

The following table is an excerpt from *Exercise for Aging Adults*¹

Maintenance of Health Benefits

Long-term benefits of exercise are sustained only with regular adherence (Table 2.2). Cardiovascular function, lung function, insulin sensitivity, strength, and pain relief are maintained over time when regular exercise is continued throughout the lifespan. Clinicians should encourage active older adults to continue regular exercise and inactive older adults to begin a program of their choice.

Table 2.2 Benefits of exercise for specific diseases and conditions

Disease or condition	Exercise component	Benefits
<i>Cardiac and vascular</i>		
Coronary artery disease	Endurance	<i>Prevention</i>
		Improves cardiac blood flow
	Tai Chi endurance	<i>Prevention</i>
		Improves blood lipids
	Endurance	<i>Treatment</i>
		Decreases mortality
Hypertension		Improves cardiac function
		Improves blood lipids
	Endurance, strengthening, and Tai Chi	<i>Treatment</i>
		Reduces systolic and diastolic blood pressure
Chronic heart failure	Endurance and strengthening	<i>Treatment</i>
		Decreases hospitalizations
		Decreases mortality
		Decreases inflammation
	Inspiratory muscle training	<i>Treatment</i>
		Decreases dyspnea
Peripheral vascular disease		Increases activity tolerance
	Endurance and strengthening	<i>Treatment</i>
		Increases blood flow
Atrial fibrillation	Endurance	<i>Prevention</i>
		Reduces incidence in normal-weight men and women and obese men
	Endurance and strengthening	<i>Treatment</i>
		Decreases resting heart rate
Stroke	Endurance	<i>Prevention</i>
		Decreases risk for atrial fibrillation
		<i>Treatment</i>
		Increases mobility (walking)
		Improves balance

(continued)

¹ Benton, Melissa J., M.S.N., Ph.D. "Benefits of Exercise for Older Adults." *Exercise for Aging Adults*. Springer, 2015. 23-25.

Table 2.2 (continued)

Disease or condition	Exercise component	Benefits
Dyslipidemia	Endurance and strengthening	<i>Treatment</i>
		Increases HDL-C
		Decreases LDL-C
	Tai Chi	Increases HDL-C
		Decreases total cholesterol
<i>Respiratory</i>		
COPD	Endurance and strengthening	<i>Treatment</i>
		Decreases dyspnea
		Reduces hospitalizations
		Decreases mortality
		Improves quality of life
Pulmonary arterial hypertension	Endurance and strengthening	<i>Treatment</i>
		Increases activity tolerance
		Increases mobility (walking)
		Improves quality of life
<i>Endocrine</i>		
Diabetes mellitus	Endurance	<i>Prevention</i>
		Improves insulin sensitivity
		Promotes weight loss
	Endurance and strengthening	<i>Treatment</i>
		Decreases blood glucose
		Increases blood flow
		Decreases mortality
<i>Psychosocial</i>		
Dementia	Endurance and strengthening	<i>Prevention</i>
		Improves cerebral blood flow
		May increase brain and gray matter volume
		<i>Treatment</i>
		Increases function (activities of daily living)
		Increases mobility (walking)
		Improves balance
	May slow cognitive decline	
Major depression	Endurance	<i>Prevention</i>
		Improves mood
	Endurance and strengthening	<i>Treatment</i>
		Improves mood
		Decreases symptom severity
	Increases socialization	
	Improves quality of life	

(continued)

Table 2.2 (continued)

Disease or condition	Exercise component	Benefits
Insomnia	Strengthening and Tai Chi	<i>Treatment</i>
		Improves sleep quality
<i>Musculoskeletal</i>		
Osteoarthritis	Endurance and strengthening	<i>Treatment</i>
		Decreases pain
		Increases mobility (walking)
	Tai Chi	<i>Treatment</i>
		Decreases pain and stiffness
	Flexibility	<i>Treatment</i>
		Maintains joint range of motion
		Decreases pain
Fall risk	Strengthening (legs)	<i>Prevention</i>
		Maintains strength and muscle mass
		Improves balance
	Balance, strengthening.	<i>Treatment</i>
		Reduces number of falls and injurious falls
Osteoporosis	Strengthening (high intensity only) and endurance (high intensity only)	<i>Prevention</i>
		Reduces risk of osteoporosis of the hip and spine
		<i>Treatment</i>
		Improves bone density of the hip and spine
Obesity	Endurance	<i>Treatment</i>
		Maintenance of weight after loss; weight loss in conjunction with diet