The aim of this paper is to present the psychometric properties of the "Lifestyle-Related Assertiveness Questionnaire" (CACEV) in a sample of patients with metabolic syndrome. The total sample was 136 subjects, of whom 79 completed the study (48 from the treatment group and 31 from the control group), with follow-up at 6 and 18 months. Socio-demographic, anthropometric, physiological and biochemical data of the participants have been included, as well as the CACEV and the Assertiveness Inventory (AI) scores. The results of the exploratory factor analysis of CACEV have revealed a 3-factor structure: Expressing preference for exercise and healthy eating, Saying no to unhealthy food consumption and Saying no to activities that interfere with physical exercise. The internal consistency (α= 0.925), test-retest reliability and sensitivity to change were adequate. From the psychometric properties found in the CACEV, we can conclude that it is a valid and reliable questionnaire to evaluate lifestyle-related assertiveness in people with metabolic syndrome.