### 表示内容

**目的**

Every year winemaking yields several thousand tons of byproducts called pomace, which is mostly used as compost. However, it contains several beneficial ingredients, such as polyphenols and oleanolic acid (OA). We have shown that OA inhibits the growth of *Streptococcus mutans* (*S. mutans*), which has been identified as a cavity-causing bacteria, and the synthesis of insoluble glucan *in vitro*. Therefore, we hypothesized that this extract would inhibit dental caries. In this study, we tested the anticaries effects of OA-containing pomace extracts in humans.

**方法**

We prepared purified ethanol and water extracts of pomace. We prepared two types of tablets, one with 24 mg of pomace extract (12 mg of OA) and the other with none, in order to conduct a placebo-controlled, double-blind crossover trial.

The subjects (N = 58; mean age, 23.4 years) took three designated tablets once a day before bedtime after brushing their teeth for four consecutive days. The wash-out period was set for a week. Saliva samples were taken from each subject on Day 1 and Day 5. We determined the number of *S. mutans* in the saliva and evaluated the effects of the two types of tablets on their growth.

**結果**

The number of *S. mutans* in the pomace-extract group was significantly lower than the placebo group (*P* < 0.05). The pH and amount of saliva did not differ significantly between the two groups during the trial.

The pomace-extract group showed a significant decrease in *S. mutans* growth in saliva. These results suggested that OA-containing pomace extract is effective in preventing dental caries.