Twenty years ago chronic heart failure was considered a contraindication for regular physical activity. Many believed exercise to be counterproductive to recovery and perhaps harmful to chronic heart failure patients. However, in recent years numerous studies have proven the feasibility and safety of exercise training in heart failure patients. Exercise now plays a pivotal role in the treatment of systolic heart failure in addition to medical or device-related therapy. Regular exercise has been shown to increase exercise capacity and quality of life, as well as reduce symptoms and lower hospitalization rates. It also has the potential to increase left ventricular ejection fraction and reduce mortality. An individual tailored regular exercise program including endurance and resistance training is recommended for all stable heart failure patients.