

## Fact Sheet

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Student Health Services, Texas A&M University

# Supplements

**Disclaimer: Supplements are not regulated in this country. Be sure to check with a health care provider before taking or using any supplements.**

**Supplements:** are defined as any substance such as vitamins, plants, herbs, or stimulants that are consumed or used in addition to normal behaviors in order to complete, enhance, or add to an individual's diet, performance, and overall wellness.

### DID YOU KNOW?

- The Food and Drug Administration (FDA) does not put any restrictions on supplements
  - Supplements can be used to complement or substitute poor nutrition
  - Supplements can be used to enhance an individual's athletic endurance and performance
- Although supplements are thought to be helpful to the body, they may do more harm than good if not taken or used properly

Supplements are widely used in today's society. It seems that they sometimes serve to replace meals and other forms of nutrition. Questions dealing with supplements include:

**Are they harmful?**

**Are they beneficial?**

**Are they worth it?**

Before taking any type of supplement, be sure to research the effects, both positive and negative, along with all ingredients in products and the supplements themselves.

### SUPPLEMENT COMMON USES

#### **Immune Support:**

used to either support the body on a regular basis (chronic) or is used when body is sick or battling illness (acute). *Examples: Amino Acids, Echinacea, Glutamine, Vitamin C, A, Zinc, and Probiotics (beneficial bacteria)*

#### **Weight Management:**

used to manage and maintain a healthy body weight. Some may be used as dietary supplements to aide in weight loss and to enhance the body's metabolism. *Examples: Hydroxytyrosic Acid, Ephedra, Ripped/Diet Fuel, Chromium Picolinate, and Xenadrine*

#### **Meal Replacement:**

used to supplement the vitamins/minerals that an individual may lack in their daily diet or may serve to completely replace or substitute meals and nutrients. *Examples: Shakes, Meal Bars, and Meal Supplements*

**Energy Stamina:**

used for relief from fatigue, quick energy, concentration, and overall energy boosting. *Examples: Ginseng, Ephedra, Magnesium, Iron, Zinc, and Astragalus*

**Sports and Fitness:**

used to enhance energy production, reduce chances of injuries, aid in recovery, nutritional supplementation (for certain workouts), “bodybuilding” mass, and endurance. (Endurance and Energy/ Recovery/Injury Reduction) *Examples: Creatine, Androstiene, THG, Amino Acids, and B complex vitamins*

**Women’s Health:**

used in dealing with women’s health issues like: menopause, PMS, breast health, and general well-ness. *Examples: Black cohosh, Vitex berry, Vitamin E, and Hormone Replacement Therapy*

**Men’s Health:**

used for men’s health issues like: nutritional benefits, prostate health, promote sexual functions, and general wellness. *Examples: Carintine, Flaxseed, Ginkgo Bilboa, Arginine, and Histione*

SUPPLEMENT	ALLEDGED POSITIVE EFFECTS	NEGATIVE EFFECTS
<b>Amino Acids (Arginine and Histidine)</b>	Improved heart functions Immune system supports Basic overall needs and functions	No negative affects, but moderation is suggested
<b>Androstiene THG Steroids</b>	Increased testosterone levels Increased muscle mass and strength Enhanced muscle recovery and stamina	Water retention, acne, gynecomastia, aggression, hypertension, jaundice, cardiovascular disease, heart palpitations, and impotence
<b>Astragalus</b>	Stimulates immune system; Boosts energy levels; Acts as an adaptogen (non-specific resistance to stress)	No negative affects, but moderation and recommended use is suggested
<b>B-Complex Vitamins (B-1,2,3,5,6,8, and 12) 8 essential</b>	“Helper Nutrients” assist in chemical reaction	No negative affects, but moderation is suggested
<b>Black Cohosh</b>	Helps reduce night sweats, mood swings, and hot flashes; Headache relieve	Possible mild to moderate gastrointestinal distress
<b>Carintine</b>	Enhanced endurance; Increased fat metabolism; Lowers cholesterol and triglycerides levels	Suggested to only take as directed
<b>Chromium Picolonate</b>	Lowers blood sugar level; Controls hunger/ suppresses appetite; Reduces cholesterol and triglyceride levels; Increases lean body mass/muscle mass	Mild Gastrointestinal upset
<b>Creatine</b>	Increased energy; Enhances muscle size and strength	Gastrointestinal distress; Nausea and dehydration; Muscle cramping
<b>Echinacea</b>	Stimulates immune system function Prevents upper respiratory tract infections	Suggested to only take as directed
<b>Ephedra</b>	Increased alertness and Mental sharpness Speeds up metabolism (Aids in weight loss) Enhances athletic performance	Elevated blood pressure, heart palpitations, insomnia, irritability, and headaches, Seizures, strokes, heart attack, and possibly death

<b>Flaxseed Oil</b>	Reduce blood clotting and arthritis pain Protects against colon and breast cancer Alleviates inflammatory conditions	Possible gastrointestinal distress; Possible nausea and diarrhea
<b>Ginkgo Bilboa</b>	Improves mental sharpness and memory Improves circulation; Antioxidant	Possible gastrointestinal upset; Possible allergic skin reactions and headaches
<b>Ginseng</b>	Improves cognitive function Relieves stress and mood disturbances	Individuals with hypertension should take precaution because of stimulation
<b>Glutamine</b>	Maintains muscle mass; Prevents muscle catabolism (breakdown); Aids in recovery from exercise; Boosts immune system functions	No negative affects, but moderation is suggested
<b>Hydorcitric Acid</b>	Increases energy levels; Increases fat oxidation/mobilization; Promotes weight loss/suppresses appetite	Gastrointestinal distress
<b>Iron</b>	Increased oxygen transport and energy levels; Stimulates immune system Neurotransmitter and collagen synthesis	Accumulation of iron in the tissues (damages and diseases)
<b>Magnesium</b>	Builds bone; Increases energy levels Enhances protein synthesis (muscle building)	May cause gastrointestinal problems and diarrhea; May interfere with calcium absorption and bone metabolism
<b>Meal Bars/Supplements/Shakes</b>	Supplements for meals	Does not fulfill body's requirements for nutrients and vitamins; High in fat, calories, and sugars
<b>Probiotics</b>	Supports immune system functions; Maintains healthy digestive tract; Prevention in colon cancer	No negative affects, but moderation is suggested
<b>Ripped/Diet Fuel Metabolife</b>	Increased energy; Increased metabolic rate and energy expenditure; Gain lean muscle mass; Reduced appetite	Anxiety, restlessness and feeling agitated; Stomach aches, nausea, and headaches; Increased heart rate; Sleep deprivation
<b>Vitamin A</b>	Promotes skin health and treats skin ailments; Promotes eye sight and vision	Storage of high levels; Toxicity: leading to vomiting, headaches, gastrointestinal distress, and skin irritations
<b>Vitamin C</b>	Prevents colds and boost immunity; Promotes wound healing; Protects against the effects of stress	Primarily safe; Possible gastrointestinal stress, stomach cramps, nausea, and diarrhea
<b>Vitamin E</b>	Reduces risk of cardiovascular disease; Boosts immune system functions and wound healing	Rare negative side effects
<b>Vitex</b>	Alleviates premenstrual syndrome (PMS); Stabilizes menstrual abnormalities; Helps restore fertility in women	Headaches; Nausea; Gastrointestinal and abdominal discomfort; A reversible skin rash
<b>Xenadrine</b>	Enhances fat burning; Increased energy	Anxiety and light headedness; Increases heart rate; Nausea and gastrointestinal distress
<b>Zinc</b>	Immune system support and wound healing Increases fertility and prostate health	High doses not recommended; Increased risk of heart disease; Possible nausea, diarrhea, and vomiting

### Resources

Office of Dietary Supplements [www.ods.od.nih.gov](http://www.ods.od.nih.gov)  
[www.supplementwatch.com](http://www.supplementwatch.com)  
[www.bodybuildingforyou.com](http://www.bodybuildingforyou.com)