

# Toishabui Medicine

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The traditional preparation of toishabui(chokecherry) was to grind the fruit with the seed and make it into a raw mixture. In the nontraditional preparation the berry is boiled, juiced, and the seed is removed. The purpose of my research was to determine if the laetrile (vitamin B17) or other components of the seed are anticancer. I tested the solution of 1. Chokecherry Pudding(traditional), 2. Chokecherry Juice, 3.Blended Patties, and 4. Pudding without Seed(nontraditional) against MESSA uterine sarcoma cancer cells. The solutions were placed in a centrifuge for 10 minutes at 15,000 g forces to clarify the sediments and create a supernatant. The supernatant was then made into a diluent by mixing ratios of 1:2, 1:4, 1:8, 1:16, and 1:32 with Dulbecco's Modified Eagle's Medium . The diluents were plated into a 96 well plate of 1:10, 1:20, 1:40, 1:80, 1:160, 1:320 ratios and incubated for 24 hours. I hypothesized that the traditional method of preparation would inhibit the growth of cancer cells because it incorporated the entire berry including the seed, which some research and traditional knowledge indicated had anticancer properties. Results show that there was a slight amount of killing in column 1A of Plate 2, but it was not significant enough to show any major anticancer properties of the diluents. I conclude that at these ratios the diluents were ineffective but, possibly, maybe at higher concentration there would be an anticancer effect. I would also test the toishabui on a different strain of cancer cells.

**Awards Won:**

