

評価対象論文リスト(要因:身体活動、アウトカム:認知症・認知機能低下)

評価判定日:2023/8/31

①既存の系統的レビュー・メタ解析・統合解析

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## ②日本人集団の個別研究

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## ③有力な研究

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■メタ解析

Reference			Include study						Design	Category	Relative risk (95% CI or p)	Weight	<b>Magnitude of association</b>
Author	Title	Year	Ref No.	First author	Year	Study	Study	Event					
Stephen R	Physical Activity and Alzheimer's Disease: A Systematic Review	2017	38							Physically inactive	1.00 (ref)		
				Yoshitake	1995	1985-1992	Japan	Incidence	Cohort	Physically active	記載なし	記載なし	-
Guure CB	Impact of Physical Activity on Cognitive Decline, Dementia, and Its Subtypes: Meta-Analysis of Prospective Studies	2017	23							Inactive	1.00 (ref)		
				Kishimoto	2016	1988-2005	Japan	Incidence	Cohort	Active	-	記載なし	No association (関連なし)
Blondell SJ	Does physical activity prevent cognitive decline and dementia?: A systematic review and meta-analysis of longitudinal studies	2014	35							Physically inactive	1.00 (ref)		
Aarsland D	Is physical activity a potential	2010	記載なし	Yoshitake	1995	1985-1992	Japan	Incidence	Cohort	Physically active	0.20 (0.006-0.68)	1	Strong (強い)
				Yamada	2003	1992-1997	Japan	Incidence	Cohort	Physically active	記載なし	記載なし	-
			記載なし							Physically inactive	1.00 (ref)		
				Yoshitake	1995	1985-1992	Japan	Incidence	Cohort	Physically active	記載なし	記載なし	-
Xu W	Leisure time physical activity and dementia risk: a dose-response meta-analysis of prospective studies	2017	9							>2mile/d	1.00 (ref)		
										>1 to 2mile/d	1.33 (0.73-2.45)		No association (関連なし)
										>0.25 to 1mile/d	1.75 (1.03-2.99)		Moderate(中くらい)
				Abbott	2004	1994-1999	America	Incidence	Cohort	<0.25 mile/d	1.93 (1.11-3.34)	記載なし	Moderate(中くらい)
			17							Physically inactive	1.00 (ref)		
				Miyachi	2015	記載なし	Japan	Incidence	Cohort	Physically active	-	記載なし	
Santos-Lozano A	Physical Activity and Alzheimer Disease: A Protective Association	2016	11							Physically inactive	1.00 (ref)		
				Gelber	2011	1965-1968	America	記載なし	Case-control	Physically active	-	記載なし	
			39							Physically inactive	1.00 (ref)		

Biazus-Sehn LF	Effects of physical exercise on cognitive function of older adults with mild cognitive impairment: A systematic review and meta-analysis	2020	40	Yoshitake	1995	1985-1992	Japan	Incidence	Cohort	Physically active	0.20 (0.06–0.68)	記載なし	Strong (強い)
				Kishimoto	2016	1988-2005	Japan	Incidence	Cohort	Inactive	1.00 (ref)	記載なし	
			55							Control			
Hamer M	Physical activity and risk of neurodegenerative disease: a systematic review of prospective evidence	2009	56	Suzuki	2012	記載なし	Japan	Incidence	RCT	Exercise	記載なし		
				Suzuki	2013	記載なし	Japan	Incidence	RCT	Control	記載なし		
			記載なし							Physically inactive	1.00 (ref)		
Frederiksen KS	Physical Activity as a Moderator of Alzheimer Pathology: A Systematic Review of Observational Studies	2019	65	Yamada	2003	1992-1997	Japan	Incidence	Cohort	Physically active	記載なし		
										Physically inactive	1.00 (ref)		
			記載なし	Yoshitake	1995	1985-1992	Japan	Incidence	Cohort	Physically active	記載なし		
Morgan GS	Physical activity in middle-age and dementia in later life: findings from a prospective cohort of men in Caerphilly, South Wales and a meta-analysis	2012	67	Doi	2015	記載なし	Japan	記載なし	cross-sectional	Physically active	記載なし		
										Physically inactive			
			66	Makizako	2015	記載なし	Japan	記載なし	cross-sectional	Physically active	記載なし		
Brasure M	Physical Activity Interventions in Preventing Cognitive Decline and Alzheimer-Type Dementia: A Systematic Review	2018	40	Yoshitake	1995	1985-1992	Japan	Incidence	Cohort	Physically active	0.20 (0.06–0.68)	2.04	Strong (強い)
										Control			
			44	Okumiya	1996	記載なし	Japan	Incidence	RCT	Exercise	記載なし		
			Satoh	2014	記載なし	Japan	Incidence	RCT	Control Ex	記載なし			
									ExM	記載なし			

Author	Title	Year	Participants	Country	Outcome	Design	Intervention	Control	Effect Size	Quality			
Beckett MW	A meta-analysis of prospective studies on the role of physical activity and the prevention of Alzheimer's disease in older adults	2015	17				Physically inactive		1.00 (ref)				
Öhman H	Effect of physical exercise on cognitive performance in older adults with mild cognitive impairment or dementia: a systematic review	2014	41	Yoshitake	1995	1985-1992	Japan	Incidence	Cohort	Physically active	-1.71 (-2.94—0.49)	1.77	Strong (強い)
										Control			
				Suzuki	2013	記載なし	Japan	Incidence	RCT	Exercise BAT AT RT		記載なし 記載なし 記載なし 記載なし	
Sakaki K	Benefits of VR Physical Exercise on Cognition in Older Adults with and without Mild Cognitive Decline: A Systematic Review of Randomized Controlled Trials	2021	10	Nagamatsu	2013	記載なし	Japan	Incidence	RCT				
									Control				
Gavelin HM	Combined physical and cognitive training for older adults with and without cognitive impairment: A systematic review and network meta-analysis of randomized controlled trials	2021	記載なし	Nouchi	2013	記載なし	Japan	Incidence	RCT	Exercise		記載なし	
									Control				
				Kitazawa	2015	記載なし	Japan	記載なし	Case contro	NSE Control		記載なし	
Zhu Y	Effects of Aerobic Dance on Cognition in Older Adults with Mild Cognitive Impairment: A Systematic Review and Meta-Analysis	2020	36	Shimada	2017	記載なし	Japan	Incidence	RCT	combined activity group		記載なし	
									Control				
Law LL	Effects of combined cognitive and exercise interventions on cognition in older adults with and without cognitive innairment: a svsystematic review	2014	記載なし	Doi	2017	記載なし	Japan	Incidence	RCT	Dance Music		記載なし 記載なし	
									Control				

						Doi	2013	記載なし	Japan	Incidence	RCT	multicomponent exercise Control	記載なし
												Cognitive function	記載なし
						Komai	2012	記載なし	Japan	Incidence	RCT	Physical function program	記載なし
												Control Exercise	記載なし
Zhou XL	Effects of exercise interventions for specific cognitive domains in old adults with mild cognitive impairment: A meta-analysis and subgroup analysis of randomized controlled trials	2020	48			Suzuki	2013		Japan	Incidence	Cohort	Physically active	記載なし
			39			Suzuki	2012		Japan	Incidence	Cohort	Physically active	記載なし
Moniruzza man M	Effects of physical activities on dementia-related biomarkers: A systematic review of randomized controlled trials	2021	30										
			34			Suzuki	2013		Japan	Incidence	Cohort	Physically active	記載なし
						Yokoyama	2015		Japan	Incidence	Cohort	Dual task training	0.004(2.25~9.98)
Kivimäki M	Physical inactivity, cardiometabolic disease, and risk of dementia: an individual-participant meta-analysis	2019	36										1.00 (ref)
						Kishimoto	2016	1988-2005	Japan	Incidence	Cohort	Physically active	1.42 (0.79-2.56)
Meng Q	The effect of combined cognitive intervention and physical exercise on cognitive function in older adults with mild cognitive impairment: a meta-analysis of randomized controlled trials	2022	17										
			28			Shimada	2018	2011-2012	Japan	Incidence	Cohort	Physically active	記載なし
						Suzuki	2013		Japan	Incidence	Cohort	Physically active	記載なし
Northey JM	Exercise interventions for cognitive function in adults older than 50: a systematic review with meta-analysis	2018	55										
						Kimura	2010	記載なし	Japan		Cohort	Physically active	記載なし



			28	Doi	2015	記載なし	Japan		Cohort	slow gait	記載なし 1.00 (ref)
			29	Tomata	2017	2007~2012	Japan	Incidence	Cohort	Physically active	0.72(0.53~0.97) 1.00 (ref)
				taniguchi	2017	2002~2014	Japan	Incidence	Cohort	Initial gait speed	3.46(1.88~6.40)
Olanrewaju O	Sedentary behaviours, cognitive function, and possible mechanisms in older adults: a systematic review	2020	25								1.00 (ref)
				Kurita	2018	記載なし	Japan	Incidence	Cohort	sitting time	OR 0.19(0.12-0.30)
Song D	The effectiveness of physical exercise on cognitive and psychological outcomes in individuals with mild cognitive impairment: A systematic review and meta-analysis	2018	APAstyle							resistance training	
			APAstyle	Nagamatsu	2012	記載なし	Japan		Cohort	aerobic training	記載なし
			APAstyle	Nagamatsu	2013		記載なし		Cohort	resistance training aerobic training	記載なし
			APAstyle	Suzuki	2012		Japan	Incidence	Cohort	Physically active	記載なし
			APAstyle	Suzuki	2013		Japan	Incidence	Cohort	Physically active	記載なし
Yan S	Association between sedentary behavior and the risk of dementia: a systematic review and meta-analysis	2020	36								1.00 (ref)
				Kishimoto	2016	1988-2005	Japan	Incidence	Cohort	Physically active	1.42 (0.79-2.56)
Olanrewaju O	Sedentary behaviours, cognitive function, and possible mechanisms in older adults: a systematic review	2020	25								1.00 (ref)
				Kurita	2018	記載なし	Japan	Incidence	Cohort	sitting time	OR 0.19(0.12-0.30)