

July 22, 2025

## **Confirms GLP-1 Secretion Promoting Effect of Purple Tea Extract!**

### **~ Patent Application Filed for a New Approach to Dieting ~**

We are pleased to announce that we have confirmed the **GLP-1<sup>\*1</sup> secretion promoting effect, a new functional evidence related to dieting**, for our unique dietary ingredient "**Purple Tea Extract**," which is made from Kenyan purple tea. **We have also filed a patent application for this discovery.**

#### ■ Background of This Discovery

The demand for dietary ingredients in the health food market remains consistently high, driving the need for new approaches to dieting and the prevention of lifestyle-related diseases. In this market landscape, **GLP-1 (Glucagon-like peptide-1)**, which plays a crucial role in regulating post-meal blood sugar levels, is garnering attention as an ideal blood sugar regulation mechanism with a low risk of hypoglycemia. This is because it promotes insulin<sup>\*2</sup> secretion only when blood sugar levels are high. **Furthermore, recent years have seen growing interest in GLP-1's sustained feeling of fullness, control of digestion speed, and metabolism-boosting effects as new mechanisms for weight management.**

Amidst increasing focus on GLP-1 secretion promotion by plant-derived polyphenols like green tea catechins, we believe that the GLP-1 secretion promoting effect of Purple Tea Extract, which contains the unique GHG<sup>\*3</sup> compound not found in green tea, holds promise as a new approach to dieting and the prevention of lifestyle-related diseases.

#### ■ Highlights of the Research Findings

We evaluated the GLP-1 secretion promoting effects of Purple Tea Extract powder preparations (Purple Tea Extract-WSP) and its constituent compound GHG through cell-based assays. The following effects were confirmed.

- ✓ **Significant GLP-1 secretion promoting effect confirmed for Purple Tea Extract-WSP.**
- ✓ GHG, a unique component of purple tea, **also showed indications of GLP-1 production promotion when used alone.**
- ✓ **Scientific demonstration of its usefulness as a dietary ingredient** at the cellular level.

Based on the evidence obtained, **we have filed a patent application for this technology, which utilizes the unique functional components of purple tea that cannot be obtained from conventional tea leaves.**

#### ■ Future Developments

This research reveals a new potential health benefit of Purple Tea Extract: a dieting effect through GLP-1 secretion promotion, in addition to its previously confirmed anti-obesity, skin beautifying, and exercise performance-enhancing effects. Moving forward, we aim to contribute to the realization of a healthy and long-lived society by providing preventive and ameliorative approaches with Purple Tea Extract in the continually high-demand field of lifestyle-related diseases.

## ■ Glossary

### \*1 GLP-1

Glucagon-like peptide-1, a type of blood glucose-regulating hormone. It is secreted only when blood glucose levels are high and contributes to blood glucose reduction, making it an ideal blood glucose regulation mechanism with a low risk of hypoglycemia. In recent years, its contribution to appetite suppression, sustained satiety, and promotion of fat burning has also increased expectations for it as an ingredient for improving lifestyle-related diseases.

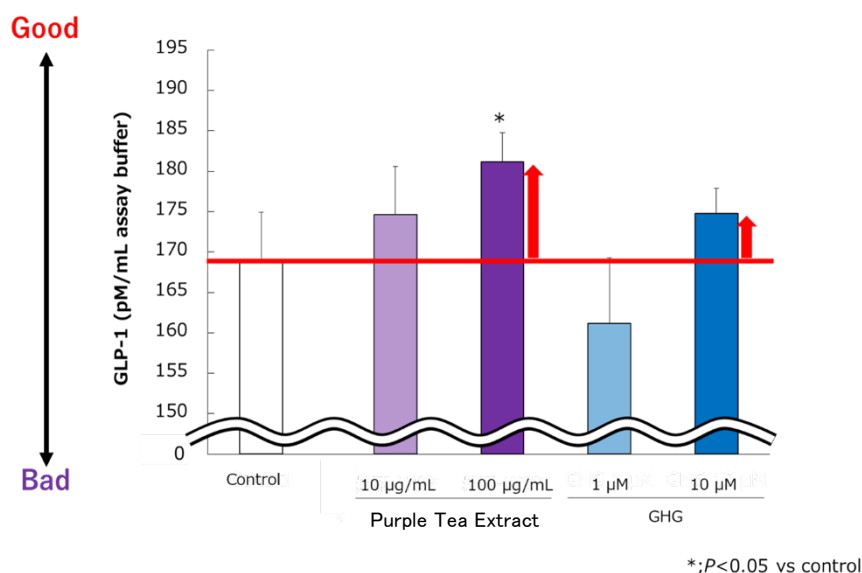
### \*2 Insulin

The only hormone that lowers blood glucose levels, and its secretion is promoted by GLP-1.

### \*3 GHG

1,2-di-Galloyl-4,6-Hexahydroxydiphenoyl- $\beta$ -D-Glucose. It is a polyphenol unique to purple tea, not found in other teas like green tea, and significantly contributes to the high antioxidant activity of Purple Tea Extract.

## 〈Experimental Results〉



## ■ About Purple Tea Extract

Purple Tea is a new tea variety developed over 25 years by the Tea Research Foundation of Kenya (TRFK) with the aim of promoting self-reliance in Kenya. In December 2013, our company launched "Purple Tea Extract" as a functional ingredient standardized for the unique polyphenol "GHG," which is not found in other teas like green tea.



Purple Tea

Through continuous research, we have developed its excellent functionalities, including diet and beauty benefits, as well as exercise performance effects, striving to enhance its added value. Furthermore, since 2020, we have initiated an effort to support Africa by donating a portion of Purple Tea Extract/Purple Tea sales through the international NGO Plan International. We have widely promoted how Purple Tea contributes to the SDGs as an "SDGs-compliant ingredient." Our SDGs initiatives through Purple Tea have also been supported by the Embassy of Kenya.

Sincerely,  
Oryza Oil & Fat Chemical Co., Ltd.