梅の抗アレルギー作用

― 細胞・動物実験と住民調査による研究 ―

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これまでに明らかにした梅の機能性

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目的：梅摂取とアレルギー疾患の関連を調査

- 梅には多くの健康増進や予防の効果が期待されている

- 梅を食べている人でアレルギー症状をもつ割合が低い？

人（住民の皆さん）を対象にアンケート調査を実施

SCIENTIFIC REPORTS

梅の抗アレルギー作用に関する論文がscientific reportsに掲載されました

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Biological and epidemiological evidence of anti-allergic effects of traditional Japanese food *ume* (*Prunus mume*)

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Japanese apricot (*Prunus mume*; *ume*) is a traditional food in Japan that has been shown to h beneficial health effects. There is some evidence to suggest that *ume* is also effective agains disease. Here, we conducted a cross-sectional epidemiological pilot study to examine the a between *ume* intake frequency and allergic symptoms including rhinitis in 563 adults (288 m 275 women) who resided in Wakayama, Japan. After adjusting for age, present illness and n women with high *ume* intake had significantly lower odds ratio (OR) for the presence of sym allergy [OR: 0.49 with 95% confidence interval (CI): 0.25–0.97]. Therefore, we investigated t allergic effect of *ume* on passive cutaneous anaphylaxis (PCA) reaction in immunoglobulin E sensitized mice. The animal study demonstrated that oral administration of *ume* extract att the PCA reaction and mast cell degranulation. Furthermore, RBL-2H3 mast cells were used anti-allergic *ume* compounds. The following *ume* compounds inhibited IgE-mediated mast c degranulation: vanillin, syringic acid, protocatechuic aldehyde, lyoniresinol and *p*-coumaric results suggested that *ume* has the potential to inhibit mast cell degranulation and may be with reduced risk of allergic symptoms in women.

The number of people suffering from an immunoglobulin E (IgE)-mediated (type I) response has increased worldwide. Allergic reactions including hay fever, food allergy and bronchial asth to environmental antigens (known as allergens) such as pollen[1], certain foods[2] and house dust m allergy symptoms can result not only in a decline in quality of life but also in life-threatening react have become a social problem. Development of Japanese cedar or Japanese cypress pollen allerg has recently increased in Japan. The most common cause of pollinosis in Japan is Japanese cedar. survey found that the prevalence of Japanese cedar pollinosis increased from 16.2% in 1998 to 2 Functional foods, defined as foods that can provide additional health benefits beyond that of tra ents they contain, have attracted attention as a potential solution, and some studies have focused anti-allergic functions of food components. For example, catechin derived from Japanese green tea derived from citrus fruits were demonstrated to have potential anti-allergic effects[7–9]. Identification

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- R. Kono et al, Sci Rep. 2018 Aug 3;8(1):11638.
- doi: 10.1038/s41598-018-30086-5.

梅の言い伝えを科学的・医学的に研究

1. 制菌作用
2. 胃潰瘍
3. 動脈硬化
4. 免疫系（風邪）に対する影響と効果
5. 糖尿病
6. ガンに対する影響と効果
7. 骨粗鬆症予防効果
8. 不妊予防効果
9. 抗アレルギー作用

結果と結論

- 梅の摂取頻度が高かった集団では、女性においてアレルギー症状を訴えた人の割合が低いことを示した。

- 梅の抗アレルギー作用のメカニズムの一つとして、梅はアレルギー反応に関与する肥満細胞の脱顆粒を抑制すること明らかにした。

- 脱顆粒反応の抑制には梅由来物質５種が関与していることを明らかにした。

- 梅摂取によるアレルギー症状の予防・改善の可能性を見出した