Supplementary Table S1. Database-specific search strategies used in the supplementary update search.

The supplementary update search was conducted following peer review to improve the sensitivity of the initial search. Search strategies were adapted to the syntax of each database while preserving the same conceptual framework. The search covered publications from 1 January 2021 through 31 July 2026 and was restricted to English-language human studies.

Database	Supplementary search strategy	Limits	Records identified
PubMed	(choriocapillaris[tiab] OR "retinal blood flow"[tiab] OR "retinal perfusion"[tiab] OR "perfusion density"[tiab] OR "vessel density"[tiab] OR "capillary density"[tiab] OR "retinal oximetry"[tiab]) AND ("physical activity"[tiab] OR exercise[tiab] OR "physical fitness"[tiab] OR "cardiorespiratory fitness"[tiab] OR HIIT[tiab] OR "resistance training"[tiab] OR "circuit training"[tiab] OR yoga[tiab] OR meditation[tiab])	1 Jan 2021–31 Jul 2026; English; humans	84
Scopus	TITLE-ABS-KEY (choriocapillaris OR "retinal blood flow" OR "retinal perfusion" OR "perfusion density" OR "vessel density" OR "capillary density" OR "retinal oximetry") AND TITLE-ABS-KEY ("physical activity" OR exercise OR "physical fitness" OR "cardiorespiratory fitness" OR HIIT OR "resistance training" OR "circuit training" OR yoga OR meditation)	2021–2026; English; humans	205
Web of Science	TS=(choriocapillaris OR "retinal blood flow" OR "retinal perfusion" OR "perfusion density" OR "vessel density" OR "capillary density" OR "retinal oximetry") AND TS=("physical activity" OR exercise OR "physical fitness" OR "cardiorespiratory fitness" OR HIIT OR "resistance training" OR "circuit training" OR yoga OR meditation)	2021–2026; English; humans	302

Overall yield: 591 records were identified (PubMed, n = 84; Scopus, n = 205; Web of Science, n = 302). After removal of 256 duplicate records, 335 unique records remained for screening. The supplementary update search contributed 22 additional eligible publications to the final qualitative synthesis.