

# Carman Collegiate

**HOME OF THE**



# **Athletic Programs Handbook**

Created April 2011

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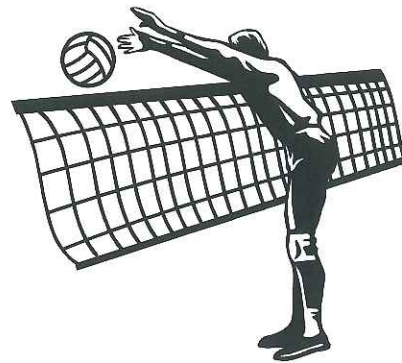
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## INTRODUCTION

It is the purpose of this handbook to provide parents, athletes and coaches with an overview of the athletic programs at Carman Collegiate. This handbook establishes the school's philosophy and values relating to sport. It provides information regarding administrative practices in relation to the school sports programs and it offers some relevant information for students relating to peak athletic performance and physical development.

Carman Collegiate has a long and decorated history in school sports. Programming has continuously offered student-athletes the opportunity to explore a variety of sports while also striving to provide individuals with the opportunity to develop into high-performance athletes. Zone IV and MHSAA banners adorn the gym walls as a testament to the hard work of the students and the volunteer coaches who encourage, challenge and support their efforts. Our graduates have gone on to play their sport at the highest levels possible and have attained success beyond their wildest imagination. Whether it is team success at the high school level, individual athletic success at the peak of the sport or simply transferring life lessons from sport into our everyday world, the power of participation in sport is impossible to ignore.





# Sec. 1: Philosophy and Values



## CARMAN COLLEGIATE MISSION AND VISION STATEMENTS

### **Carman Collegiate Mission:**

Carman Collegiate students will grow and develop holistically through a combination and variety of curricular, co-curricular, and leadership learning opportunities that ultimately prepares them for a responsible, productive and successful life path guided by respect for themselves, others and the environment.

### **Carman Collegiate Vision:**

Holistic growth encompasses academic, physical, creative, and social-emotional learning needs.

Learning opportunities will occur in a safe, supportive learning environment which appropriately recognizes and accounts for student's individual needs, abilities, interests, and learning styles.

Carman Collegiate students will graduate with a knowledge base, skill set, and ability to communicate that will allow them to be both independent and employable.

## CARMAN COLLEGIATE CODE OF CONDUCT

### Positive Expectations:

#### 1. Be present and on time.

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- a. Have proper materials
- b. Be positive and ready to work
- c. Work in assigned areas

#### 2. Strive for personal best.

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- a. Be prepared to work cooperatively
- b. Be respectful to all
- c. Complete own work
- d. Work and allow others to work
- e. Use time effectively for intended purpose

#### 3. Have respect for yourself.

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- a. Strive for academic excellence
- b. Live a healthy substancefree
- c. school life
- d. Be involved in extracurricular
- e. activities

#### 4. Respect the rights and safety of others.

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- a. Choose appropriate dress
- b. Be conscientious of allergens
- c. Demonstrate appropriate and decent behaviors
- d. Respect individual differences
- e. Interact with peers and staff cooperatively and safely
- f. Use encouraging and respectful language
- g. Respect the privacy of others and their personal belongings
- h. Keep the school and school functions free of illegal substances and illegal
- i. activities
- j. Use personal electronic devices when granted permission and for positive uses
- k. Use vehicles safely and according to Divisional Policy

#### 5. Respect your environment.

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- a. Keep the environment clean and tidy
- b. Care for the facility, furniture, equipment, and materials
- c. Use equipment safely and within appropriate use guidelines
- d. Eat and drink in supervised and assigned areas

## **CARMAN COLLEGIATE EXTRA-CURRICULAR GOAL STATEMENT**

The goal of Carman Collegiate programs and sports is to provide students with the opportunity to participate in a wide range of activities that may or may not be provided by the local community. The specific goals of Carman Collegiate programs and sports vary at the different age levels as the students mature. All students are expected to participate with their age / grade appropriate teams.

### **Junior High (grade 7 & 8)**

At this age, the focus of Carman Collegiate programs and sports is on getting students actively participating. We want students to gain an understanding of the expectations and rules of the program or sport through direct involvement in an enjoyable, but challenging atmosphere. Students will share equal time directly involved in the activity if possible (i.e. equal playing time to all players in a sport). The main goals are for students to gain an appreciation for the rules and expectations of the discipline, for students to get actively involved and engaged, as well as to have students learn to gain enjoyment from the activity.

### **Junior Varsity (grade 9 & 10)**

At this age, the focus of Carman Collegiate programs and sports will remain on getting students actively participating while increasing the expectations regarding level of performance. Higher levels of performance may be rewarded with increased responsibilities. The main goals are to gain a more in-depth understanding of the rules and expectations of the discipline, to continue to be actively involved and engaged, and to gain enjoyment of the activity in an increasingly competitive environment that begins to stress overall program success.

### **Senior Varsity (grade 11 & 12)**

At this age, the focus of Carman Collegiate programs and sports will remain on getting students actively participating and developing an appreciation for the discipline. However, the emphasis will shift toward developing a highly successful program that attains group success. Students wishing to participate at this level are expected to dedicate a greater amount of time to the program or sport in an effort to see the program achieve at its' highest level possible. The ultimate goal for many of these programs or sports is to achieve top honors at a provincial level. Carman Collegiate encourages this high level of involvement, but with an understanding that it is not at the expense of the integrity of the school or its' community members.

## MHSAA EXPECTATIONS FOR SPORTSMANSHIP

### The Case for Sportsmanship, Ethics and Integrity in High School Athletics

"Good sportsmanship is viewed by the Manitoba High Schools Athletic Association as a commitment to fair play, ethical behavior and integrity. In perception and practice, sportsmanship is defined as those qualities, which are characterized by generosity and genuine concern for others. The ideals of sportsmanship apply equally to all athletic disciplines. Individuals, regardless of their role, are expected to be aware of their influence on the behavior of others and model good sportsmanship."

#### Expectations of Coaches

- Always set a good example for participants and fans to follow, exemplifying the highest moral and ethical behavior.
- Instruct participants in proper sportsmanship responsibilities and demand that they make sportsmanship and ethics the No. 1 priority.
- Respect judgement of officials, abide by rules of the event and display no behavior that could incite fans.
- Treat opposing coaches, administrators, participants and fans with respect. Shake hands with officials, opposing coach in public.
- Develop and enforce penalties for participants who do not abide by sportsmanship standards.



#### Expectations of Student Participants

- Treat opponents with respect: shake hands prior to and after contests.
- Respect judgement of officials, abide by rules of the event and display no behavior that could incite fans.
- Cooperate with officials, coaches and fellow participants to conduct a fair competition.
- Accept seriously the responsibility and privilege of representing school and community; display positive public action at all times.
- Live up to high standard of sportsmanship established by coach.





## Expectations of Parents, Students and Other Fans

- Realize that a ticket is a privilege to observe a contest and support high school athletics, not a license to verbally assault others or to be generally obnoxious.
- Respect decision made by game officials.
- Be an exemplary role model by positively supporting teams in every manner possible, including content of cheers and signs.
- Respect fans, coaches and participants.
- BE A FAN..... NOT A FANATIC.
- Maintain enthusiasm and composure
- Recognize outstanding performances on either side of the playing court, field, or arena.



## Expectations of Media



- Promote ideals and fundamentals of good sportsmanship.
- Report acts of sportsmanlike behavior without giving undue publicity to unsportsmanlike behavior.
- Refrain from making negative comments toward participants, coaches or officials.
- Recognize efforts of all who participate in the contest.

## Expectations of School Administrators

- Develop a program for teaching and promoting the ideals and fundamentals of good sportsmanship within the school, zone, and province.
- Provide appropriate supervisory personnel for each interscholastic event.
- Support participants, coaches, and fans who teach and display good sportsmanship.
- Recognize exemplary behavior and actively discourage undesirable conduct by participants, coaches and fans.
- Attend events whenever possible.





## MHSAA BEHAVIOUR GUIDE

### Acceptable Behavior

- Applaud during introduction of players, coaches, and officials.
- Players shaking hands with opponent who fouls out while both sets of fans recognize player's performance with applause.
- Accept all decisions of officials.
- Cheerleaders lead fans in positive school yells in positive manner.
- Handshakes between participants and coaches at end of game, regardless of outcome.
- Treat competition as a game, not a war.
- Coaches, players search out opposing participants to recognize them for outstanding performance or coaching.
- Applause at end of contest for performances of all participants.
- Everyone showing concern for injured player, regardless of team.
- Encourage surrounding people to display only sportsmanlike conduct.
- During the National anthem, students, participants and fans should remove any hats, face the flag, and remain still until the end of the anthem.



### Unacceptable Behavior

- Yelling or waving arms during opponent's free-throw attempt.
- Disrespectful or derogatory yells, chants, songs or gestures.
- Booing or heckling an official's decision.
- Criticizing officials in any way; displays of temper with an official's call.
- Yells that antagonizes opponents.
- Refusing to shake hands or give recognition for good performances.
- Blaming loss of game on officials, coaches or participants.
- Laughing or name-calling to distract an opponent.
- Use of profanity or displays of anger that draw attention away from the game or activity.
- Doing own yells instead of following lead of cheerleaders.

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**FAILURE TO COMPLY WITH CARMAN COLLEGIATE AND/OR MHSAA  
GUIDELINES AND EXPECTATIONS MAY RESULT IN SANCTIONS  
AGAINST THE OFFENDING PERSON OR PARTY.**

# Sec. 2: Information



## OVERVIEW OF CARMAN COLLEGIATE ATHLETIC PROGRAMS

At Carman Collegiate we are proud to offer our students a wide variety of athletic opportunities. Beginning in grades seven and eight, our students are exposed to extra-curricular sports in the hope that they will find an avenue to connect to the school, develop new skills and learn the values of teamwork and sportsmanship. The opportunities differ slightly by age grouping.

### Grade 7-8 Sports (Junior High)

- Cross-Country
- Volleyball
- Basketball
- Badminton
- Track and Field

### Grade 9-10 Sports (Junior Varsity)

- Cross-Country
- Volleyball
- Basketball
- Badminton
- Track and Field

### Grade 11-12 Sports (Varsity)

- Soccer
- Cross-Country
- Volleyball
- Curling
- Hockey
- Basketball
- Badminton
- Track and Field
- Softball / Baseball
- Golf

These programs are available every year pending student interest and the availability of volunteers to coach and manage the teams. The structure of each program may also vary from year to year.

All students are required to participate with their grade appropriate teams. Any student participating on Junior Varsity teams and Varsity teams is expected to make the JV team their priority whenever scheduling conflict arises except in cases where an appeal to school administration has been made and accepted. When programming is unavailable at the Grade 9-10 level, those students are able to try-out to participate in the Grade 11-12 programs.

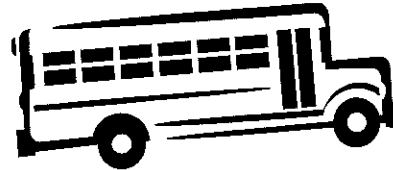
## DEVELOPMENTAL vs EXPERIENTIAL PROGRAMS

Not every athletic program offered at Carman Collegiate is considered to be a developmental program. Sports with a very short season and sports that are generally offered more extensively by the community are not intended to provide athletes with their primary development experience within that sport. Those sports are considered experiential and are intended to allow our students an opportunity to showcase their talents and / or gain some more experience in the sport. Developmental programs have longer seasons, more in-depth instruction and represent an opportunity for growth over the course of the season.

## SCHOOL SPORTS PLAYER FEE INFORMATION

All school extra-curricular sports require money to operate. This money is paid by the school and by the parents who agree to have their kids participate. The expenses associated with school sports include:

- Transportation costs
- Referee costs (when required)
- Facility Rentals (when required)
- Tournament Entry Fees
- Equipment costs
- Substitute costs



The school covers the costs of substitute teachers when coaches and managers are away from school to assist with these activities. The remaining costs are estimated at the beginning of the season based on all variable factors (number of tournaments and games, need for equipment, need for referees, need for facility rentals), and then divided by the number of players who are participating in the sport subtract one. This accounts for the possibility of a student withdrawing from an activity once fees have already been set.

Fee = cost / (# of players – 1)

### For example...

Transport = \$400.00  
Referees = \$120.00  
Facility Rentals = \$0.00  
Tournament Entry Fees = \$400.00  
Equipment Costs = \$0.00  
Substitute Costs = \$0.00 (pd)



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Total Expenses for the season = \$920.00  
Total number of participants = 12 – 1 = 11  
Fee charged per player to participate = \$83.63 rounded to \$85.00 (usually)

*(Player Fee Info. con't)*

Due to the fact that our fees are based on an estimate of costs and our expenses are based on actual costs we sometimes have an imbalance in the budget for the sport. When the result is a surplus, refunds are issued to parents of all participating students. When the result is a deficit, it may be a requirement for participants to help cover the extra costs.

Teams who qualify for Provincial Competition are eligible for funding from Prairie Rose School Division. The funds will cover a set amount of transportation costs and hotel costs depending on the location of the championships.

## **VOLUNTEER COACHING**

Carman Collegiate is a relatively small school that offers a wide variety of athletic opportunities. This means that we do not always have enough adults on staff to manage and coach every team. We are always pleased to have community members join us and help provide our students with quality programming. Any community member who would like to contribute to our programs is asked to contact the school to express an interest. All volunteer coaches will be subject to a **Criminal Record Check** and a **Child Abuse Registry Check**. A member of the teaching staff will always be provided to supervise on the bus and at games.

## **TRANSPORTATION**

When organizing transportation, supervisors may consider a couple of options:

- **Bus Transportation:** this requires advance booking. It costs \$0.40 per KM as well as the driver's wage for a minimum of three hours to pay for a bus.
- **Parent / Staff Vehicles:** this requires that each vehicle be registered with the office at the school and that students travel in the same vehicle to and from the event.

## **GAS MILEAGE FOR VOLUNTEER DRIVERS**

Volunteer drivers are eligible to be reimbursed by the appropriate program in the amount of \$0.30 per KM. Staff supervisors will provide volunteer drivers with the reimbursement form to be completed and returned to the office by the driver. Reimbursement will be in cheque form and will be sent home with the appropriate student.

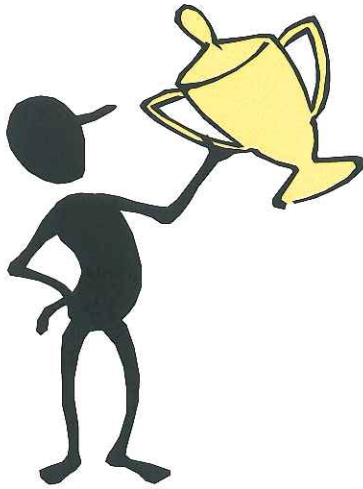
## **STUDENT MEDICAL FORM INFORMATION**

Prior to student participation in any extra-curricular sports program outside of the school, a medical form must be completed and returned to the office. The form is valid during the timeframe specified, which may or may not cover the entire season. Forms will be sent home with students to be signed and returned as



soon as possible. Students may also be required to submit an overnight permission form in situations where the athletes will be staying overnight at a competition site.

## YEAR END ATHLETIC AWARDS BANQUET



The Carman Collegiate Home and School Association and Carman Collegiate are proud to host the year end awards banquet. The event will feature an awards ceremony in honour of the achievements of student-athletes in extra-curricular sports as well as school teams. The Home and School Association will utilize the event as an opportunity to raise funds to help offset transportation costs associated with sports programs throughout the year. The cost of the event will be added to the player fees for the first sport that each athlete participates in. Tickets will be available for purchase by family and friends toward the end of the school year.

# Sec. 3: Sample Forms





# Carman Collegiate

Box 1510  
Carman MB R0G 0J0  
Phone (204) 745-2001  
Fax (204) 745-6288

## Gas Mileage Reimbursement Form

- Please complete this form and return it to the office
- Mileage for volunteer drivers is paid at \$0.30 per km.
- Please make sure forms are submitted within 2 weeks of program' s end

School Team or Program: \_\_\_\_\_

Name of Volunteer Driver: \_\_\_\_\_

Date of Trip: \_\_\_\_\_

Destination: \_\_\_\_\_

\_\_\_\_\_  
Signature of Driver

\_\_\_\_\_  
Date

### FOR OFFICE USE ONLY:

\_\_\_\_\_  
Signature of Teacher Supervisor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Principal

\_\_\_\_\_  
Date

Date Received: \_\_\_\_\_

Payment / Cheque #: \_\_\_\_\_

# of KM: \_\_\_\_\_

Account #: \_\_\_\_\_

**PRAIRIE ROSE SCHOOL DIVISION**  
**Section I: INSTRUCTIONAL PROGRAM**

**IGH-E1**

PRAIRIE ROSE SCHOOL DIVISION  
PARENT/GUARDIAN PERMISSION FORM

**RE: EXTRACURRICULAR TRIPS**

**Please note: This form is intended to be used for travel related to on-going school activities such as sports teams, choirs or other school clubs. Only those students who fill this form out in full and have a parent's/guardian's signature will be allowed to participate.**

Student's Name:

Address:

Student's Birth Date:

Telephone Number:

Please indicate any medical problems, allergies, recent illnesses or other special circumstances.

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Is the students taking any medication with him/her? (Please list) \_\_\_\_\_

Personal Medical Number:

Name of Family Doctor:

Telephone Number:

Do you have Student Accident Insurance? Yes \_\_\_\_\_ No \_\_\_\_\_

Please be aware the School Division is not responsible for any claims and/or costs if an injury occurs to your son/daughter on all extracurricular trips.

In signing this form you are giving your consent to your son/daughter participating in all the extracurricular trips related to the Badminton Program, and are giving the Supervising Teacher the authority to act on your behalf and to seek medical attention for your child if it is deemed necessary.

Valid March, 2011 to May, 2011

Signature of Parent/Guardian \_\_\_\_\_

Date: \_\_\_\_\_

*This personal information, or personal health information, is being collected under the authority of Prairie Rose School Division and will be used for education purposes or to ensure the health and safety of the student. It is protected by the Protection of Privacy provisions of The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act. If you have any questions about the collection, contact Prairie Rose School Division Access and Privacy Coordinator at 745-2003.*

# PRAIRIE ROSE SCHOOL DIVISION

## SECTION E: SUPPORT SERVICES

ENB-E

### (PART 3: TRANSPORTATION)

#### TRANSPORTATION OF STUDENTS IN PRIVATE VEHICLES

##### BY STAFF OR OTHER VOLUNTEERS

File ENB-E

During the course of the year there are occasions when students are transported to and from school sponsored activities in private vehicles. If you are willing to transport students in your vehicle on some of these occasions, please complete the following form and return it to the school.

Upon completion of the form, the School Division's Insurance policy covering Special Non Owned Vehicles will be extended to you while operating as a volunteer driver.

\*\*\*\*\*

NAME: \_\_\_\_\_ ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_ (RES) \_\_\_\_\_ (BUS)

#### Vehicle Information

Make/Model: \_\_\_\_\_ Year: \_\_\_\_\_ Lic#: \_\_\_\_\_

Registration # : \_\_\_\_\_

Make/Model: \_\_\_\_\_ Year: \_\_\_\_\_ Lic#: \_\_\_\_\_

Registration # : \_\_\_\_\_

Driver's Licence No: \_\_\_\_\_

I am willing to drive students in my private vehicle to and from school activities and in doing so will operate my vehicle in accordance with the provisions of the *Highway Traffic Act* and/or the *Criminal Code*. I hereby certify that I have a valid driver's licence and that I have a minimum of Basic Autopac Coverage on the above mentioned vehicle(s). I further certify that I will notify the School Principal immediately if any changes occur with respect to my driver's licence or vehicle insurance.

\_\_\_\_\_  
Signature of Driver

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Principal

\_\_\_\_\_  
Date



**PRAIRIE ROSE SCHOOL DIVISION**  
**Section I: INSTRUCTIONAL PROGRAM**

**IGH-E3**

PRAIRIE ROSE SCHOOL DIVISION  
PARENT/GUARDIAN PERMISSION FORM

**RE: EXTENDED FIELD TRIPS**

I hereby give permission for my child, \_\_\_\_\_, to participate in a school sponsored education field trip Envirothon Provincial Competition  
I understand that my child will leave on May 27, 2010 and is expected to return on May 29, 2010

Name of Family Doctor: \_\_\_\_\_ Doctor's Phone No. \_\_\_\_\_  
Manitoba Medical Reg # \_\_\_\_\_ (6 digit) Blue Cross or other \_\_\_\_\_  
Manitoba Medical Personal Medical Number: \_\_\_\_\_  
Medical History (conditions of which the school personnel should be aware): \_\_\_\_\_

Is the student taking any medication with him/her on this trip? \_\_\_\_\_

If so, what is it and who is expected to administer this medication?  
\_\_\_\_\_

Should emergency medical services be required for your child during the trip, the local medical personnel will be contacted immediately. It is understood that school rules shall apply during the field trip. The following potential risks may be associated with participation in this activity:  
\_\_\_\_\_

I understand that if the student does not abide by the tour regulations the Head Chaperon will call me collect and that the student may be sent home at my expense.

\_\_\_\_\_  
Signature of Parent/Guardian Home Phone No. Date of signature

**CONTACT INFORMATION:**

Mom's Work Number \_\_\_\_\_ Cell phone \_\_\_\_\_  
Dad's Work Number \_\_\_\_\_ Cell phone \_\_\_\_\_  
Emergency Contact Person \_\_\_\_\_ Home Phone \_\_\_\_\_  
Work phone \_\_\_\_\_ Cell phone \_\_\_\_\_

NOTE: For trips outside of Canada, it is required that additional medical/accident insurance be purchased. This personal information, or personal health information, is being collected under the authority of Prairie Rose School Division and will be used for education purposes or to ensure the health and safety of the student. It is protected by the Protection of Privacy provisions of The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act. If you have any questions about the collection, contact Prairie Rose School Division Access and Privacy Coordinator at 745-2003.



# Sec. 4: Appendix

## INTRODUCTION

Athletes who strive to achieve at the highest level require a knowledge base and the understanding that their lifestyle will affect their performance. Please find attached some articles that may be of interest to students who would like to reach their athletic peak. All athletes need to have an understanding of injury prevention and treatment as well as knowledge of sport nutrition and the impact of sleep on performance. Also included is a “concussion card” which provides an overview of what concussions are, how to recognize them and how to treat them. Concussions have made their way into public consciousness and should be understood by everyone associated with athletics. Athletes in every sport are prone to suffering head injuries and the card is a tool that can be utilized whenever needed. The final article relates to “Energy” drinks. The impact of these drinks on the body is substantial and it is important that they are understood for what they are.

*Articles provided by:*

**Sport Medicine and Science Council of Manitoba ([www.sportmed.mb.ca](http://www.sportmed.mb.ca))**

And

**Sports Science Exchange ([www.gssiweb.com](http://www.gssiweb.com))**



SPORT MEDICINE & SCIENCE  
COUNCIL OF MANITOBA

# SIMPLE SPORT SCIENCE

October 2010

Sport Medicine & Science Council of Manitoba      145 Pacific      Winnipeg Manitoba      R3B 2Z6  
<http://www.sportmed.mb.ca>      [sport.med@sportmanitoba.ca](mailto:sport.med@sportmanitoba.ca)      TEL: (204) 925-5750

## INJURY PREVENTION AND RECOVERY IN SPORT

### INTRODUCTION

Athletes are continually trying to better themselves in their sport. Mistakes happen and sometimes by wanting to improve, they follow poor habits or make training errors. This can lead to injury or result in poor performance. As a coach, some of your key responsibilities are to improve athletic performance and to ensure a safe environment both when training for and when participating in the sport. To achieve this, it is crucial to focus on how to prevent injury and how to promote recovery for your athletes. Addressing these points will help to significantly enhance the performance while providing safe guidance to your team.

### PREVENTING INJURIES

Unfortunately, not every injury is preventable in sports. However, research strongly supports that a vast number of injuries are preventable with proper measures. To plan is to be prepared for any setbacks. Below are some tips you can share with your athletes to minimize complications in sport.

**Include consistent quality exercise.** Improving fitness standards is well known to complement skill performance in sports. Specific strength and conditioning exercises including core, agility, power and flexibility at a progressive level of intensity will help to keep injuries away. As well include more specific training like proprioception (balance and body awareness), neuromuscular and deceleration training for a thorough program.

**Incorporate a warm-up before practice or competition.** Movement preparation involving a body warming phase, a dynamic stretching phase and a sport-specific phase will prepare the body and the mind for motions expected in your sport. This should last between 12 and 30 minutes for optimal performance.

**Promote a hydration and nutrition plan.** Small changes in body water levels correlate with a significant athletic performance loss. Encourage proper hydration throughout the day adding one litre of water replenishment for every hour of moderate to high intense exercise. This can easily be done by taking three gulps of water every 10 to 15 minutes during training. Proper fuelling before training or competition will give you the energy needed to perform at your fullest. When sessions go beyond one hour, it is imperative to refresh the body with carbohydrates throughout. Small amounts will go a long way to restore energy and minimize fatigue. It's important to re-establish energy levels post-exercise by consuming a small amount of carbohydrates and protein within 30 minutes. This is vital if you have more training or another competition later that day or the next.

Equally important are safety considerations when engaging in practices or competitions.

**Understand Common Injuries.** Familiarizing yourself with common injuries in your sport will help you to recognize unsafe patterns in order to avoid them in the future. In turn, this will permit you to have better control on problem areas.

**Have a fitness baseline.** At the start of the season, determine fitness levels and record past and current injuries of each athlete to better anticipate and evaluate problems during the season.



**Ensure proper equipment use.** Protective gear for each sport is a necessity for prevention of injuries. Make sure to take in consideration such things as proper fit, use and quality of the equipment.

**Address injuries immediately.** Maintaining proper communication between you and your athletes regarding their injuries will keep everyone on par. You can then appropriately prevent or deal with injuries at the first signs and symptoms. Allow rest and/or refer the athlete to a sports injury professional. Also being able to recognize how an athlete shows fatigue, or signs of overtraining will aid you in determining the next steps in recovery.

## Recovery

Athletic performance gains and losses are governed largely by how the body deals with stresses applied to it. Allowing the body to recover from such stresses will help overcome soreness as well as restore and revitalize the central nervous system.

**Periodization.** Develop an annual plan for your team's development throughout the season as well as during off-season. Think of variables such as training intensity, skill development, peak performance, and incorporating strategies for injury prevention and the athlete's recovery.

**Contrast-bathing.** Hot/cold bathing will help the body flush out metabolic waste and provide psychological benefits. By alternating between hot and cold, it will cause the surrounding muscles and blood vessels to act as a pump, flushing fluid back to the heart. A good guideline is 30 to 150 seconds of cold with a corresponding 60 to 300 seconds of heat for a total time of about 15 minutes.

**Self-massage.** A sports massage after training is best but you can also use a tennis ball. Apply direct pressure for approximately 20 to 90 seconds to sore spots on your back, neck and extremities. You may also do small circles to taut bands or knotted muscles for up to five minutes. Alternately, use a foam roll or a soccer ball to roll on tight muscles and tissues.

**Sleep!** When we don't get enough sleep in our day, the results are fatigue, decreased performance and loss of focus, just to name a few. Encourage good sleep patterns to make sure your athletes are taking full advantage of training sessions and are competing at their most alert state. Short rest periods are proven to provide refreshment to one's heavy schedule as long as it does not surpass 20 to 40 minutes. The time will depend on your own body's sleep pattern.

**Relative rest.** Cross-training can be easily incorporated into your schedule. Getting your team together and doing a different sport or activity strengthens team bonds and brings new stresses to the body creating a well-rounded athlete.

## CONCLUSION

Intertwining injury prevention strategies and recovery work with your training will provide your athletes with the essential performance enhancing tips and techniques needed for long term development towards optimal achievement. To learn more, consult with a sports therapist or a certified exercise professional and ask about incorporating an injury prevention program into your routine. Not only will it benefit your athletes individually, it will in turn help your team be more successful.

Article prepared by: Jean-François Bérard - Physiotherapist





# SIMPLE SPORT SCIENCE

May 2009

Sport Medicine Council of Manitoba  
<http://www.sportmed.mb.ca>

200 Main Street  
[cbaker@sport.mb.ca](mailto:cbaker@sport.mb.ca)

Winnipeg Manitoba  
TEL: (204) 925-5750

R3C 4M2

## SPORT NUTRITION

### "The Energy Edge"

*A balanced eating program is an integral component to obtaining the energy edge in performance and any physical fitness program. Dietary goals should be to obtain adequate nutrition in order to optimize health and fitness or sports performance. In other words, you want to strive to eat right all day long. Wherever you are in life, you can nourish yourself with a diet that supports good health and high energy!*



#### PLANNING FOR GOOD NUTRITION

We all need energy that will last as long as our day lasts. By planning for good nutrition you are on your way to top performance:

- ▶ Use Canada's Food Guide as a *starting* point
- ▶ Choose more servings of grain products and vegetables and fruit to meet higher energy needs
- ▶ Choose a variety from each food group each day; no one food group supplies you with all the necessary nutrients
- ▶ Learn to choose wisely while eating out
- ▶ Try new foods/beverages during practice; not the day of an event
- ▶ Plan ahead and know what and when you will be able to eat throughout the day; always carry extra "on the go" snacks (muffin, cracker, fruit, juice, cheese, peanut butter/bread)
- ▶ Don't forget fluids; drink before, during and after physical activity
- ▶ Drink plenty of water when traveling; a few hours in the air can cause dehydration



#### CARBOHYDRATE: Fuel For Champions

Carbohydrates are found in a variety of foods. More active people require more carbohydrates. Carbs are necessary to maintain blood glucose and are used for quick energy for muscle activity. Depleted glycogen stores (the quick energy) lead to reduced endurance, fatigue and exhaustion. Eating carbs is the only way to maintain and refill muscle glycogen stores.

- ▶ Before competition consume a high carb and low in fat diet on a regular basis. Pre-competition meals should be consumed 2-3 hours before the event
- ▶ Rest or taper activity for a few days prior to competition so that muscles are able to store carbs as glycogen
- ▶ After intense activity drink/eat carb-containing foods within the first 15-30 minutes post-activity
- ▶ 2-4 hours post-exercise (practice/competition) try to consume high carbohydrate snacks (fruit, fruit yogurt, crackers, chocolate milk, cereal, bagels)



## POWER PROTEINS

As an athlete it is vital you consume enough protein in your diet. Protein aids in building, repairing and maintaining muscle tissue. Strenuous endurance or strength training can increase one's protein requirements. However, even high performance athletes can meet protein needs through a well planned out diet. The food guide provides for a generous allowance for protein for the elite athlete.

- ▶ Consume at least the minimum number of servings of Milk Products and Meat and Alternatives
- ▶ Lean meat, fish, poultry, eggs, or a combination of legumes, grains, nuts, and seeds provide quality sources of protein and other essential nutrients
- ▶ Darker meats increase intake of iron and zinc (reduce risk for iron deficiency anemia)
- ▶ Protein beyond the body's requirement is broken down for use as energy or **stored as fat**.



## FLUID AND TOP PERFORMANCE

Fluid is a constant need and plays a major role in an athlete's performance. Heavy or prolonged sweating is the mechanism the body uses for body temperature regulation. This act can lead to dehydration which is a major cause of fatigue and poor performance. Dehydration also increases the risk of cramps, heat exhaustion and life threatening stroke. It can also delay an athlete's recovery after exercise/the event.

- ▶ Drink a minimum of 2 L or 8+ cups of fluid every day
- ▶ Consume additional fluids with activity
- ▶ Drink plenty of cool, plain water before, during and after physical activity
- ▶ Drink 1.5 L of fluid for each kg or 3 cups for each pound of weight lost during exercise
- ▶ Monitor urine color and amount. A small amount of dark urine is a sign of dehydration
- ▶ Plain cool water is sufficient for events/workouts lasting up to one hour
- ▶ A sports drink is beneficial when the activity lasts longer than one hour. Look for 4-8% carbohydrate when choosing a sports drink. Remember to trial first in training before using it in an event!
- ▶ Make your own sports drink: mix equal volumes of orange juice and water and add a "pinch" of salt

### Three very important questions to ask yourself:

1. *What will I eat?*
  2. *When will I eat it?*
  3. *Where will I get the food?*
- During training/practice is the time you will test different foods and the timing of meals. NEVER, EVER try any new foods or beverages the day of competition. Training or practice is the time to test your fuel options for tolerance.
  - Once you have figured out the right combination for you, it should be incorporated into your overall competition schedule.
  - Do not train/compete on an empty stomach. Plan to eat a snack 1-2 hours prior.
  - Choose carb-rich foods that are well tolerated.
  - Develop a pre-event meal plan that you can use for pre-competition - experiment during training.
  - Avoid eating high fat foods and excess protein prior to exercise.
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**Sample Meal Planning Schedule:****EARLY MORNING EVENTS**

**The Night Before:** Eat a high carb meal - pasta, grains, breads, veggies, milk, along with some lean protein - 3 oz chicken or fish. Drink 2 glasses of fluids before and after the meal. Walk/stretch before bed.

**The Morning of:** Eat a light breakfast - fruit yogurt smoothie, low fibre cereal & milk, meal replacement drink (Ensure/Boost). Drink 2 glasses of fluids 2 hours before the event. Allow for 2 hours to digest solid foods.

**EARLY AFTERNOON EVENTS**

**The Night Before:** Eat a high carb snack before bedtime - toast & jam and 1% chocolate milk.

**The Morning of:** Eat a substantial mid-morning meal of breads, cereals, fruit, yogurt and juice. Or, have a big breakfast and a light lunch. Drink fluids throughout the morning and stop 2 hours prior to the event.

**EVENING EVENTS**

**The Night Before:** Eat a high carb meal. GET A GOOD NIGHT SLEEP.

**The Day Of:** Both breakfast and lunch will be completely digested by evening. A carb rich meal - soup, sandwich and juice should be eaten 3 hours before the event. Drink fluids all day up to 2 hours before the event.

**After the Event:** Eat high carb foods and avoid alcohol. Drink plenty of fluids.

**ALL DAY EVENTS**

**The Day Before:** Eat carb rich meals and snacks every 2-3 hours. Drink sports drink (make your own), juice and low fat milk.

**The Day Of:** Eat the largest, most tolerated, high carb breakfast - toast, pancakes or hot cereal. Eat a low fat lunch and snack on high carb foods - sports bars, juice, bagels and bananas. Drink water first and sports drinks (if tolerated/needed) throughout the day.

# The difference between you and your competition is who is putting sport nutrition into practice!

Produced in partnership with

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# SIMPLE SPORT SCIENCE

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## Sleep: The Nothingness That Means Everything?

Play Video games or sleep? Populating on Facebook with pictures or sleep? MSN or sleep? TV and fall asleep on the couch. Today, it seems that late-night activity has overtaken sleep as the major nighttime priority! Does it matter? Is sleep important? I can sleep in on the weekend to catch up, right? Why not use this time to get stuff done? Well the facts are that sleep is one of the most important processes a human undergoes! Losing motivation to train - well this is often is a sleep problem!



## What is Sleep?

Contrary to popular belief, sleep is a very active process - not merely the absence of wakefulness. In fact, during sleep, the brain not only uses more glucose and oxygen than when it is awake, but also undertakes a profound change in activity! Though the exact function of sleep remains a mystery, many scientists have shown that sleep provides a "catch-up" time for the brain and body to restore processes that may have been depleted or exhausted during wakeful activities. During this time, the brain apparently "shifts gears" to accomplish long term tasks for learning and memory, especially organizing thoughts and memories. Sleep is not just about recovery it is about making a better person. Sleep plays many roles that are **essential** to exploit as an athlete - sleep must be a priority! Sleep must be planned and not just done when you can.

Sleep length (hours/night), sleep quality (number of disturbances/sleep), and sleep phase (eg. REM "rapid eye movement" sleep) are key factors that determine the overall recuperative and mental and physical growth benefits of a good night's sleep.

Children - 10-12 hours a night  
Adolescents - 9-10 hours a night  
Adults - 7 to 8 hours a night

Yes we need less sleep as we age. What is the right duration for you? Consistent sleep durations are essential to success. But if you feel lethargic or not refreshed most mornings - you may require **more or better type** of sleep! 5 days of sleep deprivation are not balanced by sleeping in for 12 hours on Saturday! You need to add sleep to each night of the week - make it happen! Yes napping can be useful - you should feel refreshed after a nap - not more "dozy".



There is a "just right amount" just like the mama bear, papa bear and baby bear story goes. Too much sleep is not good, too little is not good. You need to feel refreshed after sleep! If you wake each morning "groggy" you should consider changing your sleep. The exact amount of sleep you need is up to you to determine. Your sleep requirements do change through the year based upon the season. Consistency is king in sleep.



Get a "sleep routine" going... avoid mentally stimulating activities just before bed (reading is ok). Falling asleep to the TV is not good - the audio and visual stimulation continues all night and your brain will "listen" as you sleep and make your sleep quality poor. Going to sleep with an iPod - not good either as it disrupts sleep type. Sleep in a dark room. Don't fall asleep on the couch and then transfer to your bed at 3 am! Have a consistent bed time routine and it will help you get rejuvenated!

The first two keys to effective sleep are getting the right sleep duration and good sleep quality, the third key being the concept of sleep phase (or sleep type) might be confusing. It is necessary to have rapid eye movement (REM) sleep and slow wave sleep (deep sleep)- these sleep phases are the primary components of sleep where the recuperative processes occur!. Medications often influence these phases (for instance sleeping pills often dramatically reduce REM sleep - you won't remember your dreams). With consistent sleep routine and a good environment to sleep in, the brain goes through phases of sleep all night long - disruptions can prevent you from entering all the necessary sleep phases - making sleep ineffective - you wake up tired.

## Sleep Deprivation and Athletic Performance

Sports skills often require a special combination of mental and physical ability, where shortcomings in either are reflected in poor performance results. Not to mention any decrease in mood will likely affect performance because determination and concentration are often needed even more than physical ability! Many studies have proven the detrimental effects of sleep deprivation on athletic performance. Among the "detriments" discovered were the considerable slowing of visual reaction time, lapses in attention and tasks requiring short-term memory during successive days without sleep. Impairment of mental abilities such as memory seem to become evident far earlier than any physical impairments such as hand grip strength.

In one study, 8 swimmers were tested in a standard Olympic 50-m pool on four consecutive days at 6:30 AM and 5:30 PM under normal and partial sleep deprivation conditions. Sleep loss seemed to affect mood states, increase depression, tension, confusion, fatigue, and anger even though these characteristics are seen more in repetitive or "boring" tasks, similar to practices or training sessions.

While athletes may be able to overcome the negative effects of sleep loss in single maximal effort sports, they are usually unable or unwilling to maintain high performance levels in sustained and repetitive exercises after sleep loss. For example, no significant negative effects from sleep loss were found in maximal bicep curls but significant negative effects were noted for bench press, leg press, and dead lift exercises.

## Recommendations

First, get the sleep duration you need. Get a consistent sleep routine. Stop MSN, Facebook and video games immediately prior bed! Short/long naps can produce significant benefits because they can often help to overcome "sleep debts" but they do not replace quality sleep. Although sleeping pills may be effective in getting people to sleep, they don't guarantee sleep quality or quantity, so attempting to sleep naturally (without medications) is the best and safest way to get good sleep.

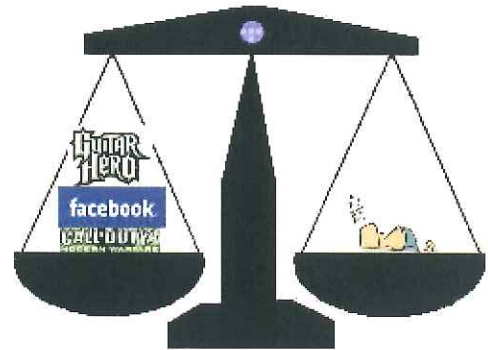
Athletes should also try to avoid excess alcohol and caffeine consumption prior to sleep. When participants in a study were given alcohol they found that the inebriated athletes spent much of their sleep in phase 1 or light sleep resulting in greater likelihood of sleep disturbance not to mention other alcohol related factors sweating, stomach upset, headaches and more frequent urination- all of which don't help sleeping behaviour! This as expected can severely impair the following day's performance from the fatigue of not having slept well the night before. Athletes should also avoid caffeinated drink before sleeping including coffee, cola, energy drinks, etc.



When doses of 100 mg or more (an average coffee beverage contains more than 100mg, 1 can of red bull contains 80mg of caffeine and) were given to people 2 hrs before bedtime, scientists found drastic decreases in sleep quality and quantity.

## Conclusions

Sleep loss affects mood and performance in a variety of mental and physical tasks. Altered mood states are observed even after as little as 2-3hrs of sleep loss, these include an increase in depression, tension, confusion, fatigue, and anger. Short naps CAN soften the negative effects sleep loss has on performance, but you should strive for the REAL THING! Finally, because even small decreases in physical or mental performance could separate winning from losing, or getting gold medal instead of a silver medal, you should seriously weigh your options. Sleep is "not nothing" it is something to cherish as much as a fine piece of exercise equipment.



If you are a talented athlete and compete against other talented athletes. Often the difference in performance is due to factors that let your talent shine - sleep, nutrition and fitness. These are often the "Achilles heel" of athletes - less than 50% of athletes believe they sleep well, less than 15% have performance nutrition plans, and the less than 10% have a yearlong fitness plan. If you want to achieve and excel - sleep well.

## CONCUSSION MANAGEMENT

C-SPINE PRECAUTIONS  
 AIRWAY, BREATHING, CIRCULATION  
 ASSESS LEVEL OF CONSCIOUSNESS



### DEFINITION OF CONCUSSION

Temporary change in mental state as a result of trauma (may be blow to head, face or jaw; may result from whiplash effect to neck)  
**NOT NECESSARILY WITH LOSS OF CONSCIOUSNESS**

### MANAGEMENT OF ATHLETE WITH CONCUSSION

When athlete shows any signs or symptoms of concussion:

1. No return to current game or practice / rest at least 24 hours
2. Medical evaluation necessary including full SCAT2 assessment done by a medical professional on the sidelines or medical facility
3. No aspirin or anti-inflammatories for pain; acetaminophen ok under supervision of a physician
4. No alcohol or sleeping pills
5. No driving
6. Do not leave alone - regular monitoring for deterioration essential (24-48 hours)
7. To Emergency Department if worsening symptoms or if new symptoms develop
8. Return-to-play must follow a medically supervised, stepwise process (No training until medically cleared)

### RETURN-TO-PLAY

Proceed to next step only when asymptomatic for 24 hours; if symptoms recur, return to step 1 and seek re-evaluation by physician

- Step 1: No activity; complete physical and mental rest (no videogames; no texting)  
 Step 2: Light exercise (walking; stationary bike)  
 Step 3: Sport-specific activity (e.g. skating)  
 Step 4: "On-field" practice without body contact / light resistance training  
 Step 5: "On-field" practice with body contact (once cleared by medical doctor)  
 Step 6: Game play

***"When in doubt, sit them out!"***

## CONCUSSION SCREENING

### 1. SIGNS AND SYMPTOMS OF CONCUSSION:

Headache / pressure in head	Poor balance
Dizziness	Poor concentration / easily distracted
Neck pain	Slow or slurred speech
Feeling dazed / "in a fog"	Slow responses to questions
Feeling "dinged" or stunned / "bell rung"	Slow to follow instructions
Feeling "slowed down"	Vacant stare / glassy eyed
Sleepiness	Decreased playing ability
Seeing stars	Unusual / inappropriate emotions
Double or blurred vision	Personality changes / irritability
Sensitivity to light or noise	Inappropriate behaviour (skate/run wrong direction)
Ringing in ears	Loss of consciousness
Nausea / vomiting	Memory deficits / amnesia
Confusion	Seizure / convulsion
Disorientation (unaware of time / date / place)	

**\*presence of any of the above symptoms may suggest concussion**

### 2. MENTAL STATUS TESTING:

- What venue are we at today? (which gym / stadium / rink is this?)  
 Which half (quarter / period / round) is this?  
 Who scored last in this match (game / fight)?  
 What team did you play last week / game (Who was your opponent in the last match)?  
 Did you / your team win the last match / game?

**Failure to answer all questions correctly may suggest concussion**

### 3. BALANCE TESTING:

- Tandem Stance: (Requires stop-watch)  
 Stand heel-to-toe with non-dominant foot in back (weight evenly distributed)  
 Then balance for 20 seconds with hands on hips / eyes closed

**More than 5 errors may suggest concussion:**

- E.g.
- Lift hands off hips
  - Open eyes
  - Lift forefoot or heel
  - Step / stumble / fall
  - Remain out of start position more than 5 seconds

**IF CONCUSSION SUSPECTED, REMOVE FROM PLAY AND ASSESS FULLY WITH SCAT 2 CONCUSSION ASSESSMENT TOOL**

[www.sportmed.mb.ca/?page=22](http://www.sportmed.mb.ca/?page=22)

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# WHAT YOU NEED TO KNOW ABOUT “ENERGY DRINKS”

Energy is the capacity to do work, including synthesizing proteins, fats, and carbohydrates, producing nerve stimuli and muscle contractions, and performing sports. Biochemical energy is derived from food and is optimized when athletes get adequate rest and sleep and when they engage in effective training programs. The feeling of being “energized” also requires the correct balance of neurochemicals in the brain; this, too, requires the appropriate amounts of food, fluids, rest and sleep, and physical activity, plus other psychological factors about which we know little.

Eating an optimal amount of calories and being well hydrated are certainly critical components of athletic success. Energy drinks can supply energy and fluid, and they may have a role to play in carbohydrate loading during recovery from exercise. But energy drinks typically are not optimally formulated to work best to improve strength, speed, stamina, and other requirements for sport performance when consumed shortly before or during exercise. Here are some of the concerns experts have with energy drinks:

- Doses of ingredients are often not standardized, so it is impossible to know if you are getting too little or too much of a particular ingredient.
- Some supplements do not contain the ingredients stated on the package; some contain banned ingredients not stated.
- Some products may have side effects that detract from performance.
- Energy drinks are a costly way to acquire carbohydrate and fluid.

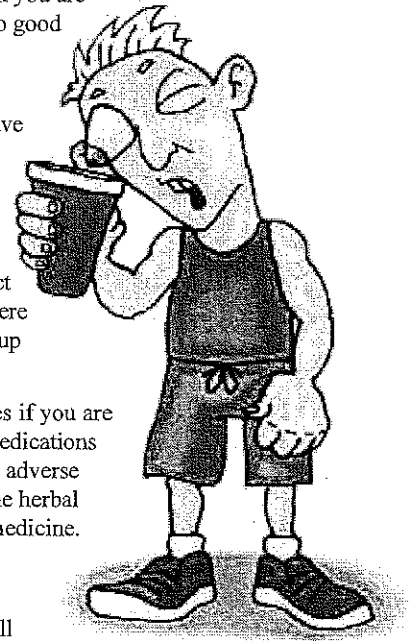
The table on back lists some of the ingredients added to energy drinks with claims and facts.

### BOTTOM LINE

Athletes need to be well rested, well fueled, and well hydrated for optimal energy and performance. Supplemental beverages should have a beneficial, not negative effect on the body. Examine energy drinks carefully and think before you buy, keeping the following points in mind:

- Is there anything about your present eating, hydrating, or lifestyle patterns that you should improve before trying a costly energy drink?

- Does the energy drink you are considering sound too good to be true? If so, it probably is.
- Does the beverage have a Nutrition Facts or Supplement Facts Panel? If not, avoid it.
- What does the product claim to do, and is there any research to back up those claims?
- Avoid herbal additives if you are taking prescription medications because there may be adverse interactions among the herbal chemicals and your medicine.
- Avoid products containing ephedra, yohimbe, and mate, all of which are unsafe.



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(See chart on back)

## INGREDIENTS OF ENERGY DRINKS

INGREDIENT	CLAIMS	FACTS
Royal jelly/bee pollen	Improved exercise performance	No effect on performance; dangerous for those allergic to bee stings
Glucose, sucrose, fructose, galactose	Carbohydrate is the preferred fuel source; enhanced performance	Carbohydrate supplements often improve performance. Carbohydrate-rich drinks can be effective for carbohydrate loading up to 2 hours before exercise. If consumed shortly before or during exercise, carbohydrate amounts in energy drinks are usually too much or too little; drinks containing only galactose or fructose can cause digestive problems
Pyruvate	Enhance aerobic metabolism; delay fatigue; decrease body fat	Amount needed is far in excess of what current products provide; larger quantities cause GI distress
Branched-chain amino acids (BCAAs)	Decrease brain serotonin; delay fatigue; expedite recovery	No effect on athletic performance when compared to carbohydrate; may cause digestive distress
Glutamine	Boost immune system; increase glycogen storage	No effect on an athlete's immune system or on performance
Arginine	Improve muscle glycogen stores	No benefit; can cause digestive distress
Creatine	Delay fatigue in high-intensity exercise	Insufficient amount in energy drinks to be effective
Carnitine	Delay fatigue, burn body fat	No effect on athletic performance
Taurine	Serves as antioxidant; enhances cardiac function	No effect on athletic performance
Medium-chain triglycerides (MCTs)	Spare glycogen; enhance endurance	No effect on athletic performance; causes digestive distress
Vitamins and minerals	Essential for normal body functions	Amounts in energy drinks range from trace to megadoses; no effect on athletic performance
Oxygen dissolved in beverage	Increased aerobic metabolism; decreased lactic acid; improved endurance	No effect on metabolism or athletic performance in typical athletes, who have no deficiency of vitamins
Caffeine	Stimulates brain function and metabolism; Improves performance	May improve athletic performance; may stimulate urine production and contribute to dehydration if ingested before exercise; may cause nervousness; laxative effect
Guarana extract; Kola nut extract; Yerba mate extract ("natural" caffeine sources)	Similar to caffeine	Similar to caffeine; often unknown quantities of active ingredients; could lead to anti-doping violation if too much caffeine
"Fat burners" such as Citrujia, hydroxycitrate, ephedra	Stimulate metabolism and brain function; reduce fat	Little or no evidence of athletic performance effect; ephedra can cause cardiovascular dysfunction and death in sensitive individuals
Kava-kava and St. John's Wort	Calm the nervous system	No athletic performance effect; kava-kava associated with liver failure
Amino acids from hornet's saliva	Increase endurance	No evidence of effect on athletic performance in humans

**For additional information: In the U.S.A. and Canada: 1-800-616-GSSI (4774) ■ Outside the U.S.A.: 847-967-6092**  
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