

# MEMORANDUM

**To:** GB SQUAD MEMBERS  
**cc:** BJA Staff and Coaches  
**From:** Performance Team  
**Date:** 22 June 2020  
**Subject:** UKAD and BJA Supplements Education Reminder – JUNE 2020



*Stay Home, Stay Safe and  
Protect the NHS*

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Dear GB Squad Member

We hope this memo finds you, and your families, well.

It has come to our attention that several fighters are taking / considering taking / distributing Ketone supplements, and it therefore provides an opportunity to remind you of the UKAD and BJA education surrounding the topic of supplements.

There is no guarantee that any supplement product is free from banned substances. You are strongly advised to be very cautious if you choose to use any supplement product. The WADA code and Anti-Doping Violations operate under STRICT LIABILITY, and apply to fighters, coaches and support personnel.

UKAD and British Judo promote a '**Food First**' approach, and therefore consideration of Supplements must follow the **ANARAC** process: **Assess the Need, Assess the Risk, Assess the Consequence.**

**Dr Jo Banks, GB Judo Chief Medical Officer** and **Louise Bloor, Performance Nutritionist & SENr Practitioner for British Judo** provide the following specific update on the evidence behind **Ketone** use in our sport.

## What are Ketones?

Our bodies typically rely on glucose for fuel, which comes from the carbs in your diet. If you restrict these foods you force your body to look for alternative fuel sources, so it turns to fat for fuel instead. Ketones are acidic chemicals that your liver produces when it breaks down fats. Ketone diets are basically high fat / low carb diets which train your body to metabolise fats more efficiently whilst theoretically preserving carbs, this is called a state of Ketosis. The companies who produce Ketone supplements claim that taking them can increase ketone levels in your body, imitating the state of ketosis achieved through a Ketone diet, without you having to follow the diet.

Whilst a ketone diet may benefit an endurance athlete such as a marathon runner, it does not benefit Judo fighters who train and compete at much higher intensities, where carbohydrates are needed as the primary fuel source. Judo athletes need to be able to produce high intensity explosive performances on the mat, not slow but steady ones. If our sports science team put a judo athlete on a treadmill and monitored their oxygen consumption and carbon dioxide production, we would expect to see judo athletes burning carbohydrates more efficiently at higher intensities. If the results showed they were in fact burning fats we would recommend amending their diet to switch back to carbs for power, so Ketones are the opposite of what we want in Judo!

If ketones levels build up in the blood it can become dangerously acidic, a life-threatening condition seen in diabetics called Diabetic Ketoacidosis. To prevent this, healthy nondiabetic people have a feedback mechanism that slows down the body's production of ketones if their levels become too high. In other words, the higher your blood ketone levels are, the less your body produces. As a result, taking ketone supplements may actually prevent body fat being used as fuel. There is no evidence that ketone supplements aid weight loss, and in fact research suggests they may actually hinder weight loss efforts thanks to these feedback mechanisms. There is no magic pill for weight loss, simply getting your nutrition right is the best way.

The long-term effects of taking Ketone supplements are currently unknown. Side effects associated with ketone supplements include stomach discomfort and diarrhoea.

### **Why should I care about taking supplements?**

You can't supplement a bad diet and getting that right will have the biggest impact on your health and performance. As athletes, what you put into your bodies is your responsibility. There is no guarantee that any supplement product is free from banned substances, they can have them as fine print ingredients, or be contaminated with them during the manufacturing process. As many as 1 in 10 supplements can be contaminated with ingredients and compounds prohibited in sport, so you need to ensure that your trusted nutrition partners consider their product development as seriously as you do your performance.

Athletes must be fully aware of the risks to their career if they choose to use a supplement product. All athletes must undertake thorough internet research prior to using any supplement product. This is a WADA (World Anti-Doping Agency) Code requirement. WADA, UK Anti-Doping or other anti-doping organisations do not endorse or approve supplement products, and any product claiming it is "safe for athletes to take" should be used with extreme caution. If you still chose to use a supplement product, you should do so in conjunction with a qualified Sports Nutritionist (you can identify on the Sport and Exercise Nutrition Register (SENr) website). You need to use a batch-tested product and make sure you check the actual batch numbers prior to use. Certified products can be identified on the Informed Sport Website.

### **What you need to know about the 10 Anti-Doping Rule Violations (ADRVs)**

There are 10 ADRVs, all 10 apply to athletes and six (in bold) apply to athlete support personnel. (Number 11 will be introduced in 2021)

1. Presence
2. Use
3. Evading, refusing
4. Whereabouts failures
5. **Tampering or attempted tampering**
6. **Possession**
7. **Trafficking or attempted trafficking**
8. **Administration, aiding, abetting**
9. **Complicity**
10. **Prohibited Association**

Even if you are not taking a banned substance, you can still be found in violation for possession, supplying or being complicit in the use of a banned substance to another athlete. Please consider this very carefully if you are endorsing a product publicly or helping to distribute it. The penalty for an anti-doping violation can be exclusion from your sport for 4 years.

Further information can be obtained from the UKAD, WADA & Informed Sport websites:

[www.wada-ama.org](http://www.wada-ama.org)

[www.informed-sport.com](http://www.informed-sport.com)

[www.ukad.org.uk](http://www.ukad.org.uk)