



# What's DOPE.org

Classroom Edition

Student Activities



## Welcome to the Classroom Edition of That's Dope.

This curriculum is designed to equip you with the knowledge to make healthy choices in a variety of situations and to prevent the abuse of steroids and dietary supplements. You will gain:

- Skills for responsible and healthy decision-making
- Healthy alternatives to performance-enhancing drug use
- Consumerism skills
- Tools for making balanced food choices
- Heredity and body type knowledge

Whether used in the classroom, the weight room or locker room, That's Dope is a great resource. Feel free to also check out

[www.ThatsDope.org](http://www.ThatsDope.org) - the complementary website loaded with great info and interactive features.

THAT'S DOPE.ORG



Includes:

- x ~~The Edge~~  
Investigating Healthy  
Performance Strategies
- x ~~Over-the-Counter~~  
Evaluating Dietary Supplements



# The EDGE

investigating healthy performance strategies

*"Do not let what you cannot do interfere with what you can do."*

**- John Wooden**  
Former UCLA Basketball Coach

**What does John Wooden's quote mean to you?**

---

---

**What do you think the necessary ingredients are for a successful athletic performance?**

---

---

## *A Snapshot of Athletic Performance*

There are many different aspects that contribute to a successful athletic performance. Most of these can be broken down into two categories:

### *Mental and Physical*

The mental game is sometimes referred to as the game behind the game. Here are just a few examples of the mental game:

**Focus** – Sports require your concentration throughout the game.

**Attitude** – Your attitude can determine how much fun you are going to have during the game. It can also help you bounce back from mistakes and give you a better chance of winning.

**Decision Making** – Some games are decided by who makes the fewest mistakes. If you can make the best decisions under pressure, you will give yourself a great chance to be successful.

**Preparation** – Having a plan and executing it is very important.

**How do you apply each of these mental examples to your competition or to your life in general?**

---

---

**Can you think of other examples of the mental game?**

---

---

There are also many aspects of the physical game, including:

**Skill** – Sports require a specific set of skills that are only developed through quality practice.

**Agility** – Most sports require the ability to execute precise and complicated movements.

**Endurance** – Athletes with endurance - the ability to perform consistently over a long period of time - will have an advantage over those without endurance.

**Speed** – Depending on the sport, being fast can give an athlete an edge.

**Quickness** – In most sports, quickness is more important than speed. Quickness is the ability to make sudden bursts over short distances.

**Strength** – In sports, strength is defined as the ability to apply force to an object, moving it from one place to another.

**Power** – Power is the combination of strength and speed. In most sports, power is much more important than just strength.

**Flexibility** – Maintaining muscle and joint flexibility through stretching activities is critical to avoiding injuries.

### Can you think of other examples of the physical game?

---

---

---

Many athletes are concerned with their weight. Some think they need to gain more lean body mass; others are obsessed with maintaining low body weight. If athletes focus their training solely on things like weight or strength, they are missing the bigger picture. Some people think that taking shortcuts by using substances is the answer. Do these drugs actually work? What is the cost for taking this kind of shortcut, physically and mentally?

Shortcuts often seem like the easy route- but most of the time are harmful in the end.

**For example** – taking a shortcut to cheat on a homework assignment might seem like a quick fix, but what happens when you get to the test? You'll probably wish you had taken the time to learn the information in the homework assignment.

Remember that while society overemphasizes the importance of body weight or strength, these things are just pieces of the puzzle. Athletes who reach their full potential work hard to develop all of their physical and mental skills.

## The Basics of Food and Exercise

Body weight equals “what goes in” (the food you eat) minus “what goes out” (the energy you burn).

Think of it as an hourglass. Filling the top with sand is like energy input. The sand emptying at the bottom is like energy output.

- If you pour in sand faster than it goes out the other end by eating more food than you need, the hourglass fills up, resulting in weight gain.
- If you balance the input and the output, then your body weight does not change.
- If you increase the amount of energy that you burn without changing the food you eat, your body weight goes down.

Now, let's take a look at how to increase body size and strength in a healthy manner. The three keys ingredients include:

**Training** – A challenging exercise program combined with a balanced weight-lifting program is the key to adding lean muscle mass. (Note: Per general health and safety guidelines, high school is considered the appropriate time to begin weight training.)

**Nutrition** – If you eat a well-balanced diet, even without supplements, your body will have 100% of the building blocks necessary to build muscle.

**Sleep/Recovery** – Most of your body's natural growth hormone is produced during sleep. Getting a good eight hours of sleep is one of the most important things you can do to help your body grow and recover.

*If an athlete trains the right way, eats a balanced diet, and gets enough rest – their body is fully equipped to add muscle naturally and safely.*





## Anabolic Steroids

Some athletes are not satisfied with the results they get on their own and decide to use steroids. Let's take a look at steroids:

### What are the important terms?

- **Anabolic Hormones** are used in the process that builds complex molecules, leading to muscle growth.
- **Testosterone** is the most active anabolic hormone in the human body. Testosterone has many different effects on the human body, including the development of muscle mass.

### What do anabolic steroids do?

Anabolic steroids can be an important part of a doctor's medical treatment plan for people with muscle wasting diseases, like muscular dystrophy or AIDS. In these cases, legitimate uses of anabolic steroids are prescribed in therapeutic doses and carefully administered and monitored.

Some athletes trying to get an edge use anabolic steroids to increase the testosterone in their body. They believe that if the amount of testosterone in their body is increased, they will gain more muscle mass and that this shortcut will ensure successful performance.

### Do anabolic steroids work?

The simple answer is yes, anabolic steroids can add muscle and strength. They can also accelerate recovery. But the complete answer is a little complicated...

The truth is that your body produces as much testosterone as it can use. We also know that small increases in testosterone will not advance muscle mass. So, how can adding more testosterone increase muscle mass?

In contrast to the therapeutic doses used for managing diseases, people wanting to take shortcuts by using anabolic steroids have to consume huge amounts to see any results. In order for steroids to add muscle mass, the amount of testosterone in the body must be increased by around 1,000-1,500%. Some scientists believe that these large amounts of extra testosterone stop cortisol from doing its natural job of destroying muscle. If cortisol is stopped from doing its job, the body will artificially add more muscle.

### So as you see, there is no question that steroids work to increase lean muscle mass. But at what cost? What potential problems await those who take anabolic steroids?

There is a saying that "the dose makes the poison." Translation: The more of a drug you take, and the longer you take it, the greater the risk of negative side effects. This is the case with anabolic steroids.



**Kelli White, former track and field 200 meter world champion talks about suffering adverse side effects from using anabolic steroids. Her menstrual cycles were disrupted, she had acne and her blood pressure was highly elevated.**

**In addition she says “My voice was getting very raspy and started to change a little bit, to the point where people were always asking me if I was sick.”**

**Kelli lived to tell her story, but still does not know if she will suffer any long-term side effects.**

**Taylor Hooton, a high school baseball standout, didn't live to tell his story. Taylor became severely depressed as a result of steroid withdrawal. He tragically ended his life by committing suicide. To read more of Taylor's story, visit [www.taylorhooton.org](http://www.taylorhooton.org).**

## *What are the potential side effects of anabolic steroid abuse?*

### **Physical Side Effects:**

- Strains and tears of ligaments and tendons
- Increased risk of heart disease
- Liver dysfunction
- Acne
- Reduced production of natural testosterone

### **Side Effects for Males:**

- Development of breast tissue
- Impotence – inability to conceive a child
- Premature baldness

### **Side Effects for Females:**

- Permanent deepening of the voice
- Growth of body hair
- Enlargement of sexual organs
- Abnormal menstrual cycle

### **Side Effects for Youth:**

- Stunted growth

### **Psychological Side Effects for Males and Females:**

- Increased aggression and in some cases “roid rage”
- Psychological and physical dependence, similar to the properties associated with addictive drugs
- Feelings of euphoria and invincibility in some individuals and, in others, delusions and paranoia
- Anabolic steroid withdrawal can be associated with depression and, in some cases, suicide



## *So, what's the bottom line?*

In order for steroids to work, an athlete has to take huge amounts to produce any results. This can be expensive and, more importantly, leads to many dangerous side effects. Steroids are especially troublesome for youth since they can permanently stunt growth by stopping bone development. They also can shut down the body's natural production of testosterone. Finally, steroids are also illegal without a prescription to treat a medical condition.

## Time for some Action! **Your Assignment**

**Read the following story and be ready to answer the questions below.**

Steph and Sarah are buddies, on and off of the soccer field. Instead of studying for a biology test, they stay up late on a school night to watch a movie. Tired and running late the next morning, they substitute breakfast for a quick cup of coffee. Since they chose to finish the movie rather than study for their biology test, they use their lunch period to review, grabbing some snacks from the vending machine. After school, they have 30 minutes before soccer practice starts. They take this chance to swing by a convenience store and share a protein bar and an energy drink. Later at practice, Steph and Sarah not only feel dead on their feet but also disappoint their coach with their poor performance.

Put yourself in Steph and Sarah's shoes and think about a time when your decisions caused your performance to suffer on and off the field.



*Give Steph and Sarah some advice to help improve performance by answering these questions:*

**How could Steph and Sarah have improved their dietary intake?**

---

---

---

**How could Steph and Sarah have improved their sleep/recovery?**

---

---

---

**In what ways do you think that a lack of good nutrition and sleep impacted their training?**

---

---

---



# Setting Goals

Setting goals is important to any successful training program. A couple of tips to help you get the most out of setting goals:

**Mix it up** – Big goals are good to remind you what you hope to accomplish when you finish. Also, make some smaller goals so that you can judge your progress along the way.

**Measurable** – Be specific when you write down your goals. In the end, you should be able to know, without a doubt, whether or not you met your goal.

Think about your own daily and weekly habits and routines. For each of the focus areas in this activity, identify one goal that you can set and implement to help improve your performance.

**Identify one way you could improve your nutrition. Create a realistic plan with the tasks and timeline needed to begin practicing this new habit. How can you measure your success with this goal?** (Example: I can improve my nutrition by eating breakfast each day. To help meet my goal, I can prepare a breakfast in advance that I can grab on my way to school. My plan will include tasks and timelines to find affordable food items that I like, that have good nutritional value and that are easy to fix. This way, I can have a healthy breakfast even on the go.)

---

---

---

**Identify one way you could improve your sleep/recovery. Create a realistic plan with the tasks and timeline needed to begin practicing this new habit. How will you measure your success?**

---

---

---

**Identify one way you could improve your exercise/training routine. Create a realistic plan with the tasks and timeline needed to begin practicing this new habit. How will you measure your success?**

---

---

---

**If someone offered you a prescribed or over-the-counter medication claiming that it would give you fast energy, strength or help you recover more quickly, would you consider taking it? Why or why not?**

---

---

---

**Remember, your body is an amazing machine. If you give it what it needs – nutrition, training, and sleep/recovery – it will grow muscle in a safe, natural and healthy way.**

**There is no substitute for hard work. People who choose to cheat will never have the chance to know how good they could have been on their own!**

# OVER-THE-COUNTER

## evaluating dietary supplements

### What is a dietary supplement?

My Guess: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Consumers need to be aware that companies manufacturing and selling dietary supplements do not need to first prove that their products are safe or effective for human consumption. There is no guarantee that what is on the label is actually what is inside the bottle— or that what is in the bottle is actually listed on the label!

## Dietary Supplements

- Dietary supplements include products like vitamins, minerals, herbs, amino acids, proteins, energy products, sports performance products and more.
- Millions of Americans use vitamins, minerals and other dietary supplements.
- Dietary supplements can have unhealthy side effects.
- Dietary supplements can interact with prescribed or over-the-counter medicines, creating significant health risks.

### *Natural does not equal safe*

Just because a product claims to be natural does not make it safe to use. There are many natural substances that are toxic, poisonous and deadly if used.

### Can you think of something found in nature that is dangerous to use?

\_\_\_\_\_  
\_\_\_\_\_

### *More is not better*

Some people make the mistake of thinking that if a little bit is good, then a lot is even better. Not true! Too much of any substance can be harmful.

### Can you think of a medicine or other product intended to add benefit to the human body that could make you sick if you took more than the recommended dose?

\_\_\_\_\_  
\_\_\_\_\_

### *What's the big deal about dietary supplements?*

- Some dietary supplements, like some stimulants, pro-hormones and sports performance products, can be dangerous for you to take.
- Some dietary supplement ads make claims about products that can't be proven or are not true.

The U.S. Dietary Supplement Health and Education Act (DSHEA) was originally enacted in 1994. The details of this legislation are very complex. However, one component of the act removes a good deal of control that the U.S. government's Food and Drug Administration (FDA) has in regulating the manufacture and sale of dietary supplements.



## How can you know if the product in your hand is a food, medication or supplement?

- Some manufacturers find classification loopholes, making it difficult to tell into which category a product fits.
- Check the label. Food products will list the term “Nutrition Facts” on the label, drug medications will list “Drug Facts” and dietary supplements will list “Supplement Facts”.
- Consumers should not rely only on the terms “Nutrition Facts,” “Drug Facts” or “Supplement Facts” to determine the difference between food, drug and dietary supplements. Do your homework before assuming any product is safe.

## Do I need dietary supplements?

- If you have an illness or special dietary needs, your doctor may recommend dietary supplements.
- However, most healthy people can get everything they need from a well-balanced diet.
- Unless there are special needs, supplements can be a waste of money and may cause health problems.

## Can supplements be harmful?

As a very sad example, two professional athletes died due to taking dietary supplements containing strong stimulants, while training for their sport. Kory Stringer, a lineman for the Minnesota Vikings, and Steve Bechler, an upcoming pitcher for the Baltimore Orioles, both had been using products containing ephedra. While ephedra can no longer be manufactured in dietary supplement products in the United States, there are many other powerful stimulants that are still being used. Some of these stimulants have “thermogenic” properties, meaning that they take control of the body’s ability to regulate body temperature. In the wrong circumstances, taking these products creates huge health risks and can lead to death.



## Fluid Replacement Drinks vs. Stimulant Drinks ("Energy Drinks")

You see these drinks all over the place. They are in convenience stores, in vending machines at the gym and even in clubs. So what's the difference between the two?

**Fluid replacement drinks**, like Gatorade or Powerade, contain a blend of carbohydrates and electrolytes that replace not only energy but also sodium and potassium lost through excessive sweating. These drinks can be helpful with activity that lasts over 60 minutes.

**Stimulant drinks (sold as "energy drinks")** may or may not contain sugars and electrolytes – but they always contain a major dose of stimulants. Most often, these drinks contain a combination of many different stimulants. These drinks provide the body with a short-term energy boost by speeding up the body's consumption of its fuel stores. In the long-term, stimulant drinks will rob the user of the true energy that comes from carbs, fats, proteins, hydration and rest.

### Other side effects of stimulants include:

- Anxiety, tremor, insomnia
- Aggressiveness
- Addiction
- Increased risk of stroke, heart attack, cardiac arrhythmia and sudden death

## Muscle Builders

There are a variety of supplements that claim to build muscle. These companies are either lying or they are using pro-hormones in their products. If they are lying, the products are a waste of your money. If they are using pro-hormones, the products are harmful to your health.

When the DSHEA was amended in 2005, many pro-hormones were banned from being manufactured in dietary supplements and were added to the Schedule III List of Controlled Substances. However, there are still many dangerous products being manufactured which claim to be legal and safe but still have potential side effects similar to those associated with steroid use. (See the steroid side effects listing in The Edge.)

## Dietary Supplement Advertising

The dietary supplement industry is a competitive multi-billion dollar per year business. Keep these points in mind:

- Some companies target students just like you when they create and distribute their ads.
- Advertisements are created for one purpose: to convince people to buy a product.
- Images in ads are carefully created to send specific messages. They are not reflections of reality.
- Companies may use deceiving tactics to get you to buy their products.



## Time for some Action! **Your Assignment**

**YOUR MISSION:** to make decisions based on the truth and not based on misleading advertising. Your teacher will provide an advertisement for a dietary supplement. Your goal is to evaluate it and answer the following questions.

### Target

My DIETARY SUPPLEMENT AD is for: \_\_\_\_\_  
\_\_\_\_\_

(Name of the product and what its intended use is— i.e., weight loss, muscle-building, etc.)

### Who do you think the ad is **TARGETING**?

- Senior Citizens?
- High School Athletes?
- Olympic Athletes?
- Coaches?
- Youth?
- Parents?



### Claims

#### **WHAT CLAIMS** does this ad obviously make with its statements?

- Increase Athletic Ability
- Run Faster
- Build Muscle
- Increase Energy Level
- Increase Strength
- Feel Younger
- Other: \_\_\_\_\_

**WHAT OTHER CLAIMS** are implied or suggested in the ad, either through statements, the product name, pictures or testimonials?

---

---

---

---

---

---

## *Evidence*

Does the ad provide **EVIDENCE** to back-up its claims? YES or NO

If so, what kind of evidence is there? Does it appear to come from a **RELIABLE SOURCE**? Why or Why not?

---

---

Is the evidence **RELEVANT** to the claims made in the advertisement? Why or Why not?

---

---

What are the **DISCLAIMERS** made within the advertisement? Are those **DISCLAIMERS** easy to read and understand? Why or Why not?

---

---

## *As a result of your evaluation*

Do you trust that the ad is sending a truthful message? Why or why not?

---

---

List two things you can do in the future to help ensure you make educated and healthy choices when purchasing products that claim to improve your health.

---

---

---





### The Edge – Investigating Healthy Performance Strategies

1. List two examples of the mental game that you use in your personal life.

- a. \_\_\_\_\_
- b. \_\_\_\_\_

2. List two examples of the physical game that you use in your sports/ activities.

- a. \_\_\_\_\_
- b. \_\_\_\_\_

3. Identify the three primary keys to increasing strength through healthy choices in your daily life.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

4. Identify two physical and two psychological side effects of steroid abuse.

PHYSICAL

PSYCHOLOGICAL

_____	_____
_____	_____

### Over-the-Counter – Evaluating Dietary Supplements

1. Identify three types of dietary supplement products.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

2. Describe something that is “natural” but that could be potentially harmful.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. List three potential side effects that people can experience by taking stimulants.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

## Additional Resources

### [www.usada.org](http://www.usada.org)

The United States Anti-Doping Agency (USADA) is dedicated to preserving the integrity of competition, inspiring true sport, and protecting the rights of U.S. athletes.

### [www.thatsdope.org](http://www.thatsdope.org)

Complementing the That's Dope curriculum, this USADA site is the place to go for information on improving athletic performance, the dangers of anabolic steroids, dietary supplements, energy drinks and the value of ethical decision-making.

### [www.usadakids.org](http://www.usadakids.org)

USADA's youth website is filled with interactive activities, complementing units and lesson plans for students ages 10-14.

### <http://www.aap.org/family/steroids.htm>

This American Academy of Pediatrics site is dedicated to information and education on steroid use in sports.

### <http://www.charactercounts.org/sports/sports.htm>

CHARACTER COUNTS! sport development programs and materials help coaches and mentors equip youth with values to meet life's challenges, on and off the field.

### <http://www.cfsan.fda.gov/~dms/supplmnt.html>

The Food & Drug Administration (FDA) Center for Food Safety and Applied Nutrition is dedicated to keeping the public informed of the latest developments in the supplement industry.

### <http://monitoringthefuture.org/>

Monitoring the Future is an ongoing study of the behaviors, attitudes, and values of American secondary school students, college students and young adults.

### <http://www.drugabuse.gov/NIDAHome.html>

The National Institute of Drug Abuse (NIDA), part of the National Institutes of Health (NIH), is a component of the U.S. Department of Health and Human Services. NIDA has a variety of drug prevention programs and resources.

### <http://www.mediacampaign.org/>

As the Office of National Drug Control Policy's (ONDCP) National Youth Anti-Drug Media Campaign, this site has an "ad" gallery, fact sheets and programs listing.

### <http://www.samhsa.gov>

The Substance Abuse and Mental Health Services Administration (SAMHSA) is an agency of the U.S. Department of Health & Human Services.

### [www.wordscanwork.com](http://www.wordscanwork.com)

Words Can Work helps parents talk with their kids about challenges they face growing up.