Resveratrol mais quercetina são sinérgicos na inibição do carcinoma epidermóide

Modulating effect of resveratrol and quercetin on oral cancer cell growth and proliferation.
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Source

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Abstract

Resveratrol and quercetin are polyphenols which have been detected in significant amounts in green vegetables, citrus fruits and red grape wines. Beneficial effects attributed to these compounds include anti-inflammatory, antiviral and antitumor properties. The effect of resveratrol and quercetin on growth of human oral cancer cells is unknown. Resveratrol and quercetin, in concentrations of 1 to 100 microM, were incubated in triplicates with human oral squamous carcinoma cells SCC-25 in DMEM-HAM's F-12 supplemented with fetal calf serum and antibiotics in an atmosphere of 5% CO2 in air at 37 degrees C for 72 h. Cell growth was determined by counting the number of viable cells with a hemocytometer. Cell proliferation was measured by means of incorporation of [3H]thymidine in nuclear DNA. Resveratrol at 10 and 100 microM induced significant dose-dependent inhibition in cell growth as well as in DNA synthesis. Quercetin exhibited a biphasic effect, stimulation at 1 and 10 microM, and minimal inhibition at 100 microM in cell growth and DNA synthesis. Combining 50 microM of resveratrol with 10, 25 and 50 microM of quercetin resulted in a gradual and significant increase in the inhibitory effect of quercetin on cell growth and DNA synthesis.

We conclude that resveratrol or a combination of resveratrol and quercetin, in concentrations equivalent to that present in red wines, are effective inhibitors of oral squamous carcinoma cell (SCC-25) growth and proliferation, and warrant further investigation as cancer chemopreventive agents.

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