盗用論文は「2021 年の *Food and Agricultural Immunology*」論文。

Dietary supplementation with fructooligosaccharides ameliorates allergy development following DEHP exposure in mice
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Food and Agricultural Immunology, 32(1), 419-424. (2021)
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代表例として、盗用 1 と盗用 2 を示すが、他にも盗用箇所があると思われる。

――盗用 1――

被盗用論文は他人の「2016 年の PLoS ONE」論文。

Thymic Stromal Lymphopoietin Neutralization Inhibits the Immune Adjuvant Effect of Di-(2-Ethylhexyl) Phthalate in Balb/c Mouse Asthma Model.
You H, Li R, Wei C, Chen S, Mao L, Zhang Z, Yang X.
PLoS One. 2016 Jul 28;11(7):e0159479.
doi: 10.1371/journal.pone.0159479. eCollection 2016.
PMID: 27467143

盗用論文:The first paragraph of "Introduction" section of *Food and Agricultural Immunology*, 32(1), 419–424. (2021) doi.org/10.1080/09540105.2021.1952934	被盗用論文:The first paragraph of "Introduction" section of *PLoS ONE* 11(7): e0159479. (2016) doi.org/10.1371/journal.pone.0159479
In recent years, reports about the illegal use of the phthalate plasticizer, di-(2-ethylhexyl) phthalate (DEHP), have raised concerns among medical institutions, regulatory agencies and the public. DEHP is widely used as a plasticizer in polyvinyl chloride, from which it can leach and then be absorbed by the human body. DEHP exposure is associated with the presence or development of wheezing and allergic airway symptoms, and has been shown to contribute to asthma occurrence in Sweden (Bornehag et al., Citation2004; Jaallola & Knight, Citation2008). Additionally, a dose–response relationship was found between DEHP concentrations in indoor dust and wheezing in preschool children in Bulgaria (Kolarik et al., Citation2008). Furthermore, many studies indicate that DEHP has an adjuvant effect with an allergen, characterized by the development of Th2-type allergic pathology (Guo et al., Citation2012; Larsen et al., Citation2001a; Larsen et al., Citation2001b; Matsuda et al., Citation2010).	In recent years, reports of about the illegal use of the phthalate plasticizer, di-(2-ethylhexyl) phthalate (DEHP), have raised concerns among medical institutions, regulatory agencies and the public. DEHP is widely used as a plasticizer in polyvinyl chloride from which it can leach and thence be absorbed by the human body. DEHP exposure is associated with the development of wheezing and allergic airway diseases, and has been shown to contribute to asthma occurrence in Sweden [1–2]. Additionally, it was found that there is a dose-response relationship between DEHP concentrations in indoor dust and wheezing in preschool children in Bulgaria [3]. Moreover, many studies indicate that DEHP has an adjuvant effect with a coallergen which is characterized by the development of Th2 allergic responses [4–7].

両論文の 7 件の引用文献（灰色）は、表記方法が異なるが、示している論文は同じ。

――盗用 2――

被盗用論文は井上健一郎たちの「2012 年の Biochem Biophys Res Commun」論文。

Dietary supplementation with fructooligosaccharides attenuates allergic peritonitis in mice.
Yasuda A, **Inoue K**, Sanbongi C, Yanagisawa R, Ichinose T, Tanaka M, Yoshikawa T, Takano H.
Biochem Biophys Res Commun. 2012 Jun 15;422(4):546-50. doi: 10.1016/j.bbrc.2012.05.007. Epub 2012 May 9.PMID: 22580001

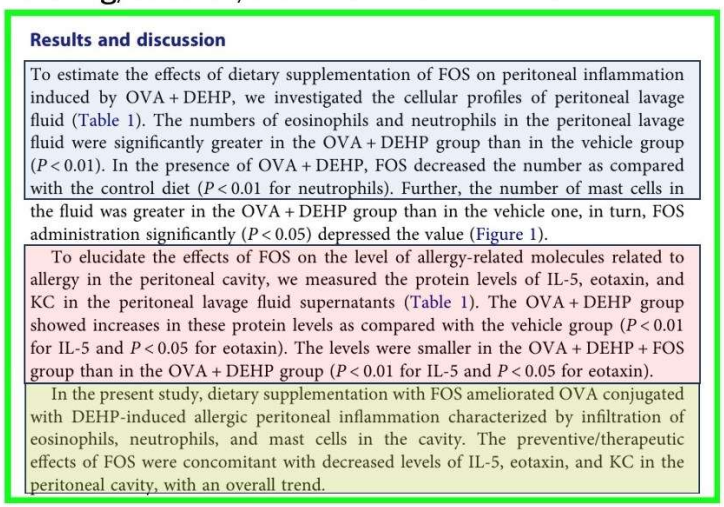
以下に示すように自己盗用である。

構文も単語もほぼ一致している。被盗用論文は 9 年前の論文なので、無意識のうちに記憶に残っていた文章が、偶然、一致したという可能性は 100%近くない。

まず、全体像を示す。左が盗用論文、右が被盗用論文。

盗用論文

"Results and discussion" section of *Food and Agricultural Immunology*, 32(1), 419–424. (2021)
doi.org/10.1080/09540105.2021.1952934



Results and discussion

To estimate the effects of dietary supplementation of FOS on peritoneal inflammation induced by OVA + DEHP, we investigated the cellular profiles of peritoneal lavage fluid (Table 1). The numbers of eosinophils and neutrophils in the peritoneal lavage fluid were significantly greater in the OVA + DEHP group than in the vehicle group ($P < 0.01$). In the presence of OVA + DEHP, FOS decreased the number as compared with the control diet ($P < 0.01$ for neutrophils). Further, the number of mast cells in the fluid was greater in the OVA + DEHP group than in the vehicle one, in turn, FOS administration significantly ($P < 0.05$) depressed the value (Figure 1).

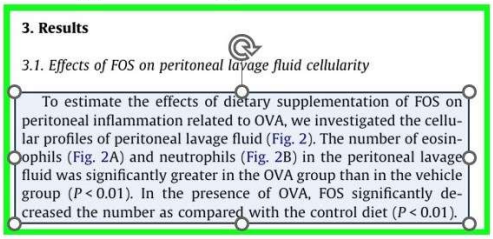
To elucidate the effects of FOS on the level of allergy-related molecules related to allergy in the peritoneal cavity, we measured the protein levels of IL-5, eotaxin, and KC in the peritoneal lavage fluid supernatants (Table 1). The OVA + DEHP group showed increases in these protein levels as compared with the vehicle group ($P < 0.01$ for IL-5 and $P < 0.05$ for eotaxin). The levels were smaller in the OVA + DEHP + FOS group than in the OVA + DEHP group ($P < 0.01$ for IL-5 and $P < 0.05$ for eotaxin).

In the present study, dietary supplementation with FOS ameliorated OVA conjugated with DEHP-induced allergic peritoneal inflammation characterized by infiltration of eosinophils, neutrophils, and mast cells in the cavity. The preventive/therapeutic effects of FOS were concomitant with decreased levels of IL-5, eotaxin, and KC in the peritoneal cavity, with an overall trend.

被盗用論文

"Results" and "Discussion" sections of *Biochemical and Biophysical Research Communications*, 422, (4), 546–550. (2012)
doi.org/10.1016/j.bbrc.2012.05.007

1

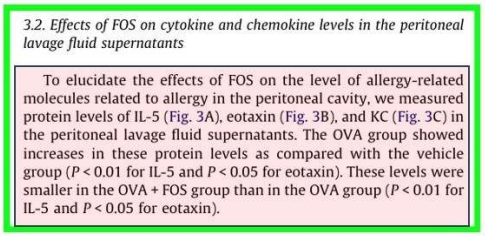


3. Results

3.1. Effects of FOS on peritoneal lavage fluid cellularity

To estimate the effects of dietary supplementation of FOS on peritoneal inflammation related to OVA, we investigated the cellular profiles of peritoneal lavage fluid (Fig. 2). The number of eosinophils (Fig. 2A) and neutrophils (Fig. 2B) in the peritoneal lavage fluid was significantly greater in the OVA group than in the vehicle group ($P < 0.01$). In the presence of OVA, FOS significantly decreased the number as compared with the control diet ($P < 0.01$).

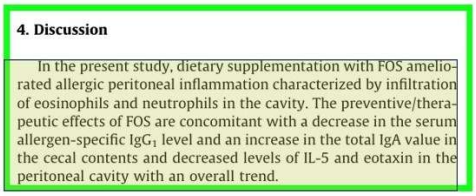
2



3.2. Effects of FOS on cytokine and chemokine levels in the peritoneal lavage fluid supernatants

To elucidate the effects of FOS on the level of allergy-related molecules related to allergy in the peritoneal cavity, we measured protein levels of IL-5 (Fig. 3A), eotaxin (Fig. 3B), and KC (Fig. 3C) in the peritoneal lavage fluid supernatants. The OVA group showed increases in these protein levels as compared with the vehicle group ($P < 0.01$ for IL-5 and $P < 0.05$ for eotaxin). These levels were smaller in the OVA + FOS group than in the OVA group ($P < 0.01$ for IL-5 and $P < 0.05$ for eotaxin).

3



4. Discussion

In the present study, dietary supplementation with FOS ameliorated allergic peritoneal inflammation characterized by infiltration of eosinophils and neutrophils in the cavity. The preventive/therapeutic effects of FOS are concomitant with a decrease in the serum allergen-specific IgG_1 level and an increase in the total IgA value in the cecal contents and decreased levels of IL-5 and eotaxin in the peritoneal cavity with an overall trend.

上図の 1，2，3 の詳細を以下に示す。左が盗用論文、右が被盗用論文。

盗用論文	被盗用論文
"Results and discussion" section of *Food and Agricultural Immunology*, 32(1), 419–424. (2021) doi.org/10.1080/09540105.2021.1952934	**"Results" and "Discussion" sections of *Biochemical and Biophysical Research Communications*, 422, (4), 546-550. (2012) doi.org/10.1016/j.bbrc.2012.05.007**
1 Results and discussion To estimate the effects of dietary supplementation of FOS on peritoneal inflammation induced by OVA+DEHP, we investigated the cellular profiles of peritoneal lavage fluid (Table 1). The numbers of eosinophils and neutrophils in the peritoneal lavage fluid were significantly greater in the OVA+DEHP group than in the vehicle group (P <0.01). In the presence of OVA+DEHP, FOS decreased the number as compared with the control diet (P<0.01 for neutrophils). Further, the number of mast cells in	3. Results 3.1. *Effects of FOS on peritoneal lavage fluid cellularity* To estimate the effects of dietary supplementation of FOS on peritoneal inflammation related to OVA, we investigated the cellular profiles of peritoneal lavage fluid (Fig. 2). The number of eosinophils (Fig. 2A) and neutrophils (Fig. 2B) in the peritoneal lavage fluid was significantly greater in the OVA group than in the vehicle group (P < 0.01). In the presence of OVA, FOS significantly decreased the number as compared with the control diet (P < 0.01)

2 To elucidate the effects of FOS on the level of allergy-related molecules related to allergy in the peritoneal cavity, we measured the protein levels of IL-5, eotaxin, and KC in the peritoneal lavage fluid supernatants (Table 1). The OVA+DEHP group showed increases in these protein levels as compared with the vehicle group ($P < 0.01$ for IL-5 and $P < 0.05$ for eotaxin). The levels were smaller in the OVA+DEHP+FOS group than in the OVA+DEHP group ($P < 0.01$ for IL-5 and $P < 0.05$ for eotaxin).	*3.2. Effects of FOS on cytokine and chemokine levels in the peritoneal lavage fluid supernatant* To elucidate the effects of FOS on the level of allergy-related molecules related to allergy in the peritoneal cavity, we measured protein levels of IL-5 (Fig. 3A), eotaxin (Fig. 3B), and KC (Fig. 3C) in the peritoneal lavage fluid supernatants. The OVA group showed increases in these protein levels as compared with the vehicle group ($P < 0.01$ for IL-5 and $P < 0.05$ for eotaxin). These levels were smaller in the OVA+FOS group than in the OVA group ($P < 0.05$ for eotaxin)
3 In the present study, dietary supplementation with FOS ameliorated OVA conjugated with DEHP–induced allergic peritoneal inflammation characterized by infiltration of eosinophils, neutrophils, and mast cells in the cavity. The preventive/therapeutic effects of FOS were concomitant with decreased levels of IL–5, eotaxin, and KC in the peritoneal cavity, with an overall trend.	4.Discussion In the present study, dietary supplementation with FOS ameliorated allergic peritoneal inflammation characterized by infiltration of eosinophils and neutrophils in the cavity. The preventive/therapeutic effects of FOS are concomitant with a decrease in the serum allergen–specific IgG_1 level and an increase in the total IgA value in the cecal contents and decreased levels of IL–5 and eotaxin in the peritoneal cavity with an overall trend.

以上。