

**Supplementary Table 1** Risk of bias assessment, participant and study characteristics of included studies

Study	Risk of bias assessment criteria						Participant characteristics					Study protocol				
	A	B	C	D	E	Total	n (total)	n (male)	n (female)	Age	Level	Sport	Load	Duration (weeks)	Subjective measure	Objective measure
Berger et al.[58]	1	1	2	2	1	7	8	8	0	Young adult	Elite	Ind	Acute (E)	6	POMS	Physiol, Perf
Bosquet et al.[59]	1	1	2	2	0	6	10	10	0	Adult	Region	Ind	Acute (E)	6	SFMS	Physiol, Perf
Bresciani et al.[95]	1	1	2	2	1	7	14	14	0	Young adult	Sub-elite	Team	Chronic (O)	40	POMS, RESTQ-S	Bio (B)
Burrows et al.[96]	1	1	2	1	0	5	20	0	20	Mixed	Region	Ind	Chronic (O)	12	Mood	Bio (S)
Chennaoui et al.[34]	1	1	1	1	0	4	8	?	?	Adult	?	Ind	Ramadan (O)	6	POMS	Bio (B)
Chtourou et al.[35]	1	1	1	1	0	4	20	20	0	Adolescent	Region	Team	Ramadan (O)	4	POMS	Perf
Coutts & Reaburn[52]	1	1	1	2	1	6	20	20	0	Adult	Prof	Team	Acute (E)	7	RESTQ-S	Perf
Coutts et al.[57]	1	1	2	2	1	7	16	16	0	Adult	Sub-elite	Ind	Acute (E)	6	DALDA	Physiol, Perf
Coutts et al.[48]	1	1	2	2	1	7	16	16	0	Adult	Sub-elite	Ind	Acute (E)	6	RESTQ	Bio (B), Perf
Dodson[72]	0	1	1	0	1	3	10	?	?	Young adult	Region	Ind	Chronic (O)	12	RESTQ-S	Bio (S)
Eloumi et al.[76]	1	1	1	1	0	4	20	20	0	Adult	Prof	Team	Chronic (O)	14	SFMS	Bio (S), Perf
Faude et al.[69]	1	1	1	2	1	6	15	?	?	Young adult	Prof	Team	Chronic (O)	44	RESTQ-S	Perf
Filaire et al.[73]	1	1	1	1	1	5	17	17	0	Adult	Prof	Team	Chronic (O)	32	POMS	Bio (S), Perf
Filaire et al.[71]	1	1	1	2	1	6	7	0	7	Adolescent	Sub-elite	Ind	Chronic (O)	28	RESTQ-S	Bio (U), Perf
Filaire et al.[70]	1	1	2	2	1	7	12	0	12	Adolescent	Sub-elite	Ind	Chronic (O)	16	RESTQ-S	Bio (S)
Filaire et al.[24, 25]	1	1	1	2	1	6	12	12	0	Young adult	Sub-elite	Ind	Acute (O)	32	POMS, SFMS	Bio (S,U)
Filaire et al.[97]	1	1	1	2	1	6	12	0	12	Adolescent	Sub-elite	Ind	Chronic (O)	20	POMS	Bio (S)
Garatachea et al.[98]	1	1	1	2	1	6	8	5	3	Adolescent	Elite	Ind	Chronic (O)	42	POMS, RESTQ-S	Bio (B)
Gleeson et al.[99]	1	1	1	2	0	5	26	15	11	Young adult	Elite	Ind	Chronic (O)	28	STAI	Bio (S)
Gonzalez-Bono et al.[100]	1	1	1	2	1	6	20	20	0	Young adult	Prof	Team	Chronic (O)	16	POMS	Bio (B)
Halsou et al.[26, 27]	1	1	1	2	0	5	8	8	0	Adult	Region	Ind	Acute (E)	6	POMS,	Bio (B,S),

Study	Risk of bias assessment criteria						Participant characteristics					Study protocol					
	A	B	C	D	E	Total	n (total)	n (male)	n (female)	Age	Level	Sport	Load	Duration (weeks)	Subjective measure	Objective measure	
															DALDA	Perf	
Hooper et al.[65]	1	1	1	2	1	6	27	12	15	Mixed	Region	Ind	Acute (E)	6	POMS	Perf	
Jones et al.[101]	1	2	1	2	0	6	75	0	75	Young adult	Region	Team	Chronic (O)	14	POMS	Perf	
Jurimae et al.[51]	1	1	1	2	1	6	10	10	0	Adolescent	Sub-elite	Team	Acute (E)	1	RESTQ-S	Bio (B), Perf	
Jurimae et al.[50]	1	1	1	2	1	6	21	21	0	Young adult	Sub-elite	Team	Acute (E)	1	RESTQ-S	Bio (B), Perf	
Kellmann et al.[53]	1	2	1	2	1	7	54	30	24	Adolescent	Elite	Team	Acute (O)	6	POMS, RESTQ-S	Bio (B), Perf	
Kentta et al.[102]	1	1	1	2	1	6	11	6	5	Young adult	Elite	Team	Acute (O)	3	POMS	Perf	
Koutedakis et al.[66]	1	1	1	1	1	5	12	?	?	Adult	Elite	Ind	Acute (E)	5	POMS	Perf	
Kumae et al.[75]	1	1	1	0	0	3	19	19	0	Young adult	Elite	Ind	Chronic (O)	24	POMS	Bio (B)	
Lamberts et al.[103]	1	0	1	2	1	5	1	?	?	Adult	Elite	Ind	Chronic (O)	10	DALDA	Perf	
Leti & Bricout[104]	1	1	1	1	0	4	10	10	0	Masters	Trained	Ind	Chronic (O)	12	POMS, SFMS	Physiol	
Liederbach et al.[78]	1	1	2	2	1	7	12	6	6	Adult	Prof	Ind	Chronic (O)	5	POMS	Bio (U)	
Maestu et al.[49]	1	1	1	2	1	6	12	12	0	Young adult	Elite	Team	Chronic (O)	6	RESTQ-S	Bio (B), Perf	
Main et al.[105]	1	1	2	2	0	6	8	8	0	Adult	Elite	Team	Chronic (O)	8	MTDS	Bio (B), Perf	
Main et al.[56]	1	1	1	2	0	5	8	4	4	Young adult	Sub-elite	Team	Chronic + acute (O)	8	PSS	Bio (B)	
Martin et al.[54]	1	1	1	2	1	6	11	11	0	Young adult	Region	Ind	Acute (E)	10	POMS	Bio (B), Perf	
Milanez et al.[106]	1	1	2	2	0	6	13	0	13	Young adult	Prof	Team	Chronic (O)	5	DALDA	Bio (S)	
Murphy et al.[107]	1	1	1	2	0	5	15	8	7	Adult	Elite	Ind	Acute (E)	10	POMS, CSAI-2, DSC, STPI	Perf	
O'Connor et al.[64]	1	1	0	1	1	4	14	0	14	Young adult	Region	Ind	Acute (O)	22	POMS	Bio (S)	
O'Connor et al.[67]	1	1	1	2	1	6	40	22	18	Young adult	Region	Ind	Acute (O)	4	POMS	Bio (S), Perf	
O'Connor et al.[62]	1	1	1	2	1	6	40	22	18	Young adult	Region	Ind	Acute (E)	1	POMS	Bio (S), Perf	

Study	Risk of bias assessment criteria						Participant characteristics					Study protocol					
	A	B	C	D	E	Total	n (total)	n (male)	n (female)	Age	Level	Sport	Load	Duration (weeks)	Subjective measure	Objective measure	
Papacosta et al.[108]	1	1	2	2	0	6	11	11	0	Young adult	Region	Ind	Acute (E)	5	POMS	Bio (S), Perf	
Purge et al.[109]	1	1	2	2	1	7	11	11	0	Young adult	Elite	Team	Chronic + acute (O)	24	RESTQ-S	Bio (B), Perf	
Raglin et al.[63]	1	1	1	1	1	5	12	0	12	Young adult	Region	Ind	Chronic (O)	16	POMS	Perf	
Rama et al.[77]	1	1	1	1	0	4	13	13	0	Young adult	Elite	Ind	Chronic (O)	7	POMS	Bio (B,S), Physiol	
Robson-Ansley et al.[60]	1	1	1	1	0	4	8	8	0	Adult	Region	Ind	Acute (E)	4	DALDA	Bio (B,S)	
Rollo et al.[110]	1	1	1	1	1	5	30	30	0	Young adult	Sub-elite	Team	Chronic (O)	6	RESTQ-S	Perf	
Rouveix et al.[74]	1	1	2	2	1	7	7	0	7	Adolescent	Elite	Ind	Chronic (O)	28	POMS	Bio (U), Perf	
Santhiago et al.[111]	1	1	2	2	0	6	10	0	10	Young adult	Elite	Ind	Chronic + acute (O)	14	POMS	Bio (B), Perf	
Schultz de Arruda et al.[112]	1	1	1	0	1	4	12	0	12	Adult	Elite	Team	Chronic (O)	6	POMS	Bio (S)	
Silva et al.[113]	1	1	1	2	0	5	15	15	0	Adult	Prof	Team	Chronic (O)	12	POMS	Bio (B), Perf	
Umeda et al.[61]	1	1	1	2	0	5	13	0	13	Young adult	Region	Ind	Acute (O)	1	POMS	Bio (B)	
Verde et al.[55]	1	1	1	2	0	5	10	10	0	Adult	Region	Ind	Acute (E)	9	POMS	Bio (B), Perf	
Wallace et al.[114]	1	1	0	1	1	4	7	?	?	Adult	Trained	Ind	Chronic (O)	15	POMS	Physiol, Perf	
Wittig et al.[115]	1	1	1	1	0	4	10	10	0	Adult	Region	Ind	Acute (E)	8	POMS	Perf	
Wood et al.[116]	1	0	1	2	1	5	1	1	0	Adult	Region	Ind	Chronic (O)	12	POMS	Perf	

Abbreviations: professionals (Prof), individual (Ind), observational study (O), experimental study (E), biochemical (Bio) from blood (B), saliva (S), or urine (U), physiological (Physiol), and performance (Perf).