

中文題目：台灣一大型研究發現咀嚼檳榔與阻塞性肺病有關

英文題目：Betel nut chewing was associated with obstructive lung disease in a large Taiwanese population study

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**Background:** The prevalence of betel nut chewing in Taiwan is high at approximately 7%. However, few studies have evaluated the relationship between betel nut chewing and lung disease. Therefore, the aim of this study was to investigate associations between betel nut chewing and lung function.

**Materials and Methods:** 80,877 participants in the Taiwan Biobank were classified into normal lung function and obstructive lung function (forced expiratory volume in 1 s (FEV1)/forced vital capacity (FVC) < 70%) groups, which were assessed by spirometry. The participants were asked questions about betel nut chewing, including years of use, frequency and daily amount.

**Results:** Multivariable analysis showed that betel nut chewing (odds ratio [OR] = 1.159;  $p < 0.001$ ) was significantly associated with FEV1/FVC < 70% in all participants ( $n = 80,877$ ). Further, in the participants who chewed betel nut ( $n = 5,135$ ), a long duration of betel nut chewing (per 1 year; OR = 1.008;  $p = 0.012$ ), betel nut use every day (vs. 1-3 days/month; OR = 1.793;  $p = 0.036$ ), 10-20 quids a day (vs. < 10 quids; OR = 1.404;  $p = 0.019$ ), 21-30 quids a day (vs. < 10 quids; OR = 1.662;  $p = 0.010$ ),  $\geq 31$  quids a day (vs. < 10 quids; OR = 1.717;  $p = 0.003$ ), and high cumulative dose (per 1 year\*frequency\*daily score; OR = 1.001;  $p = 0.002$ ) were significantly associated with FEV1/FVC < 70%.

**Conclusions:** In our study, chewing betel nut was associated with obstructive lung disease. This suggests that preventing betel nut chewing should be considered to reduce obstructive lung disease in Taiwan.

**Key words:** obstructive lung disease; betel nut chewing; cumulative dose; Taiwan biobank