

Appendix 1: Search strategy for each database

Database	Search String	Results
PubMed	(((((electronic track* OR electronic activ* AND track* OR electronic activ* AND monitor* OR electronic fitness track* OR wearable device OR wearable act* AND track* OR consumer wearable OR Fitbit OR Jawbone OR Nike Fuelband OR SenseWear OR PAM))) AND ((Intervention OR trial OR feasibility))) AND ((Child* OR Adolescent* OR youth))) AND ((Physical act* OR Exerc* OR Fitness OR Energy expenditure))	33
Scopus	(electronic track* OR electronic activ* AND track* OR electronic activ* AND monitor* OR electronic fitness track* OR wearable device OR wearable act* AND track* OR consumer wearable OR Fitbit OR Jawbone OR Nike Fuelband OR SenseWear OR PAM) AND (Intervention OR trial OR feasibility) AND (Child* OR Adolescent* OR youth) AND (Physical act* OR Exerc* OR Fitness OR Energy expenditure)	10
ProQuest Central	<u>all(electronic track* OR electronic activ* AND track* OR electronic activ* AND monitor* OR electronic fitness track* OR wearable device OR wearable act* AND track* OR consumer wearable OR fitbit OR Jawbone OR Nike fuelband OR SenseWear OR PAM) AND all(Intervention OR trial OR feasibility) AND all(Child* OR Adolescent* OR youth) AND all(Physical act* OR Exerc* OR Fitness OR Energy expenditure)</u>	114
Web of Science	TS=(electronic track* OR electronic activ* AND track* OR electronic activ* AND monitor* OR electronic fitness track* OR wearable device OR wearable act* AND track* OR consumer wearable OR fitbit OR Jawbone OR Nike fuelband OR Sensewear OR PAM) AND TS=(Intervention OR trial OR feasibility) AND TS=(Child* OR Adolescent* OR youth) AND TS=(Physical act* OR Exerc* OR Fitness OR Energy expenditure)	94
SPORTDiscus	AB ((electronic track* OR electronic activ* AND track* OR electronic activ* AND monitor* OR electronic fitness track* OR wearable device OR wearable act* AND track* OR consumer wearable OR fitbit OR Jawbone OR Nike fuelband OR Sensewear OR PAM)) AND AB ((Intervention OR trial OR feasibility)) AND AB ((Child* OR Adolescent* OR youth)) AND ((Physical act* OR Exerc* OR Fitness OR Energy expenditure))	8