index (BMI). For balance, chronological age was significant as a covariate ($P = 0.0001$) with increases in age associated with increases in balance. Boys had significantly better sprint technique compared to girls ($P = 0.012$) and increased BMI was associated with poorer sprint technique ($P = 0.001$). Boys' catching technique was significantly better than girls ($P = 0.003$) and children born in Q1 had significantly better catching technique than children born in Q2 ($P = 0.015$), Q3 ($P = 0.019$) and Q4 ($P = 0.01$). Results for throwing also indicated significantly better technique for boys compared to girls ($P = 0.013$), and that children born in Q1 had significantly better throwing technique than children born in Q4 ($P = 0.038$). These results are important if coaches and teachers are basing sport selection on measures of skilled performance, particularly in object-control skills. Furthermore, development of FMS may be linked to increased physical activity levels, and this should be further explored taking RAE into account. In conclusion, categorising children's skilled performance based on rounded down values of whole-year age may disadvantage children born relatively later in the selection year, whereas children born earlier in the selection year will likely evidence greater skill mastery and subsequent advantage for selection purposes.

D2.P5. Carrying shopping bags poses no additional fall risk to healthy older females as assessed by statistic and dynamic stability

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Food shopping is an important aspect of maintaining independence and social interaction in older age (AgeUK, 2012, *Food Shopping in Later Life*). Carrying the shopping bags home, however, may pose higher fall risk. Carriage of UK-style shopping bag alters the body's weight distribution by lowering the centre of gravity resulting in a more balanced static stance; however, when this stance is disturbed, it creates additional torsion which might make recovery difficult. The aim of the project, therefore, was to examine the effect of carrying shopping bags on static and dynamic postural stability in healthy older females aged over 65 years. Following institutional ethics approval, nine older females (aged 71 (*s* 5.9) years) performed both static and dynamic postural stability assessments carrying bags of varying loads and distributions (no bags, one 1.5-kg bag in each hand, one 3-kg bag in each hand, one 1.5-kg bag in preferred hand only, one 3-kg bag in preferred hand only; loads representing typical weight of essential shopping items) in a randomised order. For static postural stability assessment, participants stood quietly feet width apart on a force platform (AMTI, Massachusetts) for 30 s. Anteroposterior and mediolateral displacements, 95% ellipse area and sway velocity were calculated (BioAnalysis, Massachusetts). For dynamic postural stability, participants balanced on an uneven surface (Biodex, New York) for 30 s. Total anteroposterior and mediolateral displacements were calculated. Additionally, the load carried was quantified relative to handgrip strength (Takei Scientific Inst. Co. Ltd, Japan). A repeated measures analysis was used, and significance was set at $P < 0.05$. The heaviest load (3 kg in each hand, 6 kg in total) was 9.1% (range 7%–11%) of body mass. The heaviest load (3 kg in each hand) was 14.3% (range 9.8%–22.8%) of handgrip strength. Neither static nor dynamic postural stability were affected by carrying shopping bags. The postural stability variables assessed have been previously shown to be related to fall risk (Fernie et al., 1982, *Age and Ageing,* 11, 11–16). The present findings suggest that despite the disturbance caused by the additional load, carrying shopping bags either in one hand only or in both hands does not increase the fall risk in older females, as seen from the similar static and dynamic postural stability scores across conditions. These results should help to alleviate concerns regarding safety of carrying shopping bags, thereby reducing social isolation, maintaining independence and increasing physical activity (Hornyak et al., 2013, *Archives of Physical Medicine and Rehabilitation,* 94, 2529–2534).

D2.P6. Associations between body mass index, waist circumference, habitual physical activity and dynamic balance in adolescents

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Dynamic balance is a key sensorimotor skill related to performance of tasks of daily living and engagement in physical activity (PA). Despite this, data examining relations between dynamic balance, weight status and PA are lacking, particularly in children and adolescents (Hills et al., 2002, *Obesity Reviews*, 3, 35–43). The