Nitrate supplementation has been shown to improve blood flow, oxygen uptake and running economy. Of interest for middle & long distance running and multievents.

Sources
Nitrate-rich foods including leafy green and root vegetables (i.e. spinach, rocket, celery, beetroot, etc.), although beetroot juice is the more popular supplement choice for exercise settings.

Protocol
Acute performance benefits are generally seen within 2–3 hr following a bolus of 375–750 mL. Chronic periods of supplementation (>3 days) also appear beneficial to performance.

Limitation
VO2max
Performance gains appear harder to obtain in elite athletes, with limited to no benefits generally seen in athletes with a VO2max >60 ml/kg.

Side Effects
Individual trials prior to use in competition are recommended especially in gut-sensitive athletes.

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