

2026
10.28 (wed.) 12:10 ~ 12:50

12:10-12:15

◆ Introduction

12:15-12:40

◆ Seminar
(Presentation)

12:40-12:50

◆ Q&A

Online
(Zoom)Scan here for
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Unraveling the powers of green tea



Key Words

Green tea

Polyphenol

Green tea catechin sensing

Functional food pairing

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Yoshinori Fujimura is an Associate Professor in the Faculty of Agriculture, Kyushu University, Japan. He received a Ph.D. in Agriculture at Kyushu University in 2003. He conducted research at the Innovation Center for Medical Redox Navigation (ICMRN), Kyushu University (2007-2016), and returned to the Faculty of Agriculture, Kyushu University as an Associate Professor (2018). His research field is food chemical biology and food metabolomics. His main research interest is to investigate the elucidation of bioactive green tea catechin-sensing mechanism through its specific receptor, and to apply mass spectrometry-based metabolic profiling technique to the evaluation of food functionality and screening of bioactive food factors and combinations.

Polyphenols, non-nutritive components found in green tea, are recognized by the body as foreign substances, yet they are expected to contribute to health maintenance and promotion as well as to the reduction of disease risk. However, many aspects of their mechanisms of action remain unclear. Our bodies possess sensing and response mechanisms for such foreign substances (xenobiotics). For example, capsaicin, the pungent component of chili peppers, is detected by a sensor molecule called TRPV1, in a system that transmits sensations of pungency, pain, and heat. Following this concept, this seminar will introduce the mechanism of "green tea catechin sensing," whereby the body detects polyphenols and exerts their functional effects. In addition, I will mention our research on "functional food pairing," which aims to capture functional interactions among food components and enhance the functionality of green tea.