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 and performance increases due to delayed fatigue

Of interest for:
- Sustained sprints
- Middle-distance running
- Multievents

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

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

Reference: Peeling et al IJSNEM 2019 © Copyright. World Athletics. All rights reserved.