMON DOSE: 5-20 mg per day
TIMING: Not time-dependent

RATING

MAGNESIUM

Function: Improves metabolism; supports bone health; aids in regulation of blood pressure
COMMON DOSE: 280-400 mg per day
TIMING: Take on an empty stomach, preferably without calcium

RATING

QUERCETIN

Function: Antioxidant; antiatherogenic; anticarcinogenic
COMMON DOSE: 12.5-25 mg per kg of body weight per day
TIMING: Not time-dependent

2016 SUPPLEMENT GUIDE

VITAMINS, MINERALS, AND ANTIOXIDANTS

RATING

VITAMIN A

Function: Antioxidant; supports eye and cell health
COMMON DOSE: 0.25-0.5 mg per kg of body weight per day
TIMING: Take with a fat-containing meal to increase absorption

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RATING

VITAMIN B-12

Function: Improves energy; supports cardiovascular health
COMMON DOSE: 25-100 mcg per day
TIMING: Take in the morning with breakfast

RATING

VITAMIN C

Function: Antioxidant; reduces incidence of upper respiratory tract infections; reduces soreness
COMMON DOSE: 400-1000 mg per day
TIMING: Take in the morning with breakfast

RATING

VITAMIN E

Function: Antioxidant; supports cell health; prevents muscle damage
COMMON DOSE: 400-1200 IU per day
TIMING: Take in the morning with breakfast

RATING

ZINC

Function: Supports the immune system; antioxidant; assists with digestion and metabolism
COMMON DOSE: 12-15 mg per day
TIMING: Take 1-2 hours before or 2 hours after a meal