# CARV-A-CURE: A Cell Viability Analysis of the Cancericidal Effects of Carvacrol on Pancreatic and Colorectal Carcinoma, Part Two

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The purpose of this continuation was to assess not only the cancericidal effects of carvacrol but also to test the potency and credibility of the drug itself. Carvacrol is found naturally in the oil of the oregano leaf and serves as an effective therapy for bacterial diseases. In this case study, it is hypothesized that carvacrol can potentially induce apoptotic activity in pancreatic and colorectal cell lines by microtubule growth inhibition and that the cell death has no correlation with toxicity or normal cellular growth. The experimental procedure is similar to last year in the sense that is was designed for cancerous cell lines derived from a variety of mice, in this case the PANC-02, CT-26, and two variations of splenocytes. The two cancer cell lines and two normal splenocyte cell lines are treated equivalently with 3 different concentrations of carvacrol (2.7 ug/ml, 3.6 ug/ml, and 4.5 ug/ml) which serves as the independent variable and control group will also be assessed with no concentration. This experiment was successful with carvacrol having substantial effects on the cell viability of both carcinomas and remained ineffective among the splenocytes, which leads to the support of the hypothesis listed earlier. Due to the high availability of carvacrol containing plants such as oregano and its strong cancericidal properties, the compound holds true potential in the treatment fields. While there is still some inconclusiveness on the creation of a strong impulse and method to degrade and elongate it, the researcher feels that that the only leads to his continuation with creating carvacrol derivatives that plan to achieve this goal.

**Awards Won:**