

Common spice turmeric improves recovery in professional soccer players, study suggests

June 6 2023



Credit: Pixabay/CC0 Public Domain

Researchers at Nottingham Trent University found that drinking a 60ml turmeric drink twice a day allowed players to return to their pre-game fitness faster than those who did not.



Playing soccer causes muscle damage in players and an <u>inflammatory</u> <u>response</u>—and their rapid recovery is crucial to optimizing their next performance and reducing injury risk.

The <u>active ingredient</u> in turmeric is curcumin—known to have <u>anti-inflammatory properties</u>—and previous studies have found that curcumin supplementation can reduce soreness following muscledamaging exercise.

This process appears to be aided by a reduction in pro-inflammatory proteins in the blood, known as cytokines, which increase in response to a stress, such as intense exercise.

The Nottingham researchers are the first to demonstrate that a curcumincontaining supplement can reduce pro-inflammatory cytokine concentrations in the blood and muscle soreness in elite professional soccer players.

The supplements used in the study were provided by the Turmeric Co. and players were split into two groups, those who drank the turmeric shot and those who did not. Leg and whole-body soreness and <u>markers</u> of inflammation in the blood were measured at various stages for up to three days post-match.

The team found that the turmeric group returned to baseline levels of subjective soreness and blood markers of inflammation quicker than the group that did not consume turmeric. The study is published in the journal *Frontiers in Nutrition*.

"Our findings suggest that the turmeric supplement accelerated players' recovery after matches, allowing them to return to their optimum fitness level more quickly," said lead researcher Dr. Dave Clayton from Nottingham Trent University's School of Science and Technology.



He said, "Elite [soccer players] have a physically demanding schedule, often playing up to three matches in a seven-day period. This causes a large degree of inflammation and pain after games. If this is not alleviated, previous research has shown this can result in poorer performance in their next match.

"Our study suggests that a turmeric supplement, consumed as an easy to drink 60mL shot twice a day, can reduce the degree of inflammatory and muscle soreness that elite players experience after a match."

Fellow researcher Dr. Ian Varley added, "There are various products that are marketed to aid recovery from strenuous exercise. This <u>pilot study</u> provides some mechanistic insight that <u>turmeric</u> maybe a convenient and viable method to boost recovery."

Thomas Robson-Kanu, founder and CEO of The Turmeric Co., said, "The Turmeric Co.'s formula was developed at the beginning of my [soccer] career to support my recovery from a severe injury. Sharing my personal experience using the shots and publicizing reviews from customers can only go so far, so this scientific validation gives further peace of mind to those who are suffering from inflammation and seek a remedy with no side effects.

"We look forward to working further with Nottingham Trent University to highlight the many benefits of natural, functional nutrition."

More information: David J. Clayton et al, Turmeric supplementation improves markers of recovery in elite male footballers: a pilot study, *Frontiers in Nutrition* (2023). DOI: 10.3389/fnut.2023.1175622

Provided by Nottingham Trent University



Citation: Common spice turmeric improves recovery in professional soccer players, study suggests (2023, June 6) retrieved 6 May 2024 from https://medicalxpress.com/news/2023-06-common-spice-turmeric-recovery-professional.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.