

patients with heart failure with preserved ejection fraction: a randomized clinical trial. *JAMA*. 2016;315:36-46. <https://doi.org/10.1001/jama.2015.17346>

74. Mueller S, Winzer EB, Duvinage A, Gevaert AB, Edelmann F, Haller B, Pieske-Kraigher E, Beckers P, Bobenko A, Hommel J, et al. OptimEx-Clin Study Group. Effect of high-intensity interval training, moderate continuous training, or guideline-based physical activity advice on peak oxygen consumption in patients with heart failure with preserved ejection fraction: a randomized clinical trial. *JAMA*. 2021;325:542-551. <https://doi.org/10.1001/jama.2020.26812>

75. Alves AJ, Ribeiro F, Goldhammer E, Rivlin Y, Rosenschein U, Viana JL, Duarte JA, Sagiv M, Oliveira J. Exercise training improves diastolic function in heart failure patients. *Med Sci Sports Exerc*. 2012;44:776-785. <https://doi.org/10.1249/MSS.0b013e31823cd16a>

76. Angadi SS, Mookadam F, Lee CD, Tucker WJ, Haykowsky MJ, Gaesser GA. High-intensity interval training vs. moderate-intensity continuous exercise training in heart failure with preserved ejection fraction: a pilot study. *J Appl Physiol* (1985). 2015;119:753-758. <https://doi.org/10.1152/jappphysiol.00518.2014>

77. Donelli da Silveira A, Beust de Lima J, da Silva Piardi D, Dos Santos Macedo D, Zanini M, Nery R, Laukkanen JA, Stein R. High-intensity interval training is effective and superior to moderate continuous training in patients with heart failure with preserved ejection fraction: a randomized clinical trial. *Eur J Prev Cardiol*. 2020;27:1733-1743. <https://doi.org/10.1177/2047487319901206>

78. Long L, Mordi IR, Bridges C, Sagar VA, Davies EJ, Coats AJ, Dalal H, Rees K, Singh SJ, Taylor RS. Exercise-based cardiac rehabilitation for adults with heart failure. *Cochrane Database Syst Rev*. 2019;1:CD003331. <https://doi.org/10.1002/14651858.CD003331.pub5>

79. Pandey A, Parashar A, Kumbhani D, Agarwal S, Garg J, Kitzman D, Levine B, Drazner M, Berry J. Exercise training in patients with heart failure and preserved ejection fraction: meta-analysis of randomized control trials. *Circ Heart Fail*. 2015;8:33-40. <https://doi.org/10.1161/CIRCHEARTFAILURE.114.001615>

80. Gomes-Neto M, Durães AR, Conceição LSR, Roeveer L, Liu T, Tse G, Biondi-Zoccai G, Goes ALB, Alves IGN, Ellingsen Ø, et al. Effect of aerobic exercise on peak oxygen consumption, VE/VCO₂ slope, and health-related quality of life in patients with heart failure with preserved left ventricular ejection fraction: a systematic review and meta-analysis. *Curr Atheroscler Rep*. 2019;21:45. <https://doi.org/10.1007/s11883-019-0806-6>

81. Fukuta H, Goto T, Wakami K, Kamiya T, Ohte N. Effects of exercise training on cardiac function, exercise capacity, and quality of life in heart failure with preserved ejection fraction: a meta-analysis of randomized controlled trials. *Heart Fail Rev*. 2019;24:535-547. <https://doi.org/10.1007/s10741-019-09774-5>

82. Leggio M, Fusco A, Loreti C, Limongelli G, Bendini MG, Mazza A, Coraci D, Padua L. Effects of exercise training in heart failure with preserved ejection fraction: an updated systematic literature review. *Heart Fail Rev*. 2020;25:703-711. <https://doi.org/10.1007/s10741-019-09841-x>

83. Upadhyay B, Haykowsky MJ, Kitzman DW. Therapy for heart failure with preserved ejection fraction: current status, unique challenges, and future directions. *Heart Fail Rev*. 2018;23:609-629. <https://doi.org/10.1007/s10741-018-9714-z>

84. Reeves GR, Whellan DJ, Patel MJ, O'Connor CM, Duncan P, Eggebeen JD, Morgan TM, Hewston LA, Pastva AM, Kitzman DW. Comparison of frequency of frailty and severely impaired physical function in patients ≥60 years hospitalized with acute decompensated heart failure versus chronic stable heart failure with reduced and preserved left ventricular ejection fraction. *Am J Cardiol*. 2016;117:1953-1958. <https://doi.org/10.1016/j.amjcard.2016.03.046>

85. Reeves GR, Whellan DJ, O'Connor CM, Duncan P, Eggebeen JD, Morgan TM, Hewston LA, Pastva A, Patel MJ, Kitzman DW. A novel rehabilitation intervention for older patients with acute decompensated heart failure: the REHAB-HF pilot study. *J Am Coll Cardiol HF*. 2017;5:359-366. <https://doi.org/10.1016/j.jchf.2016.12.019>

86. Lang CC, Smith K, Wingham J, Eyre V, Greaves CJ, Warren FC, Green C, Jolly K, Davis RC, Doherty PJ, et al. REACH-HF Investigators. A randomised controlled trial of a facilitated home-based rehabilitation intervention in patients with heart failure with preserved ejection fraction and their caregivers: the REACH-HFpEF pilot study. *BMJ Open*. 2018;8:e019649. <https://doi.org/10.1136/bmjopen-2017-019649>

87. Palau P, Domínguez E, Núñez E, Schmid JP, Vergara P, Ramón JM, Mascarell B, Sanchis J, Chorro FJ, Núñez J. Effects of inspiratory muscle training in patients with heart failure with preserved ejection fraction. *Eur J Prev Cardiol*. 2014;21:1465-1473. <https://doi.org/10.1177/2047487313498832>

88. Andryukhin A, Frolova E, Vaes B, Degryse J. The impact of a nurse-led care programme on events and physical and psychosocial parameters in patients with heart failure with preserved ejection fraction: a randomized clinical trial in primary care in Russia. *Eur J Gen Pract*. 2010;16:205-214. <https://doi.org/10.3109/13814788.2010.527938>

89. Palau P, Domínguez E, López L, Ramón JM, Heredia R, González J, Santos E, Bodi V, Miñana G, Valero E, et al. Inspiratory muscle training and functional electrical stimulation for treatment of heart failure with preserved ejection fraction: the TRAINING-HF trial. *Rev Esp Cardiol (Engl Ed)*. 2019;72:288-297. <https://doi.org/10.1016/j.rec.2018.01.010>

90. Forman DE, Arena R, Boxer R, Dolansky MA, Eng JJ, Fleg JL, Haykowsky M, Jahangir A, Kaminsky LA, Kitzman DW, et al. on behalf of the American Heart Association Council on Clinical Cardiology; Council on Cardiovascular and Stroke Nursing; Council on Quality of Care and Outcomes Research; and Stroke Council. Prioritizing functional capacity as a principal end point for therapies oriented to older adults with cardiovascular disease: a scientific statement for healthcare professionals from the American Heart Association. *Circulation*. 2017;135:e894-e918. <https://doi.org/10.1161/CIR.0000000000000483>

91. Stanek EJ, Oates MB, McGhan WF, Denofrio D, Loh E. Preferences for treatment outcomes in patients with heart failure: symptoms versus survival. *J Card Fail*. 2000;6:225-232. <https://doi.org/10.1054/jcaf.2000.9503>

92. DerSimonian R, Laird N. Meta-analysis in clinical trials. *Control Clin Trials*. 1986;7:177-188. [https://doi.org/10.1016/0197-2456\(86\)90046-2](https://doi.org/10.1016/0197-2456(86)90046-2)

93. Dieberg G, Ismail H, Giallauria F, Smart NA. Clinical outcomes and cardiovascular responses to exercise training in heart failure patients with preserved

ejection fraction: a systematic review and meta-analysis. *J Appl Physiol* (1985). 2015;119:726-733. <https://doi.org/10.1152/jappphysiol.00904.2014>

94. Chan E, Giallauria F, Vigorito C, Smart NA. Exercise training in heart failure patients with preserved ejection fraction: a systematic review and meta-analysis. *Monaldi Arch Chest Dis*. 2016;86:759. <https://doi.org/10.4081/monaldi.2016.759>

95. Keteyian SJ, Brawner CA, Ehrman JK, Ivanhoe R, Boehmer JP, Abraham WT, PEERLESS-HF Trial Investigators. Reproducibility of peak oxygen uptake and other cardiopulmonary exercise parameters: implications for clinical trials and clinical practice. *Chest*. 2010;138:950-955. <https://doi.org/10.1378/chest.09-2624>

96. Pandey A, Kitzman DW. Searching for the optimal exercise training regimen in heart failure with preserved ejection fraction. *JAMA*. 2021;325:537-539. <https://doi.org/10.1001/jama.2020.26347>

97. Fujimoto N, Prasad A, Hastings JL, Bhella PS, Shibata S, Palmer D, Levine BD. Cardiovascular effects of 1 year of progressive endurance exercise training in patients with heart failure with preserved ejection fraction. *Am Heart J*. 2012;164:869-877. <https://doi.org/10.1016/j.ahj.2012.06.028>

98. Franklin BA, Brinks J, Sacks R, Trivax J, Friedman H. Reduced walking speed and distance as harbingers of the approaching grim reaper. *Am J Cardiol*. 2015;116:313-317. <https://doi.org/10.1016/j.amjcard.2015.04.024>

99. Keteyian SJ, Brawner CA, Savage PD, Ehrman JK, Schairer J, Divine G, Aldred H, Ophaug K, Ades PA. Peak aerobic capacity predicts prognosis in patients with coronary heart disease. *Am Heart J*. 2008;156:292-300. <https://doi.org/10.1016/j.ahj.2008.03.017>

100. Franklin BA, Thompson PD, Al-Zaiti SS, Albert CM, Hivert MF, Levine BD, Lobelo F, Madan K, Sharrief AZ, Eijsvogels TMH, on behalf of the American Heart Association Physical Activity Committee of the Council on Lifestyle and Cardiometabolic Health; Council on Cardiovascular and Stroke Nursing; Council on Clinical Cardiology; and Stroke Council. Exercise-related acute cardiovascular events and potential deleterious adaptations following long-term exercise training: placing the risks into perspective-an update: a scientific statement from the American Heart Association. *Circulation*. 2020;141:e705-e736. <https://doi.org/10.1161/CIR.0000000000000749>

101. Keteyian SJ, Squires RW, Ades PA, Thomas RJ. Incorporating patients with chronic heart failure into outpatient cardiac rehabilitation: practical recommendations for exercise and self-care counseling-a clinical review. *J Cardiopulm Rehabil Prev*. 2014;34:223-232. <https://doi.org/10.1097/HCR.0000000000000073>

102. Thomas RJ, Beatty AL, Beckie TM, Brewer LC, Brown TM, Forman DE, Franklin BA, Keteyian SJ, Kitzman DW, Regensteiner JG, et al. Home-based cardiac rehabilitation: a scientific statement from the American Association of Cardiovascular and Pulmonary Rehabilitation, the American Heart Association, and the American College of Cardiology. *Circulation*. 2019;140:e69-e89. <https://doi.org/10.1161/CIR.0000000000000663>

103. *Physical Activity Guidelines for Americans*. 2018. Accessed September 21, 2022. https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf