AIM: The feasibility of coronary artery bypass grafting (CABG) concomitant with aortic valve replacement (AVR) is well established. However, its impact on long-term patient-perceived quality of life (QoL) in the elderly remains undefined. METHODS: Retrospective analysis was conducted on 866 patients 65 years of age and over who underwent AVR between October 1976 and December 1999 with a Carpentier-Edwards porcine bioprosthesis. This cohort was divided between those who underwent isolated AVR (n=438) and those with AVR and concomitant CABG (AVR+CABG; n=428). Mean age was 77.0 +/- 6.1 years (range, 65 to 91) in the AVR group and 78.2 +/- 5.5 years (range, 65 to 93) in the AVR+CABG group. QoL was assessed with the Short Form-36 health survey for survivors at follow-up, which was 97% complete. RESULTS: Operative mortality (OM) was 6.2% (27/438) for the AVR group and 8.9% (38/428) for the AVR+CABG group (P=0.130). The occurrence of hospital complications (P=0.162) and postoperative length of stay (P=0.980) was similar for the 2 groups. Actuarial survival at 10 years was 37.1 +/- 3.4% for AVR and 38.7 +/- 4% for AVR+CABG patients (P=0.088). On multivariate analyses, CABG was not a predictor of either OM or long-term survival. QoL was similar for the 2 groups on the summary components: physical health (39.4 +/- 11.4 versus 40.2 +/- 12.1; P=0.461) and mental health (50.2 +/- 10.8 versus 51.9 +/- 10.1; P=0.103). CONCLUSIONS: Despite the presence of severe coronary artery disease, CABG preserved the long-term QoL in elderly patients undergoing AVR.