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Feijoa: A promising fruit with strong health benefits**Yaoyao Peng, Karen Bishop, Lynette Ferguson and Siew-Young Quek**

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Feijoa (*Feijoa sellowiana* Berg.) is a subtropical fruit widely grown in New Zealand. It has a lovely aroma and is becoming more and more popular all around the world. Recent studies have shown increasing interests on feijoa while much is still lacking in its bioactivities including antioxidant, anti-inflammation and anti-cancer. This study investigated the potential bioactivities of feijoa as a naturally-derived fruit for human health. Feijoa extracts were prepared by ethanol extraction followed by freeze drying. The extracts were then re-suspended in 50% DMSO for cellular tests. DPPH and FRAP assays were used to evaluate its anti-oxidant activity. The anti-inflammatory activity was tested on HEKBlue TLR2 and HEKBlue TLR4 cell lines using Quanti-Blue assay. Prostate cancer cell line PC3 was used as a model to investigate the anti-proliferation activity. Our results showed that the feijoa extracts exhibit strong anti-oxidant, anti-inflammatory and anti-proliferation activities. This suggests that feijoa is a potential natural plant material to be developed into dietary supplements or medicines.

Biography

Yaoyao Peng is currently a PhD student, majoring in Food Science at the University of Auckland in New Zealand. Her research is mainly about the bioactivities of feijoa, including the bio-active compound extraction, bioactivity assessment, compound identification, etc.

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