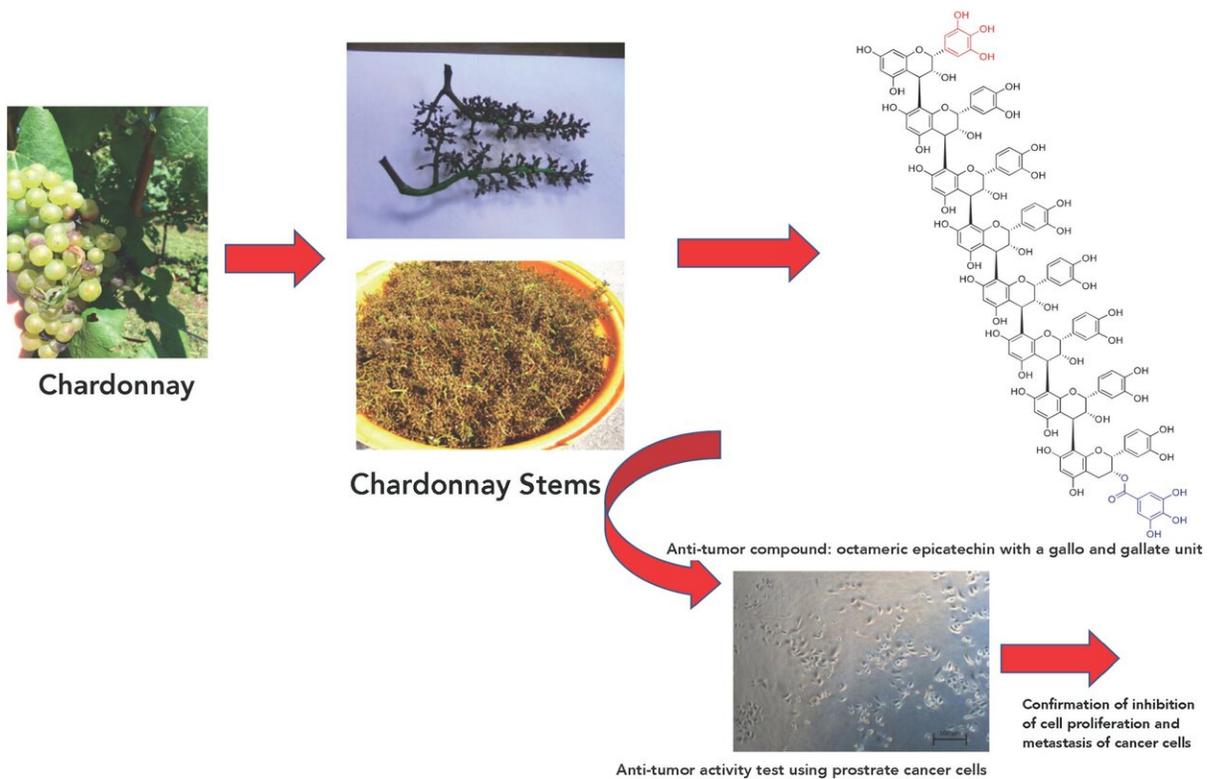


# Forget the Chardonnay, pass me the grape stems: Anti-tumor activity in prostate cancer cells

November 13 2019



Scientists at Shinshu University studied compounds within grape stem extracts and found significant anti-cancer activity on tumor cells. Credit: Hidefumi Makabe & Hiroshi Fujii, Institute for Biomedical Sciences, Shinshu University, Japan

Grape stems are discarded en masse during the production of wine. We love and produce a lot of wine in Nagano prefecture, and have been hoping to find a positive use for the previously discarded grape stems. Scientists at Shinshu University studied compounds within grape stem extracts and found significant anti-cancer activity on tumor cells.

In this study, [compounds](#) from grape stems were isolated, characterized and evaluated for their anti-tumor activities. One of the compounds in particular was found to have induced cell cycle arrest, apoptosis and suppressed the invasive activity of the cancerous prostate cells. The compound also significantly suppressed the expression of the cancer-promoting gene FABP5.

Studies need to be carried out to determine if the compound interacts with potent receptors in [cancer cells](#), and promise has been shown regarding its anti-metastasis properties. Further research is needed in vivo to determine if grape stems with food function can help deter cancer.

**More information:** Kawahara Sei-ichi et al, Isolation and characterization of a novel oligomeric proanthocyanidin with significant anti-cancer activities from grape stems (*Vitis vinifera*), *Scientific Reports* (2019). [DOI: 10.1038/s41598-019-48603-5](https://doi.org/10.1038/s41598-019-48603-5)

Provided by Shinshu University

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