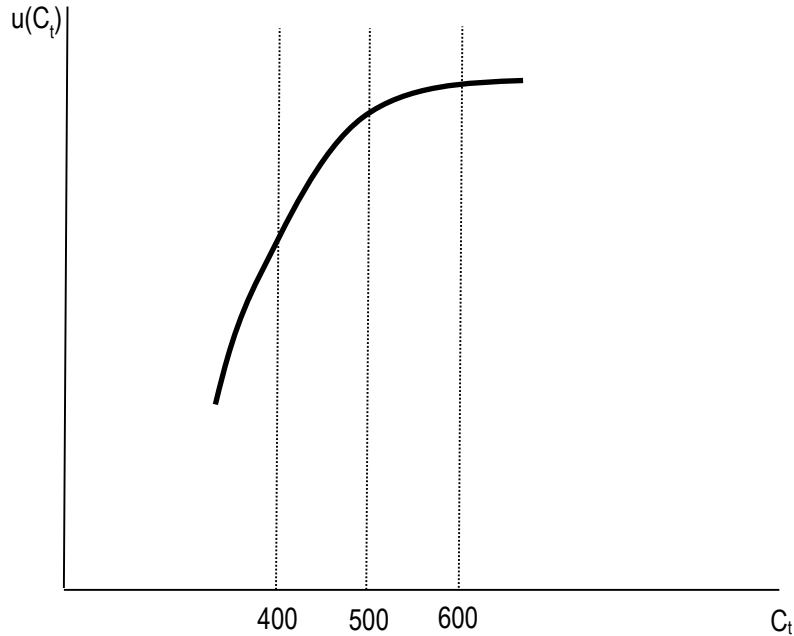


We assume that the utility from consumption in a given period is $u(C_t)$ with $u' > 0$ and $u'' < 0$. A utility function with these properties is shown below.



Ignoring interest and time preference ($r = \rho = 0$), assume that two individuals, Mr. Smoothie and Mr. Lumpy, each have the utility function above and each can consume a total of 1000 units in periods one and two. Show the following on the graph above:

- The utility of consuming 400, 500, and 600 units in any single period.
- The average utility per period for Mr. Smoothie, who consumes 500 in both periods.
- The average utility per period for Mr. Lumpy, who consumes 400 in one period and 600 in the other.
- Which of our consumers has higher average utility?