

Tutorial 1 – The Cost of Subsistence

George Stigler's 1945 paper "The Cost of Subsistence" (*Journal of Farm Economics*, **27**, 303-314) presents one of the earliest applications of linear programming, that of finding minimum-cost diets:

"Elaborate investigations have been made of the adequacy of diets at various income levels, and a considerable number of 'low-cost,' 'moderate,' and 'expensive' diets have been recommended to consumers. Yet, so far as I know, no one has determined the minimum cost of obtaining the amounts of calories, protein, minerals, and vitamins which these studies accept as adequate or optimum."

A Python stub is available on Blackboard which contains some nutritional and cost data for a sample of foods. Use this data to determine an optimal diet using these foods.