

Dr JOHN P BEST

B Med, Dip Sports Med (London), FACSP, FFSEM

Sports Physician

Conjoint Lecturer, University NSW
Sports and Exercise Medicine

PATIENT NOTES | ALCOHOL & PHYSICAL PERFORMANCE

Does alcohol effect physical performance? Can I have a drink after a game? Can I have a couple? What is "a couple"? What about training or having a drink mid-week? What about when I am injured?

These are all reasonable and relevant questions and again there is some good information in Sports Medicine literature available.

Alcohol (ethyl alcohol / ethanol) is available in various forms, generally beer, wine and spirits. Traditionally alcohol content per drink is measured in grams or "standard drinks". For example:

1 middy of beer = 1 small glass of wine = 1 nip of spirit = 10 grams.

The World Health Organisation defines alcoholism as a daily use of greater than 60g/day. This dependency on alcohol is tragic in an individual but many other alcohol-related disorders are mentioned in the medical literature. These include: dependency, acute intoxication, withdrawal syndrome and alcohol intolerance.

Once consumed, alcohol is rapidly absorbed in the gut then metabolized (broken down) by enzymes in the liver. The liver can be trained to metabolize alcohol with regular alcohol use. The by-products of this process still may cause permanent tissue damage (in the liver, nervous system and the heart). Gut absorption is faster on an empty stomach. That is why unaccustomed alcohol consumption on an empty stomach "goes straight to your head" and may contribute to intolerance and behavioral problems – disinhibition, aggression, rowdiness, etc.

The physiological and chemical effects of alcohol have been studied in recreational sportspeople. In a British study, moderately trained individuals were tested before and after a night of consuming between 5 and 10 standard drinks (average of seven). The beep test was the parameter for aerobic effort and anaerobic performance was tested with repeated 15 meter sprints and burpees (yes, burpees!). The pre-alcohol tests were 1 week before the post-alcohol tests. While there was no statistical difference with anaerobic performance, **aerobic performance deteriorated by up to 23%** (average 15%). Other functions such as mental performance, balance and fine movements were all negatively affected by alcohol.

Additionally alcohol can suppress appetite and generally causes inferior sleep quality, dehydration and an increased swelling when injured. Sexual performance may be impaired, although footballers tend not to discuss this openly.

In summary:

- Avoid alcohol with any injury which effects your training or playing (in particular lower limb injuries and concussion).
- Check if any medications interact with alcohol (eg anti-inflammatories and some antibiotics).
- Plan your alcohol use – make sure you are rehydrated and carbohydrate repleted before consuming alcohol. Wherever possible, consider low alcohol alternatives.
- The 'better time' to drink is the day after a game (eg lunch) or earlier in the week.
- The maximum recommended limit for men is 4 standard drinks a day.
- Binge drinking is extremely damaging. The liver may take up to 3 weeks to recover and physical performance is negatively affected in the short term.
- Don't drink and drive.

Matt Shirvington, the Australian sprinter, was reported in the press stating he had decided to give up alcohol until after the Olympics because recovering from a night out could take up to 3 or 4 days for his training to get back to normal again.

J. GOLDBERG shoulder surgery
R. PATTINSON paediatric, general
A. TURNBULL hip, knee
T. GOTHELF foot, ankle, shoulder, elbow

W. BRUCE hip, knee
A. LOEFLER hip, knee, spine
P. WALKER hip, knee

D. SHER shoulder, elbow, knee
J. NEGRINE foot, ankle
I. POPOFF knee, shoulder, general
J. TRANTALIS shoulder, elbow

SPORTS PHYSICIANS: J.BEST, M.CUSI, P.ANNETT, M.RAFTERY

160 Belmore Road, Randwick NSW 2031
47-49 Burwood Road, Concord NSW 2137
187 Macquarie Street, Sydney 2000
2 Pearl Street, Hurstville 2220

www.orthosports.com.au

Tel: 9399 5333 Fax: 9398 8673
Tel: 9744 2666 Fax: 9744 3706
Tel: 9233 2883 Fax: 9231 0103
Tel: 9580 6066 Fax: 9580 0890

office@orthosports.com.au