SODIUM BICARBONATE
Established Performance Supplements
Reference: Peeling et al. IJSNEM 2019

How does it work?

1. Intense exercises cause hydrogen ions accumulation in muscle & blood
2. Muscle acidity causes fatigue and decreases performance
3. Sodium bicarbonate acts as an extracellular (blood) buffer
4. pH levels stabilize during exercise & performance increases due to delayed fatigue

Of interest for
Sustained high-intensity exercise performance (e.g. middle-distance running)

PROTOCOL

1. Single acute dose of 0.2–0.4 g/kg body mass, consumed 60–150 min prior to exercise
2. Or split doses taken over a 30–180 min time period
3. Or serial-loading with 3–4 smaller doses per day for 2–4 consecutive days prior to an event

Gastro-intestinal distress

To minimize gastro-intestinal upset:

A. Co-ingest with a small, carbohydrate-rich meal (~1.5 g/kg of body mass)
B. Use sodium citrate as an alternative
C. Test split doses

TO BE TESTED

Thorough investigation into the best individualized strategy is recommended prior to use in a competition setting