



SPORT MEDICINE
COUNCIL OF MANITOBA

SIMPLE SPORT SCIENCE

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SUPPLEMENTS, OVER THE COUNTER MEDICATIONS, HERBAL PRODUCTS and ATHLETES

What is the *Taking It* model?

The seven point *Taking It* model was developed in 1997 and consolidated in 1998 during the Nagano Olympics in response to reactions by various groups to the drug related events surrounding Mark McGuire and Ross Rebagliati. The *Taking It* model, using an **informed decision-making** process, helps athletes, coaches, athletic service providers, and parents consider the many different factors that should be considered when determining whether a substance may be beneficial or detrimental to athletic performance and/or general health. In this way, athletes and those that support them can estimate the possible implications in each of the seven categories of the *Taking It* model. The model helps them to improve their understanding of the relationship between their performance goals and the consequences of their decision to use substances. Athletes have limited mental, financial and physical resources and devoting their resources appropriately will increase success in goal achievement. Athletes may focus on one aspect of the consumption of a substance, and the *Taking It* model brings to light other aspects that may not have been considered. The model can be applied to many substances including food, sport drinks & bars, caffeine, nutritional supplements, natural health products, herbal products, homeopathic remedies, functional foods, nutraceuticals, vitamins, illicit drugs, over the counter (OTC) medication, tobacco, and alcohol.

How does it work?

The *Taking It Model* involves the step-by-step consideration of seven key points that should be considered when consuming anything by an athlete beyond simple food. When putting a substance through the *Taking It* model, each element of the model is addressed in a simple fashion. What are all the facts? Are these actually facts or what we personally believe? If there is any information missing, if there is we should seek it out before proceeding with use of the substance. Once the model is completed, you would talk through each element in terms of pros and cons. In the end, the athlete and coach will weigh all the pros and cons and come to a decision. Normally, clarity of decision making is achieved where the "right" choice becomes apparent after weighing all the elements of the model.

Using the *Taking It Model*

Fair Play

The **fair play** or code of conduct element refers primarily to the **rules of sport**. In the case of most amateur sports, the banned substances and practices (prohibited) list is created and managed by the World Anti-Doping Agency (WADA - www.wada-ama.org). The primary question that should be considered is "Is the use of this substance against the rules of sport?" Remember that a prohibited substance is not necessarily illegal! The drug information database (DID) on the Canadian Centre for Ethics in Sports (www.cces.ca) is a useful tool to determine if substances are prohibited.



Legal

When considering the use of a substance, one must also determine if the substance is legal to use. "Is the substance against the rules of law?" It is important to distinguish between the rules of law and the rules of sport - they are two completely separate codes of conduct. It may be confusing to an athlete to term "anti-doping" as illegal. Illegal refers to the rules of law, not the rules of sport.



Performance

It is important to determine, using credible information sources, if the substance has been shown to be performance enhancing at their level or sport. The common source of information relating to supplement (substance use) is a "trainer" - trainers are not necessarily educated to provide advice on the 'ergogenic benefits' of substances. Many athletes gamble on the possible benefits of substances and expand valuable financial resources, and direct their limited energy into pathways which may have no benefit. The manufacturers of substances have disproportionate control of the information provided to athletes via magazines, web and media. Their information is not necessarily credible.



Health

Are there any health benefits (not necessarily performance based) documented with consumption of the product? The health benefits of a product may be credible but the performance enhancing aspects may not be. For instance, ephedrine is a herbal decongestant to clear a stuffy nose, however it is a banned substance in amateur sports.



Side Effects

What are the medical side-effects of using the substance? Side effects refer undesirable short and long-term consequences of the consumption of the substance. Furthermore, the side effects of most substances may be unknown. Often the doses are larger than used medically and because of this, it is unethical for scientists to subject athletes to these conditions and thus they may not even be able to determine side effects. Certainly there are side effects of substances that are not medicines.



Safety

How is the safety of others (teammates, opponents, coaches, spectators) affected by **your** use of the substance? Certainly, aggressive or other irresponsible behaviours induced by compounds such as stimulants or steroids would be classic examples of this safety that should be considered in the *Taking It* model.










Financial

Finally, the cost of use of a substance is critical to assess. Money spent for products could perhaps be better spent to promote more established methods of performance enhancement such as better equipment, additional coaching, strength and conditioning, nutritionist, etc. In other words, could the money have been used in a more productive manner?



Try the Taking It model on Vitamin C. You will quickly see how you can use it to make better decisions on substances.

| Compound |  |  |  |  |  |  |  |
|-----------------|---|---|---|--|---|---|---|
| Vitamin C | ✓ | ✓ | ~ | ✓ | ✓ | ✓ | ✓ |
| Ephedrine | X | ✓ | ~✓* | ✓ | X | X | X |
| Pseudoephedrine | ✓ | ✓ | ~✓* | ✓ | X | X | X |
| Steroids | X | X | ✓ | X | X | X | X |
| Creatine | ✓ | ✓ | ~ | ✓ | X | ✓ | X |
| Marijuana | X | X | X | X | X | X | X |

* dependant of dosage taken