ABSTRACT. A complete (intrinsic) solution to the Rivlin problem is given in the space $C_2[a,b]$ of continuous functions on $[a,b]$ with the L_2-norm. A brief survey is also given of what is known in the spaces $C_p[a,b]$, $1 \leq p \leq \infty$, $p \neq 2$. In each of these spaces only partial results are known.