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Given an appropriate growth condition for f and a uniqueness assumption on $y^{(n)}$ with respect to certain conjugate boundary value problems, it is shown that uniqueness of solutions to the nonlinear differential equation $y^{(n)} = f(t, y, \dots, y^{(n-1)})$ subject to boundary conditions of the form $g_{ij}(y(t_j), \dots, y^{(n-1)}(t_j)) = y_{in}$ implies existence of solutions. (Received September 18, 2007)