Beet juice and your third shift.

Beetroot juice keeps showing up in locker rooms. Here's what the research actually says, what it means for repeated shifts, and what to sort out first.

WHAT IT ACTUALLY IS

Juice or a shot high in dietary nitrate. Your body turns nitrate into nitric oxide, which widens blood vessels and makes muscles use oxygen a little more efficiently. That's the whole mechanism.

WHERE THE EVIDENCE SITS

A 2025 review pooled 31 studies in highly trained and elite athletes. Not hockey-specific — but short, hard, repeated efforts respond better than steady-state endurance.

WHAT THE RESEARCH FOUND

01 Repeated sprints and power

The strongest signal, and the closest to your job. Footballers on a modest dose put up higher peak *and* average power on a Wingate test. Six days of supplementation increased Yo-Yo intermittent running distance in trained footballers. That's shift work.

Most relevant to hockey

02 Explosive power

Jump performance improved in some rugby and handball athletes. Some — not all. Promising rather than settled.

03 Soreness and recovery

A few studies reported less muscle soreness after hard sessions. Preliminary. Don't build a back-to-back weekend around it.

04 Straight endurance

Running, swimming, cycling, skiing, tennis, taekwondo: inconsistent or no benefit. Perceived effort generally didn't change either.

Little to no effect

A real gap: I could not find any studies that specifically referenced ice-hockey. While the research hasn't been done on you yet, we can make certain assumptions based up the nature of your sport.

HOW IT'S TYPICALLY USED

VARIABLE	STUDIES USED	IN PLAIN TERMS
Dose	4–19.5 mmol nitrate/day	Usually one concentrated shot. Wide range, no agreed number.
Timing	2–3 hours pre-exercise	It goes in well before warmup — not in the room.
Loading	3–15 days	Longer protocols ran about a week. The Yo-Yo result came off six days.

Before you try it

Five things that aren't optional.

This isn't a recommendation

Whether you supplement is your call, made with a parent or guardian and the team's athletic trainer, physician, or dietitian.

Check banned-substance policy

Contamination is real, and it lands on you if you're tested. Take only third-party tested products — NSF Certified for Sport — cleared against team and league policy.

The basics matter more

Fueling, hydration, sleep, protein. Those move your season. Beet juice is a maybe-small-edge on top, never a substitute.

Know the side effects

Some people get stomach upset. Many get beeturia — pink or red urine. Harmless, but alarming if nobody told you.

Response is individual

Some athletes respond well. Some see nothing. If you already eat a lot of leafy greens, you may have less room to gain. It might help you specifically, or it might do nothing — and you find out in practice, never for the first time on game day.

So — should you?

Bring it to the team's medical or nutrition staff first. If you get the green light and want to find out, trial it in practice over a week and pay attention to how your legs feel late in a session. If nothing changes, that's an answer too.

SOURCE: 2025 SYSTEMATIC REVIEW OF 31 STUDIES, BEETROOT-DERIVED NITRATE IN HIGHLY TRAINED AND ELITE ATHLETES. PMID 42588174.

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