

S1 Table. Search terms and results. Search terms implemented for all the databases and the number of results shown by hits.

Data Base	Hits	Search Terms
Scopus	3,260	TITLE-ABS-KEY ("Gene" OR "Genes" OR genetic* OR geno* OR genotype* OR mutation* OR phenotype* OR dna OR rna OR allele* OR chromosome* OR haplotype* OR haplogroup* OR snp* OR polymorphism* OR heterozygous OR homozygous OR "Deoxyribonucleic acid" OR "Ribonucleic acid" OR nucleotide OR "epigenetics" OR "methylation" OR "demethylation" OR "acetylation" OR "deacetylation") AND ("Exercise intervention" OR "Exercise training" OR "Exercise program*" OR "Exercise session" OR "Exercise regime*" OR "Training program*" OR "Training intervention" OR "Training session" OR "Training regime*" OR "Physical activity program*" OR "Physical activity intervention" OR "Physical activity session" OR "Fitness intervention" OR "Fitness program*" OR "Fitness training" OR "Sport* intervention" OR "Sport* training" OR "Training weeks" OR "Intervention weeks" OR "Exercise weeks") AND ("VO2*" OR "Cardiovascular endurance" OR "Aerobic fitness" OR "Maximal Aerobic Power" OR "Muscle strength" OR "1RM" OR "1 repetition maximum" OR "Anaerobic Power" OR "Peak power output" OR "PPO")
Web of Science	318	((TS=("Gene") OR TS=("Genes") OR TS=(Genotype*) OR TS=(Geno*) OR TS=(Mutation*) OR TS=(Phenotype*) OR TS=(DNA) OR TS=(RNA) OR TS=(Allele*) OR TS=(Chromosome*) OR TS=(Haplotype*) OR TS=(Haplogroup*) OR TS=(SNP*) OR TS=(Polymorphism*) OR TS=(Heterozygous) OR TS=(Homozygous) OR TS=(Deoxyribonucleic acid) OR TS=(Ribonucleic acid) OR TS=(Nucleotide) OR TS=(Epigenetics) OR TS=(Methylation) OR TS=(Demethylation) OR TS=(Acetylation) OR TS=(Deacetylation)) AND (TS=("Exercise intervention") OR TS=("Exercise training") OR TS=("Exercise program*") OR TS=("Exercise session") OR TS=("Exercise regime*") OR TS=("Training program*") OR TS=("Training intervention") OR TS=("Training session") OR TS=("Training regime*") OR TS=("Physical activity program*") OR TS=("Physical activity intervention") OR TS=("Fitness intervention") OR TS=("Fitness program*") OR TS=("Fitness training") OR TS=("Sport* intervention") OR TS=("Sport* training") OR TS=("Training weeks") OR TS=("Intervention weeks") OR TS=("Exercise weeks"))) AND (TS=("VO2*") OR TS=("Cardiovascular endurance") OR TS=("Aerobic fitness") OR TS=("Maximal Aerobic Power") OR TS=("Muscle strength") OR TS=("1RM") OR TS=("1 repartition maximum") OR TS=("Anaerobic Power") OR TS=("Peak power output") OR TS=("PPO"))))

Pubmed 180 (((("Gene"[Title/Abstract] OR "Genes"[Title/Abstract] OR Genetic*[Title/Abstract] OR Geno*[Title/Abstract] OR Genotype*[Title/Abstract] OR Mutation*[Title/Abstract] OR Phenotype*[Title/Abstract] OR DNA[Title/Abstract] OR RNA[Title/Abstract] OR Allele*[Title/Abstract] OR Chromosome*[Title/Abstract] OR Haplotype*[Title/Abstract] OR Haplogroup*[Title/Abstract] OR SNP*[Title/Abstract] OR Polymorphism*[Title/Abstract] OR Heterozygous[Title/Abstract] OR Homozygous[Title/Abstract] OR "Deoxyribonucleic acid"[Title/Abstract] OR "Ribonucleic acid" [Title/Abstract] OR Nucleotide[Title/Abstract] OR "Epigenetics"[Title/Abstract] OR "Methylation"[Title/Abstract] OR "Demethylation"[Title/Abstract] OR "Acetylation"[Title/Abstract] OR "Deacetylation"[Title/Abstract])) AND ("Exercise intervention"[Title/Abstract] OR "Exercise training"[Title/Abstract] OR "Exercise program*" [Title/Abstract] OR "Exercise session"[Title/Abstract] OR "Exercise regime*" [Title/Abstract] OR "Training program*" [Title/Abstract] OR "Training intervention"[Title/Abstract] OR "Training session"[Title/Abstract] OR "Training regime*" [Title/Abstract] OR "Physical activity program*" [Title/Abstract] OR "Physical activity intervention"[Title/Abstract] OR "Physical activity session"[Title/Abstract] OR "Fitness intervention"[Title/Abstract] OR "Fitness program*" [Title/Abstract] OR "Fitness training"[Title/Abstract] OR "Sport* intervention"[Title/Abstract] OR "Sport* training"[Title/Abstract] OR "Training weeks"[Title/Abstract] OR "Intervention weeks"[Title/Abstract])) AND ("VO2*" [Title/Abstract] OR "Cardiovascular endurance"[Title/Abstract] OR "Aerobic fitness"[Title/Abstract] OR "Maximal Aerobic Power"[Title/Abstract] OR "Muscle strength"[Title/Abstract] OR "1RM"[Title/Abstract] OR "Anaerobic Power"[Title/Abstract] OR "Peak power output"[Title/Abstract] OR "PPO"))

SPORTDisc 202 us ("Gene" OR "Genes" OR Genetic* OR Geno* OR Genotype* OR Mutation* OR Phenotype* OR DNA OR RNA OR Allele* OR Chromosome* OR Haplotype* OR Haplogroup* OR SNP* OR Polymorphism* OR Heterozygous OR Homozygous OR "Deoxyribonucleic acid" OR "Ribonucleic acid" OR Nucleotide OR "Epigenetics" OR "Methylation" OR "Demethylation" OR "Acetylation" OR "Deacetylation") AND ("Exercise intervention" OR "Exercise training" OR "Exercise program*" OR "Exercise session" OR "Exercise regime*" OR "Training program*" OR "Training intervention" OR "Training session" OR "Training regime*" OR "Physical activity program*" OR "Physical activity intervention" OR "Physical activity session" OR "Fitness intervention" OR "Fitness program*" OR "Fitness training" OR "Sport* intervention" OR "Sport* training" OR "Training weeks" OR "Intervention weeks" OR "Exercise weeks") AND ("VO2*" OR "Cardiovascular endurance" OR "Aerobic fitness" OR "Maximal Aerobic Power" OR "Muscle strength" OR "1RM" OR "Anaerobic Power" OR "Peak power output" OR "PPO")

-
- TITLE-ABS = title and abstract; TS = Topic; * = truncation; “ = phrase or joint word; ‘OR’ & ‘AND’ = Boolean operators/logic; HITS = number of results.