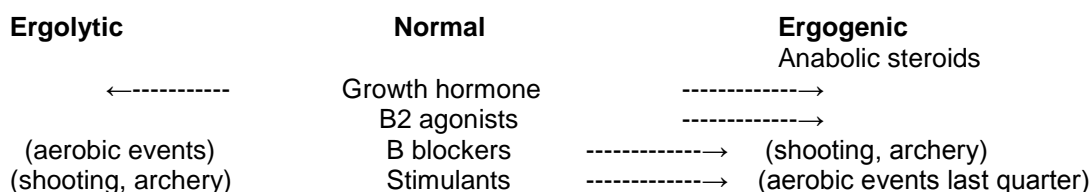


PRESCRIBING FOR ATHLETES

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1. Quote: "We are all athletes, only some of us are in training" – George Sheehan, US Cardiologist.
2. Things athletes fear:
 - Death
 - Poor performance
 - Professional athletes – loss of contract
3. Two groups of athletes:
 - Elite athletes – may be professional, subject to drug testing
 - Weekend warriors – in sport for various reasons, e.g. personal fitness, self discovery, health, relaxation
4. Physiology of athletes and illness – just like paediatrics:
 - Good protoplasm
 - Get sick quickly and recover quickly

5. Drugs and athletes – principles



6. Drugs and athletes – examples

Condition/drug	Elite athletes	Weekend warriors
Asthma: B2 agonists	Need valid TUE/provocation tests	Use if control with inhaled steroids inadequate
Inhaled steroids	Need valid TUE	Use as first choice medication
Cromoglycate	Use without restriction	Use without restriction
Prednisone	Need full TUE – contact DFSNZ: Ph 0800 378437 or www.drugfreesport.org.nz	Use with appropriate clinical indication
Hypertension: Diuretics	Avoid – use alternative	Push down batting order
B blockers	Avoid – use alternative	Use in low dose okay
ACE inhibitors	First choice in athletes	First choice in diabetics
Infections: Probenicid	Avoid – can be a masking agent	Can use freely
	Double dose of Penicillins	
Acne: Isotretinoin	Myalgia – higher threshold for prescribing	Myalgia – higher threshold for prescribing this in athletes
URTI: Ephedrine	Avoid – banned drug	Avoid – undesirable drug

7. Supplements: The biggest rip-off ever (along with bottled water)

Key points:

- a. Athletes are highly suggestible people – perception is reality
- b. 'All my opponents are taking them'
- c. High risk of contamination with banned substances (suits the manufacturer, but a liability for the athlete) – athlete is taking the manufacturer on trust

Trustworthiness:	High	Usana – all products tested
	Average	Most Western manufacturers
	Low	Herbal supplements, e.g. Ma huang – contains ephedrine

Supplements with an evidence base:

1. Fluid – staying adequately hydrated – avoid insidious dehydration, know your 'wet' weight
2. Caffeine – last quarter of endurance event, improves CNS activation, delays fatigue
3. Medium chain CHO – feeding during long events (over 3 hours) can eke out glycogen stores
4. Creatine – improves performance in repeated sprints
5. Iron tablets – if iron deficient (ferritin less than 30 in male and female athletes). Serum iron is a wasted test
6. Vitamin B12, folic acid – if deficient.

Closing quote: (Ron Maughan, member of IOC expert panel on nutrition)
"If it works, it's probably banned. If it's not banned, it's probably useless."