Neue Literatur zum Thema Sarkopenie und Frailty

for researchers

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| 1.[**The Relationship Between Urinary Total Polyphenols and the Frailty Phenotype in a Community-Dwelling Older Population: The InCHIANTI Study.**](http://www.mysprintt.eu/de/relationship-between-urinary-total-polyphenols-and-frailty-phenotype-community-dwelling-older)  **M. Urpi-Sarda, C. Andres-Lacueva, M. Rabassa, et al.**  ***J Gerontol A Biol Sci Med Sci. 2015;70(9):1141-7***  Studies have suggested that the quality of dietary intake may affect the development of frailty. The authors of this study hypothesized that frailty in older subjects would be associated with dietary total polyphenols (DTP) intake and its biomarker, urinary total polyphenols (UTP). Data obtained shown that an high concentrations of UTP were associated with lower prevalence of frailty and prefrailty in an older community-dwelling population. A polyphenol-rich diet may protect against frailty in older persons.  [**read more**](http://www.mysprintt.eu/de/node/468) | 2.[**Estimation of sarcopenia prevalence using various assessment tools**](http://www.mysprintt.eu/de/estimation-sarcopenia-prevalence-using-various-assessment-tools)  **C. Beaudart, J.Y. Reginster, J. Slomian et al.**  ***Experimental Gerontology 2015;61:31-7***  This study aims to evaluate the prevalence of sarcopenia in relation to the assessment tool used in the measurement of the variables related to muscle mass, muscle strength and physical performance. The results obtained showed that the prevalence of sarcopenia varies between 8.4% and 27.6% in relation to the method used. Furthermore, it was observed that the bioelectrical impedance analysis (BIA) tends to overestimate muscle mass compared to the X-ray absorptiometry dual energy (DXA). As regards the muscle strength, it is observed that the pneumatic dynamometer allowed to diagnose the double of the sarcopenic subjects compared to hydraulic dynamometer.  [**read more**](http://www.mysprintt.eu/de/node/289) |

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| [**Energetics of Aging and Frailty: The FRADEA Study.**](http://www.mysprintt.eu/de/energetics-aging-and-frailty-fradea-study-0)  **P. Abizanda, L. Romero, P.M. Sánchez-Jurado et al.**  ***J Gerontol A Biol Sci Med Sci. 2015;(00)00:1-10***  Resting metabolic rate (RMR) and total daily energy expenditure (TDEE) decrease with aging, but it is not known whether frailty modulates this association. Authors hypothesize that RMR and TDEE values are similar between younger and older nonfrail adults, whereas they are lower in older prefrail and frail compared with younger adults. This study shows that frailty status modulates the energy requirements of aging. Frail and prefrail older adults present lower eRMR than nonfrail adults.  [**read more**](http://www.mysprintt.eu/de/node/483) | [**The impact of sleep on age-related sarcopenia: Possible connections and clinical implications.**](http://www.mysprintt.eu/de/impact-sleep-age-related-sarcopenia-possible-connections-and-clinical-implications)  **R.D. Piovezan, J. Abucham, R.V. Dos Santos et al.**  ***Ageing Res Rev. 2015 Sep;23(Pt B):210-20*** Reductions in duration and quality of sleep and increases in prevalence of circadian rhythm and sleep disorders with age favor proteolysis, modify body composition and increase the risk of insulin resistance, all of which have been associated with sarcopenia.  Therapeutic approaches targeting sleep disturbances to normalize circadian rhythms and sleep homeostasis may represent a novel strategy to preserve or recover muscle health in older adults.  [**read more**](http://www.mysprintt.eu/de/node/488) |
| [**Prevalence and risk factors of sarcopenia among adults living in nursing homes**](http://www.mysprintt.eu/de/prevalence-and-risk-factors-sarcopenia-among-adults-living-nursing-homes)  **H. E. Senior, T. R. Henwood, E. M. Beller et al.**  ***Maturitas 2015; 82: 418–423***  Sarcopenia is a progressive loss of skeletal muscle and muscle function, with significant health and disability consequences for older adults. This study was aimed to evaluate the prevalence and risk factors of sarcopenia among older residential aged care adults using the European Working Group on Sarcopenia in Older People (EWGSOP) criteria.  [**read more**](http://www.mysprintt.eu/de/node/493) | [**Effects of a vitamin D and leucine-enriched whey protein nutritional supplement on measures of sarcopenia in older adults, the PROVIDE study: a randomized, double-blind, placebo-controlled trial**](http://www.mysprintt.eu/de/effects-vitamin-d-and-leucine-enriched-whey-protein-nutritional-supplement-measures-sarcopenia-older)  **J.M. Bauer, S. Verlaan, I. Bautmans et al.**  ***J Am Med Dir Assoc 2015;16:740-747***  This study was a multicenter, randomized, controlled, double-blind, 2 parallel-group trial among 380 sarcopenic primarily independent-living older adults. The aim of the study was to test the hypothesis that a specific oral nutritional supplement can result in improvements in measures of sarcopenia. Improvements in muscle mass and lower-extremity function were observed, suggesting that nutritional supplementation alone might benefit geriatric patients.  [**read more**](http://www.mysprintt.eu/de/node/526) |
| [**Nutritional, Physical, Cognitive and Combination Interventions and Frailty Reversal Among Older Adults: A Randomized Controlled Trial**](http://www.mysprintt.eu/de/nutritional-physical-cognitive-and-combination-interventions-and-frailty-reversal-among-older-adults)  **T. P. Ng, L. Feng, M. ZinNyunt et al.**  ***Am J Med 2015;128:1225-1236 e1221***  This study aimed to assess the reversibility of frailty in 246 community-living prefrail and frail older people in Singapore (mean age: 70 years). Participants were randomly assigned to 5 different 6-month interventions: nutritional supplementation, physical training, cognitive training, combination treatment and usual care control. Frailty score, body mass index, knee extension strength, gait speed, energy/vitality, physical activity levels and secondary outcomes (activities of daily living dependency, hospitalization and falls) were assessed at 0, 3, 6 and 12 months.  [**read more**](http://www.mysprintt.eu/de/node/532) | [**Caloric restriction and aerobic exercise in sarcopenic and non-sarcopenic obese women: an observational and retrospective study**](http://www.mysprintt.eu/de/caloric-restriction-and-aerobic-exercise-sarcopenic-and-non-sarcopenic-obese-women-observational-and)  **S. Barbat-Artigas, S. Garnier, S. Joffroy et al.**  ***J Cachexia Sarcopenia Muscle. 2015 Oct 15. doi: 10.1002/jcsm.12075. [Epub ahead of print]***  The objective of this observational and retrospective study was to verify the effect of a mixed weight loss programme combining caloric restriction and exercise on body composition, and lipid-lipoprotein profile of obese women according to their sarcopenic status. Data obtained suggest that a short weight loss programme combining caloric restriction and aerobic exercise may significantly reduce fat mass and improve lipid-lipoprotein profile in obese women, independently of their sarcopenic status. Such programmes may have deleterious effects on lean mass in non-sarcopenic obese subjects, only.  [**read more**](http://www.mysprintt.eu/de/node/473) |
| [**Effects of physical exercise interventions in frail older adults: a systematic review of randomized controlled trials**](http://www.mysprintt.eu/de/effects-physical-exercise-interventions-frail-older-adults-systematic-review-randomized-controlled)  **C. de Labra, C. Guimaraes-Pinheiro, A. Maseda, et al.**  ***BMC Geriatrics. 2015;15:154***  Physical exercise has demonstrated its beneficial effects in reducing the risk of many adverse outcomes, such as frailty. The major goal of this systematic review of randomized, controlled trials (RCTs) was to investigate the benefits of exercise programs in frail elderly people, considering only those studies where frailty had been defined. This systematic review suggested that frail older adults seemed to benefit from exercise interventions, although the optimal program remains unclear.  [**read more**](http://www.mysprintt.eu/de/node/511) | [**Myostatin antibody (LY2495655) in older weak fallers: a proof-of-concept, randomised, phase 2 trial**](http://www.mysprintt.eu/de/myostatin-antibody-ly2495655-older-weak-fallers-proof-concept-randomised-phase-2-trial)  **C. Becker, S.R. Lord, S.A. Studenski, et al.**  ***Lancet Diabetes Endocrinol 2015;3:948-957***  Myostatin inhibits skeletal muscle growth. The humanised monoclonal antibody LY2495655 (LY) binds and neutralises myostatin. This study aimed to test whether LY increases appendicular lean body mass (aLBM) and improves physical performance in older individuals who have had recent falls and low muscle strength and power. At 24 weeks, the least-squares mean change in aLBM was -0.123 kg in the placebo group and 0.303 kg in the LY group (P < 0.0001). This results show LY treatment increases lean mass and might improve functional measures of muscle power.  [**read more**](http://www.mysprintt.eu/de/node/501) |
| [**Association of habitual dietary resveratrol exposure with the development of frailty in older age: the Invecchiare in Chianti study**](http://www.mysprintt.eu/de/association-habitual-dietary-resveratrol-exposure-development-frailty-older-age-invecchiare-chianti)  **M. Rabassa, R. Zamora-Ros, M. Urpi-Sarda, et al.**  ***Am J Clin Nutr 2015;102:1534–42***  Resveratrol may play a protective role against the frailty syndrome (FS) because of its antioxidant and anti-inﬂammatory properties. This study has prospectively evaluated the association between habitual dietary resveratrol exposure and the development of FS after 3-, 6-, and 9-years follow-up periods in a community-dwelling older population. This study has shown that higher habitual dietary resveratrol exposure was associated with lower risk of older community dwellers developing FS during the ﬁrst 3 years of follow-up but not after longer follow-up periods.  [**read more**](http://www.mysprintt.eu/de/node/516) | [**Accelerometer-determined physical activity, muscle mass, and leg strength in community-dwelling older adults**](http://www.mysprintt.eu/de/accelerometer-determined-physical-activity-muscle-mass-and-leg-strength-community-dwelling-older)  **Y.C. Foong, N. Chherawala, D. Aitken et al.**  ***J Cachexia Sarcopenia Muscle. 2015 Oct 15. doi: 10.1002/jcsm.12065. [Epub ahead of print]***  The aim of this study was to describe the relationship between accelerometer-determined physical activity (PA), muscle mass, and lower-limb strength in community-dwelling older adults. Using accelerometer technology, both the amount and intensity of accelerometer-determined PA had an independent, dose-response relationship with lean mass percentage and lower limb strength, with the largest effect for vigorous activity. Time spent in sedentary activity was negatively associated with lean mass percentage, but was not associated with lower limb strength. The magnitude of the association between PA and lean mass percentage decreased with age.  [**read more**](http://www.mysprintt.eu/de/node/521) |
| [**Association of Hearing Impairment With Incident Frailty and Falls in Older Adults.**](http://www.mysprintt.eu/de/association-hearing-impairment-incident-frailty-and-falls-older-adults-0)  **R.J. Kamil, J. Betz, B. Brott Powers et al.**  ***Journal of Aging and Health. 2015***  The hearing impairment (HI) is highly prevalent but undertreated in older adults and, although it contributes to frailty risk, it remains poorly studied. This study aimed at determining whether HI in older adults is associated with the development of frailty and falls. This study demonstrate that moderate or greater HI is associated with increased risk of developing frailty and that HI is associated with an increased annual risk of falling.  [**read more**](http://www.mysprintt.eu/de/node/496) | [**Dairy Consumption and Risk of Frailty in Older Adults: A Prospective Cohort Study.**](http://www.mysprintt.eu/de/dairy-consumption-and-risk-frailty-older-adults-prospective-cohort-study-0)  **A. Lana, F. Rodriguez-Artalejo and E. Lopez-Garcia**  ***J Am Geriatr Soc. 2015;63(9):1852-60***  Some studies have found positive effects of dairy consumption in older people, but the evidence base for this recommendation remains scarce. This study aimed to examining the association between consumption of dairy products and risk of frailty in community-dwelling older adults. Data obtained shown that higher consumption of low-fat milk and yogurt are associated with lower risk of frailty and, specifically, lower risk of slow walking speed and weight loss.  [**read more**](http://www.mysprintt.eu/de/node/478) |
| [High Levels of Heavy Metals Increase the Prevalence of Sarcopenia in the Elderly Population](http://www.mysprintt.eu/de/high-levels-heavy-metals-increase-prevalence-sarcopenia-elderly-population-0)J.I. Yoo, Y.C. Ha, Y.K. Lee et al. *J Bone Metab. 2016 May;23(2):101-9.*  Despite increasing concern regarding health problems as a result of environmental pollutants, no association of toxic heavy metals with sarcopenia has been demonstrated in the general population. In this article the association of heavy metals, including lead, mercury and cadmium, with sarcopenia in the Korean population was investigated. This study demonstrates that high levels of blood lead, mercury and cadmium increase the prevalence of sarcopenia in both genders of elderly populations.  [**read more**](http://www.mysprintt.eu/de/node/440) | [Macronutrients Intake and Incident Frailty in Older Adults: A Prospective Cohort Study](http://www.mysprintt.eu/de/macronutrients-intake-and-incident-frailty-older-adults-prospective-cohort-study)H. Sandoval-Insausti, R.F. Pérez-Tasigchana, E. López-García, et al. *J Gerontol A Biol Sci Med Sci 2016;00:1–6*  This study examined the association of protein and other macronutrient intake with the risk of frailty in older adults. Authors concluded that the intake of total protein, animal protein, and MUFAs was inversely associated with incident frailty. Promoting the intake of these nutrients might reduce frailty.  [**read more**](http://www.mysprintt.eu/de/node/445) |
| [Frailty is associated with the epigenetic clock but not with telomere length in a German cohort](http://www.mysprintt.eu/de/frailty-associated-epigenetic-clock-not-telomere-length-german-cohort)L.P. Breitling, K.U. Saum, L. Perna, et al. *Clinical Epigenetics 2016;8:21*  The epigenetic clock, in particular epigenetic pre-aging quantified by the so-called DNA methylation age acceleration, has recently suggested to closely correlate with a variety of disease phenotypes. There remains a dearth of data, however, on its association with telomere length and frailty, which can be considered major correlates of age on the genomic and clinical level, respectively. The results of the present study suggest that epigenetic age acceleration is correlated with clinically relevant aging-related phenotypes through pathways unrelated to cellular senescence as assessed by telomere length.  [**read more**](http://www.mysprintt.eu/de/node/453) | [Comparison of Handgrip and Leg Extension Strength in Predicting Slow Gait Speed in Older Adults](http://www.mysprintt.eu/de/comparison-handgrip-and-leg-extension-strength-predicting-slow-gait-speed-older-adults)M.S. Fragala, D.E. Alley, M.D. Shardell et al. JAGS 2016;64:144–150  *This study aimed at comparing the relative predictive power of handgrip and leg extension strength in predicting slow walking.*  *Results suggest that handgrip strength may be an adequate measure to predict physical function whereas leg extension strength is only a slightly better predictor of slow gait speed.*  [***read more***](http://www.mysprintt.eu/de/node/455) |
| [Is Trunk Posture in Walking a Better Marker than Gait Speed in Predicting Decline in Function and Subsequent Frailty?](http://www.mysprintt.eu/de/trunk-posture-walking-better-marker-gait-speed-predicting-decline-function-and-subsequent-frailty)R.A. Merchant, S. Banerji, G. Singh, E. Chew, et al. *J Am Med Dir Assoc. 2016;17(1):65-70*  Older adults are known to compensate well for declining physiological reserve through environmental modification and posture adaptation. This study aimed to analyze and identify significant posture adaptation in older adults that is required to maintain gait speed in the face of increasing vulnerability. Data of this study suggest that identifying trunk posture adaptation before the onset of decline in gait speed will help in planning interventions in the at-risk community-dwelling older adults even before gait speed declines.  [**read more**](http://www.mysprintt.eu/de/node/464) | [Predictive validity of a two-step tool to map frailty in primary care](http://www.mysprintt.eu/de/predictive-validity-two-step-tool-map-frailty-primary-care)J.A.L. van Kempen, H.J. Schers, I. Philp et al. *BMC Medicine 2015;13:287*  EASY-Care Two step Older people Screening (EASY-Care TOS) is a stepped approach to identify frail older people at risk for negative health outcomes in primary care, and makes use of General Practitioners’ (GPs) readily-available information. This study aimed to determine the predictive value of EASY-Care TOS for negative health outcomes within the year from assessment. GPs applying the EASY-Care TOS procedure, where they only perform additional assessment when they judge this as necessary, can efficiently predict negative health outcomes in their older populations. Moreover, this evaluation is almost as accurate as a complete specialist comprehensive geriatric assessment (CGA).  [**read more**](http://www.mysprintt.eu/de/node/506) |

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| [**Phenotype of sarcopenic obesity in older individuals with a history of falling.**](http://www.mysprintt.eu/de/phenotype-sarcopenic-obesity-older-individuals-history-falling)  **Y.R. Huo, P. Suriyaarachchi, F. Gomez et al.**  ***Arch Gerontol Geriatr. 2016;65:255-9***  The goal of this study was to obtain a comprehensive phenotype of sarcopenic obesity in this high-risk population. Authors have found that sarcopenic obese subjects were older (81.1±7.3), mostly female and more likely to have lower bone mineral density, lower grip strength, slower gait velocity, and poor balance. Sarcopenic obese individuals also showed significantly higher parathyroid hormone and lower vitamin D.  [**read more**](http://www.mysprintt.eu/de/node/404) | [**Prevention of frailty through narrative intervention**](http://www.mysprintt.eu/de/prevention-frailty-through-narrative-intervention)  **S. Freitag and S. Schmidt**  ***Soc Sci Med. 2016 May 14;160:120-127. doi: 10.1016/j.socscimed.2016.05.023. [Epub ahead of print]***  The aim of this study is to investigate the effects of a biographical disclosure intervention on psychological frailty and health in older adults. The results of the intervention indicate a short-term positive effect on frailty and mental health in elderly people, who benefitted from the disclosure intervention in terms of improved mental health and lower frailty levels.  [**read more**](http://www.mysprintt.eu/de/node/412) |
| [**Physical Frailty Assessment in Older Women: Can Simplification Be Achieved Without Loss of Syndrome Measurement Validity?**](http://www.mysprintt.eu/de/physical-frailty-assessment-older-women-can-simplification-be-achieved-without-loss-syndrome)  **Q.L. Xue , J. Tian , L.P. Fried et al.**  ***Am J Epidemiol. 2016 May 5. pii: kwv272. [Epub ahead of print]*** Different phenotypes have increasingly been used as tools for clinical characterization of frailty among older adults. Although there have been studies about the comparability and effectiveness of various simplifications and approximations of existing frailty phenotypes for risk prediction, there have been no studies in which investigators evaluated the stability of the clinical characterization achieved. Findings obtained shown that it was no merely the number of criteria used to characterize the PFPs but rather the specific criteria combinations that predicted the risk of adverse outcomes. There are clinically important contexts in which simplified PFPs cannot be used interchangeably.  [**read more**](http://www.mysprintt.eu/de/node/416) | [**A Multicomponent Exercise Intervention that Reverses Frailty and Improves Cognition, Emotion, and Social Networking in the Community-Dwelling Frail Elderly: A Randomized Clinical Trial**](http://www.mysprintt.eu/de/multicomponent-exercise-intervention-reverses-frailty-and-improves-cognition-emotion-and-social)  **F.J. Tarazona-Santabalbina, M.C. Gómez-Cabrera, P. Pérez-Ros et al.**  ***J Am Med Dir Assoc. 2016 May 1;17(5):426-33***  The aim of this study is to ascertain if a supervised-facility multicomponent exercise program (MEP) when performed by frail older persons can reverse frailty and improve functionality; cognitive, emotional, and social networking; as well as biological biomarkers of frailty, when compared with a controlled population that received no training. Authors reported that in3 1.4% (95% CI 20.3-45.0) of the intervention group, frailty was reversed after the exercise training program, whereas no one in the control group reversed frailty after the 6-month period.  [**read more**](http://www.mysprintt.eu/de/node/420) |
| [**Motor Performance and Physical Activity as Predictors of Prospective Falls in Community-Dwelling Older Adults by Frailty Level: Application of Wearable Technology**](http://www.mysprintt.eu/de/motor-performance-and-physical-activity-predictors-prospective-falls-community-dwelling-older-adults)  **M.J. Mohler, C.S. Wendel , R.E. Taylor-Piliae et al.**  ***Gerontology. 2016 Apr 30. [Epub ahead of print]***  This study aimed to evaluate wearable sensor-based measures of gait, balance, and physical activity that are predictive of future falls in community-dwelling older adults. Results obtained suggests that independent predictors of falls are dependent on frailty status. Among sensor-derived parameters, balance deficit, longer typical walking episodes, and shorter typical standing episodes were the most sensitive predictors of prospective falls in the combined pre-frail and frail sample. Gait deficit was not a sensitive fall predictor in the context of frailty status.  [**read more**](http://www.mysprintt.eu/de/node/424) | [**Neuromuscular function in different stages of sarcopenia.**](http://www.mysprintt.eu/de/neuromuscular-function-different-stages-sarcopenia)  **T. Morat, K.J. Gilmore and C.L. Rice**  ***Exp Gerontol. 2016 Apr 20;81:28-36.***  This study applied the screening tool developed by the European Working Group on Sarcopenia in Older People (EWGSOP) on seniors aged over 65years and concurrently tested various laboratory-based indices of neuromuscular function. Based on gait speed, handgrip strength and muscle mass all subjects were categorized into one of the three conceptual sarcopenia stages (pre-sarcopenia, sarcopenia, severe sarcopenia). The laboratory tests found neuromuscular differences among the 3 groups which generally supported the classification scheme and helped to illustrate some key factors that could explain differences in functional capacities.  [**read more**](http://www.mysprintt.eu/de/node/435) |
| [**Physical Activity Performed in the Evening Increases the Overnight Muscle Protein Synthetic Response to Presleep Protein Ingestion in Older Men**](http://www.mysprintt.eu/de/physical-activity-performed-evening-increases-overnight-muscle-protein-synthetic-response-presleep)  **A.M. Holwerda, I.W. Kouw, J. Trommelen et al.**  ***J Nutr. 2016 Jun 8. pii: jn230086. [Epub ahead of print]***  The present study assessed whether physical activity performed in the evening can augment the overnight muscle protein synthetic response to presleep protein ingestion in older men. Physical activity performed in the evening augments the overnight muscle protein synthetic response to presleep protein ingestion and allows more of the ingested protein-derived amino acids to be used for de novo muscle protein synthesis during overnight sleep in older men.  [**read more**](http://www.mysprintt.eu/de/node/379) | [**Effect of dietary n-3 PUFA supplementation on the muscle transcriptome in older adults**](http://www.mysprintt.eu/de/effect-dietary-n-3-pufa-supplementation-muscle-transcriptome-older-adults)  **J. Yoshino , G.I. Smith, S.C. Kelly et al.**  ***Physiol Rep. 2016;4(11). pii: e12785.***  In this study, we used muscle biopsy samples collected during a recently completed randomized controlled trial that found that n-3 PUFA therapy increased muscle mass and function in older adults to provide a comprehensive assessment of the effect of n-3 PUFA therapy on the skeletal muscle gene expression profile in these people.  Data obtained suggest that n-3 PUFA therapy results in small but coordinated changes in the muscle transcriptome that may help explain the n-3 PUFA-induced improvements in muscle mass and function.  [**read more**](http://www.mysprintt.eu/de/node/389) |
| [**Successful Aging and Frailty: Opposite Sides of the Same Coin?**](http://www.mysprintt.eu/de/successful-aging-and-frailty-opposite-sides-same-coin)  **J. Woo, J. Leung and T. Zhang**  ***J Am Med Dir Assoc. 2016 May 25. pii: S1525-8610(16)30109-8. doi: 10.1016/j.jamda.2016.04.015. [Epub ahead of print]***  This study explore the hypothesis that frailty and successful aging are two sides of the same coin and that walking speed may be an objective indicator of successful aging. Fast walkers had better self-rated health, lower prevalence of stroke, hypertension, cataracts, osteoporosis, and impaired cognitive function. They were more likely to be current alcohol users, more physically active, consumed more vegetables, had better physical component of health-related quality of life, and received more education. They also had lower body mass index, percentage whole body fat as well as appendicular fat, and higher appendicular muscle mass index.  [**read more**](http://www.mysprintt.eu/de/node/384) | [**Associations of Computed Tomography-Based Trunk Muscle Size and Density With Balance and Falls in Older Adults**](http://www.mysprintt.eu/de/associations-computed-tomography-based-trunk-muscle-size-and-density-balance-and-falls-older-adults)  **D.E. Anderson, E. Quinn, E. Parker et al.**  ***J Gerontol A Biol Sci Med Sci. 2016;71(6):811-6***  Aging is associated with significant declines in muscle size and density, but associations of trunk muscle size and density with balance and falls in older adults have not been previously examined.  Results suggest that higher muscle density was associated with reduced postural sway, particularly sway velocities, in both men and women, and better Short Physical Performance Battery score in women, but was not associated with falls.  [**read more**](http://www.mysprintt.eu/de/node/394) |
| [**Association of frailty with the serine protease HtrA1 in older adults**](http://www.mysprintt.eu/de/association-frailty-serine-protease-htra1-older-adults)  **M. Lorenzi, T. Lorenzi, E. Marzetti et al.**  ***Exp Gerontol. 2016;81:8-12. doi: 10.1016/j.exger.2016.03.019. [Epub ahead of print]***  High-temperature requirement serine protease A1 (HtrA1) is a secreted multidomain serine protease implicated in the inhibition of signaling of active transforming growth factor-β (TGF-β)1, a cytokine which has an important anti-inflammation role.  These findings demonstrate for the first time the association of plasma levels of HtrA1 with frailty status.  [**read more**](http://www.mysprintt.eu/de/node/399) | [**Consumption of fruit and vegetables and risk of frailty: a dose-response analysis of 3 prospective cohorts of community-dwelling older adults**](http://www.mysprintt.eu/de/consumption-fruit-and-vegetables-and-risk-frailty-dose-response-analysis-3-prospective-cohorts)  **E. García-Esquinas, B. Rahi, K. Peres et al.**  ***Am J Clin Nutr. 2016 May 18. pii: ajcn125781. [Epub ahead of print]***  We sought to examine the dose-response association between fruit and vegetables consumption and the risk of frailty in older adults.  Among community-dwelling older adults, fruit and vegetables consumption was associated with a lower short-term risk of frailty in a dose-response manner, and the strongest association was obtained with 3 portions of fruit/d and 2 portions of vegetables/d  [**read more**](http://www.mysprintt.eu/de/node/408) |

For healthcare providers (some articles published for researchers are also in the section of healthcare providers)

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| [**Serum markers of inflammation and oxidative stress in sarcopenia.**](http://www.mysprintt.eu/de/serum-markers-inflammation-and-oxidative-stress-sarcopenia-0)  **B. Can, O. Kara, M.C. Kizilarslanoglu et al.**  ***Aging Clin Exp Res. 2016 Aug 29. [Epub ahead of print]***  The aim of the study was to evaluate the relationship between sarcopenia and biomarkers that may be involved in its pathogenesis and hence allow early detection. The present study demonstrated an association of sarcopenia with inflammatory markers CRP, erythrocyte sedimentation rate and adiponectin.  [**read more**](http://www.mysprintt.eu/de/node/374) |
| [**Fried frailty phenotype assessment components as applied to geriatric inpatients**](http://www.mysprintt.eu/de/fried-frailty-phenotype-assessment-components-applied-geriatric-inpatients)  **J. Bieniek , K. Wilczyński and J. Szewieczek**  ***Clin Interv Aging. 2016;11:453-9.***  The aim of this article was to assess the usefulness and limitations of Fried frailty phenotype criteria in geriatric inpatients, characterized by comorbidity and functional impairments, and to estimate the frailty phenotype prevalence in this group. Data obtained suggest that Fried frailty phenotype criteria can useful for geriatric inpatient assessment, despite diagnostic limitations  [**read more**](http://www.mysprintt.eu/de/node/537) |
| [**Disseminating a Clinically Effective Physical Activity Program to Preserve Mobility in a Community Setting for Older Adults**](http://www.mysprintt.eu/de/disseminating-clinically-effective-physical-activity-program-preserve-mobility-community-setting)  **J. Laussen, C. Kowaleski , K. Martin et al.**  ***J Frailty Aging. 2016;5(2):82-7. doi: 10.14283/jfa.2016.94.***  The objective of this study is to assess the dissemination of an evidence-based PA program for older adults by evaluating program participation and its impact on mobility, strength and quality of life. Results obtained suggest that the dissemination of a clinically efficacious physical activity intervention into a community-based setting can improve mobility, strength and quality of life for older adults.  [**read more**](http://www.mysprintt.eu/de/node/542) |
| [**The clinical frailty scale predicts functional decline and mortality when used by junior medical staff: a prospective cohort study**](http://www.mysprintt.eu/de/clinical-frailty-scale-predicts-functional-decline-and-mortality-when-used-junior-medical-staff)  **K.J. Gregorevic, R.E. Hubbard, W.K. Lim et al.**  ***BMC Geriatr. 2016;16(1):117.***  The objective of this study is to determine whether the clinical frailty scale (CFS) can be used to identify patient baseline frailty status in the acute general medical setting when used by junior medical staff using information obtained on routine clinical assessment. A high proportion of eligible patients had the frailty measure completed, demonstrating the acceptability of the CFS to clinicians. Despite lack of training for medical staff, increasing frailty was correlated with functional decline and mortality supporting the validity of the CFS as a frailty screening tool for clinicians.  [**read more**](http://www.mysprintt.eu/de/node/547) |
| [**High Levels of Heavy Metals Increase the Prevalence of Sarcopenia in the Elderly Population**](http://www.mysprintt.eu/de/high-levels-heavy-metals-increase-prevalence-sarcopenia-elderly-population)  **J.I. Yoo, Y.C. Ha, Y.K. Lee et al.**  ***J Bone Metab. 2016 May;23(2):101-9.***  Despite increasing concern regarding health problems as a result of environmental pollutants, no association of toxic heavy metals with sarcopenia has been demonstrated in the general population. In this article the association of heavy metals, including lead, mercury and cadmium, with sarcopenia in the Korean population was investigated. This study demonstrates that high levels of blood lead, mercury and cadmium increase the prevalence of sarcopenia in both genders of elderly populations.  [**read more**](http://www.mysprintt.eu/de/node/552) |
| [**A Multicomponent Exercise Intervention that Reverses Frailty and Improves Cognition, Emotion, and Social Networking in the Community-Dwelling Frail Elderly: A Randomized Clinical Trial**](http://www.mysprintt.eu/de/multicomponent-exercise-intervention-reverses-frailty-and-improves-cognition-emotion-and-social-0)  **F.J. Tarazona-Santabalbina, M.C. Gómez-Cabrera, P. Pérez-Ros et al.**  ***J Am Med Dir Assoc. 2016 May 1;17(5):426-33***  The aim of this study is to ascertain if a supervised-facility multicomponent exercise program (MEP) when performed by frail older persons can reverse frailty and improve functionality; cognitive, emotional, and social networking; as well as biological biomarkers of frailty, when compared with a controlled population that received no training. Authors reported that in3 1.4% (95% CI 20.3-45.0) of the intervention group, frailty was reversed after the exercise training program, whereas no one in the control group reversed frailty after the 6-month period.  [**read more**](http://www.mysprintt.eu/de/node/557) |
| [**Physical Activity Performed in the Evening Increases the Overnight Muscle Protein Synthetic Response to Presleep Protein Ingestion in Older Men**](http://www.mysprintt.eu/de/physical-activity-performed-evening-increases-overnight-muscle-protein-synthetic-response-presleep-0)  **A.M. Holwerda, I.W. Kouw, J. Trommelen et al.**  ***J Nutr. 2016 Jun 8. pii: jn230086. [Epub ahead of print]***  The present study assessed whether physical activity performed in the evening can augment the overnight muscle protein synthetic response to presleep protein ingestion in older men. Physical activity performed in the evening augments the overnight muscle protein synthetic response to presleep protein ingestion and allows more of the ingested protein-derived amino acids to be used for de novo muscle protein synthesis during overnight sleep in older men.  [**read more**](http://www.mysprintt.eu/de/node/562) |
| [**Medium-Chain Triglycerides in Combination with Leucine and Vitamin D Increase Muscle Strength and Function in Frail Elderly Adults in a Randomized Controlled Trial.**](http://www.mysprintt.eu/de/medium-chain-triglycerides-combination-leucine-and-vitamin-d-increase-muscle-strength-and-function)  **S. Abe, O. Ezaki and M. Suzuki**  ***J Nutr. 2016 May;146(5):1017-26.*** In this paper a combination of nutrients was investigated to treat sarcopenia in very frail elderly adults. Authors concluded that the combined supplementation of MCTs (6 g), leucine-rich amino acids, and cholecalciferol at dinner may improve muscle strength and function in frail elderly individuals.  [**read more**](http://www.mysprintt.eu/de/node/567) |
| [**Successful Aging and Frailty: Opposite Sides of the Same Coin?**](http://www.mysprintt.eu/de/successful-aging-and-frailty-opposite-sides-same-coin-0)  **J. Woo, J. Leung and T. Zhang**  ***J Am Med Dir Assoc. 2016 May 25. pii: S1525-8610(16)30109-8. doi: 10.1016/j.jamda.2016.04.015. [Epub ahead of print]***  This study explore the hypothesis that frailty and successful aging are two sides of the same coin and that walking speed may be an objective indicator of successful aging.  Fast walkers had better self-rated health, lower prevalence of stroke, hypertension, cataracts, osteoporosis, and impaired cognitive function. They were more likely to be current alcohol users, more physically active, consumed more vegetables, had better physical component of health-related quality of life, and received more education. They also had lower body mass index, percentage whole body fat as well as appendicular fat, and higher appendicular muscle mass index.  [**read more**](http://www.mysprintt.eu/de/node/572) |
| [**Phenotype of sarcopenic obesity in older individuals with a history of falling.**](http://www.mysprintt.eu/de/phenotype-sarcopenic-obesity-older-individuals-history-falling-0)  **Y.R. Huo, P. Suriyaarachchi, F. Gomez et al.**  ***Arch Gerontol Geriatr. 2016;65:255-9***  The goal of this study was to obtain a comprehensive phenotype of sarcopenic obesity in this high-risk population. Authors have found that sarcopenic obese subjects were older (81.1±7.3), mostly female and more likely to have lower bone mineral density, lower grip strength, slower gait velocity, and poor balance. Sarcopenic obese individuals also showed significantly higher parathyroid hormone and lower vitamin D.  [**read more**](http://www.mysprintt.eu/de/node/577) |
| [**Sarcopenia is an independent risk factor of dysphagia in hospitalized older people.**](http://www.mysprintt.eu/de/sarcopenia-independent-risk-factor-dysphagia-hospitalized-older-people)  **Maeda and J. Akagi**  ***Geriatr Gerontol Int. 2016 Apr;16(4):515-21***  The present study investigated the prevalence of dysphagia among patients with sarcopenia, and the association between the two conditions. On 224 older adults, the prevalences of sarcopenia and dysphagia were 76.8% and 30.0%, respectively and it was shown that sarcopenia is an independent risk factor for dysphagia among older individuals.  [**read more**](http://www.mysprintt.eu/de/node/582) |
| [**Consumption of fruit and vegetables and risk of frailty: a dose-response analysis of 3 prospective cohorts of community-dwelling older adults**](http://www.mysprintt.eu/de/consumption-fruit-and-vegetables-and-risk-frailty-dose-response-analysis-3-prospective-cohorts-0)  **E. García-Esquinas, B. Rahi, K. Peres et al.**  ***Am J Clin Nutr. 2016 May 18. pii: ajcn125781. [Epub ahead of print]***  We sought to examine the dose-response association between fruit and vegetables consumption and the risk of frailty in older adults.  Among community-dwelling older adults, fruit and vegetables consumption was associated with a lower short-term risk of frailty in a dose-response manner, and the strongest association was obtained with 3 portions of fruit/d and 2 portions of vegetables/d  [**read more**](http://www.mysprintt.eu/de/node/587) |
| [**Physical Frailty Assessment in Older Women: Can Simplification Be Achieved Without Loss of Syndrome Measurement Validity?**](http://www.mysprintt.eu/de/physical-frailty-assessment-older-women-can-simplification-be-achieved-without-loss-syndrome-0)  **Q.L. Xue , J. Tian , L.P. Fried et al.**  ***Am J Epidemiol. 2016 May 5. pii: kwv272. [Epub ahead of print]*** Different phenotypes have increasingly been used as tools for clinical characterization of frailty among older adults. Although there have been studies about the comparability and effectiveness of various simplifications and approximations of existing frailty phenotypes for risk prediction, there have been no studies in which investigators evaluated the stability of the clinical characterization achieved. Findings obtained shown that it was no merely the number of criteria used to characterize the PFPs but rather the specific criteria combinations that predicted the risk of adverse outcomes. There are clinically important contexts in which simplified PFPs cannot be used interchangeably.  [**read more**](http://www.mysprintt.eu/de/node/592) |
| [**Motor Performance and Physical Activity as Predictors of Prospective Falls in Community-Dwelling Older Adults by Frailty Level: Application of Wearable Technology**](http://www.mysprintt.eu/de/motor-performance-and-physical-activity-predictors-prospective-falls-community-dwelling-older-0)  **M.J. Mohler, C.S. Wendel , R.E. Taylor-Piliae et al.**  ***Gerontology. 2016 Apr 30. [Epub ahead of print]***  This study aimed to evaluate wearable sensor-based measures of gait, balance, and physical activity that are predictive of future falls in community-dwelling older adults. Results obtained suggests that independent predictors of falls are dependent on frailty status. Among sensor-derived parameters, balance deficit, longer typical walking episodes, and shorter typical standing episodes were the most sensitive predictors of prospective falls in the combined pre-frail and frail sample. Gait deficit was not a sensitive fall predictor in the context of frailty status.  [**read more**](http://www.mysprintt.eu/de/node/597) |
| [**Neuromuscular function in different stages of sarcopenia.**](http://www.mysprintt.eu/de/neuromuscular-function-different-stages-sarcopenia-0)  **T. Morat, K.J. Gilmore and C.L. Rice**  ***Exp Gerontol. 2016 Apr 20;81:28-36.***  This study applied the screening tool developed by the European Working Group on Sarcopenia in Older People (EWGSOP) on seniors aged over 65years and concurrently tested various laboratory-based indices of neuromuscular function. Based on gait speed, handgrip strength and muscle mass all subjects were categorized into one of the three conceptual sarcopenia stages (pre-sarcopenia, sarcopenia, severe sarcopenia). The laboratory tests found neuromuscular differences among the 3 groups which generally supported the classification scheme and helped to illustrate some key factors that could explain differences in functional capacities.  [**read more**](http://www.mysprintt.eu/de/node/602) |
| [**Macronutrients Intake and Incident Frailty in Older Adults: A Prospective Cohort Study**](http://www.mysprintt.eu/de/macronutrients-intake-and-incident-frailty-older-adults-prospective-cohort-study-0)  **H. Sandoval-Insausti, R.F. Pérez-Tasigchana, E. López-García, et al.**  ***J Gerontol A Biol Sci Med Sci 2016;00:1–6***  This study examined the association of protein and other macronutrient intake with the risk of frailty in older adults. Authors concluded that the intake of total protein, animal protein, and MUFAs was inversely associated with incident frailty. Promoting the intake of these nutrients might reduce frailty.  [**read more**](http://www.mysprintt.eu/de/node/607) |
| [**Development and validation of an electronic frailty index using routine primary care electronic health record data**](http://www.mysprintt.eu/de/development-and-validation-electronic-frailty-index-using-routine-primary-care-electronic-health)  **A. Clegg, C. Bates, J. Young, R.Ryan, et al.**  ***Age and Ageing 2016;0:1-8***  International guidelines recommend routine identification of frailty to provide evidence-based treatment, but currently available tools require additional resource. This retrospective cohort study wants to develop and validate an electronic frailty index (eFI), using routinely available primary care electronic health record data.  [**read more**](http://www.mysprintt.eu/de/node/612) |
| [**Differences in palliative care quality between patients with cancer, patients with organ failure and frail patients: A study based on measurements with the Consumer Quality Index Palliative Care for bereaved relatives**](http://www.mysprintt.eu/de/differences-palliative-care-quality-between-patients-cancer-patients-organ-failure-and-frail)  **J.M. Hofstede, N.J. Raijmakers, L.S. van der Hoek et al.**  ***Palliat Med. 2016 Jan 26. pii: 0269216315627123. [Epub ahead of print]***  The aim of this paper is to compare the quality of palliative care provided to patients with cancer, patients with organ failure and frail patients and their relatives. Compared with the bereaved relatives of patients with cancer, bereaved relatives of patients with organ failure or frailty were more likely to negatively assess the palliative care provided to both the patient and themselves.  [**read more**](http://www.mysprintt.eu/de/node/617) |
| [**Comparison of Handgrip and Leg Extension Strength in Predicting Slow Gait Speed in Older Adults**](http://www.mysprintt.eu/de/comparison-handgrip-and-leg-extension-strength-predicting-slow-gait-speed-older-adults-0)  **M.S. Fragala, D.E. Alley, M.D. Shardell et al.**  ***JAGS 2016;64:144–150***  This study aimed at comparing the relative predictive power of handgrip and leg extension strength in predicting slow walking.  Results suggest that handgrip strength may be an adequate measure to predict physical function whereas leg extension strength is only a slightly better predictor of slow gait speed.  [**read more**](http://www.mysprintt.eu/de/node/622) |
| [**Is Trunk Posture in Walking a Better Marker than Gait Speed in Predicting Decline in Function and Subsequent Frailty?**](http://www.mysprintt.eu/de/trunk-posture-walking-better-marker-gait-speed-predicting-decline-function-and-subsequent-frailty-0)  **R.A. Merchant, S. Banerji, G. Singh et al.**  ***J Am Med Dir Assoc. 2016;17(1):65-70***  Older adults are known to compensate well for declining physiological reserve through environmental modification and posture adaptation. This study aimed to analyze and identify significant posture adaptation in older adults that is required to maintain gait speed in the face of increasing vulnerability. Data of this study suggest that identifying trunk posture adaptation before the onset of decline in gait speed will help in planning interventions in the at-risk community-dwelling older adults even before gait speed declines.  [**read more**](http://www.mysprintt.eu/de/node/627) |
| [**What is a Clinically Meaningful Improvement in Leg-Extensor Power for Mobility-limited Older Adults?**](http://www.mysprintt.eu/de/what-clinically-meaningful-improvement-leg-extensor-power-mobility-limited-older-adults)  **D.R. Kirn, K.F. Reid, C. Hau et al.**  ***J Gerontol A Biol Sci Med Sci. 2016;71(5):632-6***  The purpose of this study is to establish the minimal clinically important improvement (MCII) and substantial improvement (SI) for leg-extensor power and muscle contraction velocity in mobility-limited older adults.  This is the first study to establish a clinically meaningful improvement of leg-extensor power (9%-10%) and velocity (6%-7%) in mobility-limited older adults  [**read more**](http://www.mysprintt.eu/de/node/632) |
| [**Dairy Consumption and Risk of Frailty in Older Adults: A Prospective Cohort Study.**](http://www.mysprintt.eu/de/dairy-consumption-and-risk-frailty-older-adults-prospective-cohort-study)  **A. Lana, F. Rodriguez-Artalejo and E. Lopez-Garcia**  ***J Am Geriatr Soc. 2015;63(9):1852-60***  Some studies have found positive effects of dairy consumption in older people, but the evidence base for this recommendation remains scarce. This study aimed to examining the association between consumption of dairy products and risk of frailty in community-dwelling older adults. Data obtained shown that higher consumption of low-fat milk and yogurt are associated with lower risk of frailty and, specifically, lower risk of slow walking speed and weight loss.  [**read more**](http://www.mysprintt.eu/de/node/637) |
| [**Sarco-Osteoporosis: Prevalence and Association with Frailty in Chinese Community-Dwelling OlderAdults**](http://www.mysprintt.eu/de/sarco-osteoporosis-prevalence-and-association-frailty-chinese-community-dwelling-olderadults)  **Y.J. Wang, Y. Wang, J.K. Zhan et al.**  ***Int J Endocrinol. 2015;2015:482940***  The study aimed to apply Asian Working Group for Sarcopenia (AWGS) proposed criteria to estimate the prevalence of sarco-osteoporosis and investigate its relationship with frailty, in a sample of 316 community-dwelling Chinese older people. The results indicate that patients with sarco-osteoporosis are more likely to be ≧ 80 years with higher burden of comorbidities and to have frailty/prefrailty, especially women.  [**read more**](http://www.mysprintt.eu/de/node/642) |
| [**Energetics of Aging and Frailty: The FRADEA Study.**](http://www.mysprintt.eu/de/energetics-aging-and-frailty-fradea-study)  **P. Abizanda, L. Romero, P.M. Sánchez-Jurado et al.**  ***J Gerontol A Biol Sci Med Sci. 2015;(00)00:1-10***  Resting metabolic rate (RMR) and total daily energy expenditure (TDEE) decrease with aging, but it is not known whether frailty modulates this association. Authors hypothesize that RMR and TDEE values are similar between younger and older nonfrail adults, whereas they are lower in older prefrail and frail compared with younger adults. This study shows that frailty status modulates the energy requirements of aging. Frail and prefrail older adults present lower eRMR than nonfrail adults.  [**read more**](http://www.mysprintt.eu/de/node/647) |
| [**Predictive validity of a two-step tool to map frailty in primary care**](http://www.mysprintt.eu/de/predictive-validity-two-step-tool-map-frailty-primary-care-0)  **J.A.L. van Kempen, H.J. Schers, I. Philp et al.**  ***BMC Medicine 2015;13:287***  EASY-Care Two step Older people Screening (EASY-Care TOS) is a stepped approach to identify frail older people at risk for negative health outcomes in primary care, and makes use of General Practitioners’ (GPs) readily-available information. This study aimed to determine the predictive value of EASY-Care TOS for negative health outcomes within the year from assessment. GPs applying the EASY-Care TOS procedure, where they only perform additional assessment when they judge this as necessary, can efficiently predict negative health outcomes in their older populations. Moreover, this evaluation is almost as accurate as a complete specialist comprehensive geriatric assessment (CGA).  [**read more**](http://www.mysprintt.eu/de/node/652) |
| [**Effects of physical exercise interventions in frail older adults: a systematic review of randomized controlled trials**](http://www.mysprintt.eu/de/effects-physical-exercise-interventions-frail-older-adults-systematic-review-randomized-controlled-0)  **C. de Labra, C. Guimaraes-Pinheiro, A. Maseda et al.**  ***BMC Geriatrics. 2015;15:154***  Physical exercise has demonstrated its beneficial effects in reducing the risk of many adverse outcomes, such as frailty. The major goal of this systematic review of randomized, controlled trials (RCTs) was to investigate the benefits of exercise programs in frail elderly people, considering only those studies where frailty had been defined. This systematic review suggested that frail older adults seemed to benefit from exercise interventions, although the optimal program remains unclear.  [**read more**](http://www.mysprintt.eu/de/node/657) |
| [**Association of habitual dietary resveratrol exposure with the development of frailty in older age: the Invecchiare in Chianti study**](http://www.mysprintt.eu/de/association-habitual-dietary-resveratrol-exposure-development-frailty-older-age-invecchiare-0)  **M. Rabassa, R. Zamora-Ros, M. Urpi-Sarda et al.**  ***Am J Clin Nutr 2015;102:1534–42***  Resveratrol may play a protective role against the frailty syndrome (FS) because of its antioxidant and anti-inﬂammatory properties. This study has prospectively evaluated the association between habitual dietary resveratrol exposure and the development of FS after 3-, 6-, and 9-years follow-up periods in a community-dwelling older population. This study has shown that higher habitual dietary resveratrol exposure was associated with lower risk of older community dwellers developing FS during the ﬁrst 3 years of follow-up but not after longer follow-up periods.  [**read more**](http://www.mysprintt.eu/de/node/662) |
| [**Caloric restriction and aerobic exercise in sarcopenic and non-sarcopenic obese women: an observational and retrospective study**](http://www.mysprintt.eu/de/caloric-restriction-and-aerobic-exercise-sarcopenic-and-non-sarcopenic-obese-women-observational-0)  **S. Barbat-Artigas, S. Garnier, S. Joffroy et al.**  ***J Cachexia Sarcopenia Muscle. 2015 Oct 15. doi: 10.1002/jcsm.12075. [Epub ahead of print]***  The objective of this observational and retrospective study was to verify the effect of a mixed weight loss programme combining caloric restriction and exercise on body composition, and lipid-lipoprotein profile of obese women according to their sarcopenic status. Data obtained suggest that a short weight loss programme combining caloric restriction and aerobic exercise may significantly reduce fat mass and improve lipid-lipoprotein profile in obese women, independently of their sarcopenic status. Such programmes may have deleterious effects on lean mass in non-sarcopenic obese subjects, only.  [**read more**](http://www.mysprintt.eu/de/node/667) |
| [**Accelerometer-determined physical activity, muscle mass, and leg strength in community-dwelling older adults**](http://www.mysprintt.eu/de/accelerometer-determined-physical-activity-muscle-mass-and-leg-strength-community-dwelling-older-0)  **Y.C. Foong, N. Chherawala, D. Aitken et al.**  ***J Cachexia Sarcopenia Muscle. 2015 Oct 15. doi: 10.1002/jcsm.12065. [Epub ahead of print]***  The aim of this study was to describe the relationship between accelerometer-determined physical activity (PA), muscle mass, and lower-limb strength in community-dwelling older adults. Using accelerometer technology, both the amount and intensity of accelerometer-determined PA had an independent, dose-response relationship with lean mass percentage and lower limb strength, with the largest effect for vigorous activity. Time spent in sedentary activity was negatively associated with lean mass percentage, but was not associated with lower limb strength. The magnitude of the association between PA and lean mass percentage decreased with age.  [**read more**](http://www.mysprintt.eu/de/node/697) |
| [**Prevalence and risk factors of sarcopenia among adults living in nursing homes**](http://www.mysprintt.eu/de/prevalence-and-risk-factors-sarcopenia-among-adults-living-nursing-homes-0)  **H. E. Senior, T. R. Henwood, E. M. Beller et al.**  ***Maturitas 2015; 82: 418–423***  Sarcopenia is a progressive loss of skeletal muscle and muscle function, with significant health and disability consequences for older adults. This study was aimed to evaluate the prevalence and risk factors of sarcopenia among older residential aged care adults using the European Working Group on Sarcopenia in Older People (EWGSOP) criteria.  [**read more**](http://www.mysprintt.eu/de/node/702) |
| [**Effects of a vitamin D and leucine-enriched whey protein nutritional supplement on measures of sarcopenia in older adults, the PROVIDE study: a randomized, double-blind, placebo-controlled trial**](http://www.mysprintt.eu/de/effects-vitamin-d-and-leucine-enriched-whey-protein-nutritional-supplement-measures-sarcopenia-0)  **J.M. Bauer, S. Verlaan, I. Bautmans et al.**  ***J Am Med Dir Assoc 2015;16:740-747***  This study was a multicenter, randomized, controlled, double-blind, 2 parallel-group trial among 380 sarcopenic primarily independent-living older adults. The aim of the study was to test the hypothesis that a specific oral nutritional supplement can result in improvements in measures of sarcopenia. Improvements in muscle mass and lower-extremity function were observed, suggesting that nutritional supplementation alone might benefit geriatric patients.  [**read more**](http://www.mysprintt.eu/de/node/672) |
| [**Nutritional, Physical, Cognitive and Combination Interventions and Frailty Reversal Among Older Adults: A Randomized Controlled Trial**](http://www.mysprintt.eu/de/nutritional-physical-cognitive-and-combination-interventions-and-frailty-reversal-among-older-0)  **T. P. Ng, L. Feng, M. ZinNyunt et al.**  ***Am J Med 2015;128:1225-1236 e1221***  This study aimed to assess the reversibility of frailty in 246 community-living prefrail and frail older people in Singapore (mean age: 70 years). Participants were randomly assigned to 5 different 6-month interventions: nutritional supplementation, physical training, cognitive training, combination treatment and usual care control. Frailty score, body mass index, knee extension strength, gait speed, energy/vitality, physical activity levels and secondary outcomes (activities of daily living dependency, hospitalization and falls) were assessed at 0, 3, 6 and 12 months. Frailty score and status over 12 months were reduced in all groups, but the reduction rates were significantly higher in the intervention groups compared with the usual care control group, with the combination intervention group showing the highest odds (OR 5.00). Beneficial effects persisted at 12 months.  [**read more**](http://www.mysprintt.eu/de/node/677) |
| [**Quality of life and physical components linked to sarcopenia: The SarcoPhAge study**](http://www.mysprintt.eu/de/quality-life-and-physical-components-linked-sarcopenia-sarcophage-study)  **C. Beaudart, J.Y .Reginster, J. Petermansd et al.**  ***Experimental Gerontology 2015;69: 103–110***  The SarcoPhAge project is an ongoing longitudinal study following community-dwelling elderly subjects; the aim of this study is to assess prevalence of sarcopenia and clinical components using the diagnosis algorithm developed by the European Working Group on Sarcopenia in Older People (EWGSOP). The authors concluded that sarcopenia seems to be associated with many harmful clinical components (for example frailty and polipharmacy) making this geriatric syndrome a real public health burden.  [**read more**](http://www.mysprintt.eu/de/node/682) |
| [**Polypharmacy and frailty: prevalence, relationship, and impact on mortality in a French sample of 2350 old people**](http://www.mysprintt.eu/de/polypharmacy-and-frailty-prevalence-relationship-and-impact-mortality-french-sample-2350-old-people)  **M. Herr, J.M. Robine, J. Pinot et al.**  ***Pharmacoepidemiology and drug safety 2015;24(6):637-46***  Polypharmacy is associated to several negative outcomes as drug-drug interactions and mortality. Frail older people often have multiple chronic conditions and may therefore be particularly at risk of polypharmacy. This cross-sectional population study aimed to assess the prevalence of polypharmacy and frailty, to examine their association, and to establish their independent and combined effects on mortality in a sample of 2350 French older people aged 70 years and over. This study emphasizes the importance of the combined effects of two prevalent condition in older people, polypharmacy and frailty, on mortality risk.  [**read more**](http://www.mysprintt.eu/de/node/688) |
| [**Association of Hearing Impairment With Incident Frailty and Falls in Older Adults.**](http://www.mysprintt.eu/de/association-hearing-impairment-incident-frailty-and-falls-older-adults)  **R.J. Kamil, J. Betz, B. Brott Powers et al.**  ***Journal of Aging and Health. 2015***  The hearing impairment (HI) is highly prevalent but undertreated in older adults and, although it contributes to frailty risk, it remains poorly studied. This study aimed at determining whether HI in older adults is associated with the development of frailty and falls. This study demonstrate that moderate or greater HI is associated with increased risk of developing frailty and that HI is associated with an increased annual risk of falling.  [**read more**](http://www.mysprintt.eu/de/node/692) |