

Summary of Findings:

Summary of Findings table 1: Exercise as treatment for premenstrual syndrome?

Population: Patients with premenstrual syndrome

Intervention: Exercise or exercise program

Comparison: No exercise, no exercise program or placebo intervention

Outcome		Study results and measurements	Absolute effect estimates	Certainty of the Evidence (Quality of evidence)	Summary
Total PMS symptoms measured with DRSP (critical)		Based on data of 0 participants in 0 studies	-	No GRADE	No evidence was found regarding the effect of exercise on total PMS symptoms when compared with no exercise in patients with PMS.
PMS symptoms (important)	Total	Measured with various scales A lower score is better Based on data of 134 participants in 4 studies	Standardized mean difference: 1.55 lower (95% CI 2.92 lower - 0.19 lower)	Very low Due to serious risk of bias, serious inconsistency and serious imprecision ²	The evidence is very uncertain about the effect of exercise on total PMS symptoms when compared with no exercise in patients with PMS. (Abic 2014, Samadi 2013, Yang and Kim 2016, Zoodfekr 2017)
	Physical	Measured with various scales A lower score is better Based on data of 257 participants in 4 studies	Standardized mean difference: 2.17 lower (95% CI 3.52 lower - 0.82 lower)	Low Due to serious risk of bias and serious imprecision ³	Exercise may result in less physical PMS symptoms when compared with no exercise in patients with PMS. (Jafernajad 2016, Kamalifard 2017, Samadi 2013, Tonekaboni 2012)
	Psychological	Measured with various scales A lower score is better Based on data of 291 participants in 5 studies	Standardized mean difference: 1.99 lower (95% CI 2.71 lower - 1.27 lower)	Low Due to serious risk of bias and serious imprecision ³	Exercise may result in less psychological PMS symptoms when compared with no exercise in patients with PMS. (Abic 2024, Jafernajad 2016, Kamalifard 2017, Samadi 2013, Tonekaboni 2012)

Quality of life (important)	Based on data of 0 participants in 0 studies	-	No GRADE	No evidence was found regarding the effect of exercise on quality of life when compared with no exercise in patients with PMS.
--------------------------------	---	---	-----------------	--

Abbreviations: CI: Confidence Interval, DRSP: Daily Record of Severity of Problems, PMS: PreMenstrual Syndrome.

- 1 Risk of bias: serious. Due to limitations in study designs.
Imprecision: very serious. Due to low number of participants in only one study.
- 2 Risk of bias: serious. Due to limitations in the study designs.
Inconsistency: serious. Due to conflicting results.
Imprecision: serious. Due to low number of participants.
- 3 Risk of bias: serious. Due to limitations in the study designs.
Imprecision: serious. Due to low number of participants.

Summary of Findings table 2: Diet as treatment for premenstrual syndrome?

Population: Patients with premenstrual syndrome

Intervention: Diet

Comparison: No diet or placebo intervention

Outcome		Study results and measurements	Absolute effect estimates	Certainty of the Evidence (Quality of evidence)	Summary
Total PMS symptoms measured with DRSP (critical)		Measured with DRSP A lower score is better Based on data of 72 participants in 1 study	Mean difference: 30 lower (95% CI 36 lower - 23 lower)	Low Due to serious risk of bias and serious imprecision ¹	Diet may result in less PMS symptoms when compared with no diet in patients with PMS. (Al Kiyumi 2023)
PMS symptoms (important)	Total	Measured with various scales A lower score is better Based on data of 103 participants in 2 studies	Standardized mean difference: 1.56 lower (95% CI 3.91 lower - 0.80 higher)	Very low Due to serious risk of bias and very serious imprecision ²	The evidence is very uncertain about the effect of diet on total PMS symptoms when compared with no diet in patients with PMS. (Al Kiyumi 2023, Yurt 2020)
	Physical	Based on data of 0 participants in 0 studies	-	No GRADE	No evidence was found regarding the effect of diet on physical PMS symptoms when compared with no diet in patients with PMS.
	Psycho-logical	Measured with PSS A lower score is better Based on data of 72 participants in 1 study	Mean difference: 1.19 higher (95% CI 0.88 lower - 1.50 lower)	Very low Due to serious risk of bias and very serious imprecision ³	The evidence is very uncertain about the effect of diet on psychological PMS symptoms when compared with no diet in patients with PMS. (Al Kiyumi 2023)
Quality of life (important)		Measured with SF-36 Scale 0 to 100 A higher score is better	Physical health: Mean difference: 9.90 higher (95%CI 5.04 higher - 14.76 higher)	Very low Due to serious risk of bias and very serious imprecision ⁴	The evidence is very uncertain about the effect of exercise or diet on quality of life when compared with no exercise or diet in patients with PMS. (Yurt 2020)

	Based on data of 31 participants in 1 study	Mental health: Mean difference: 7.00 higher (95%CI 1.36 higher - 12.64 higher)		
--	---	--	--	--

Abbreviations: CI: Confidence Interval, DRSP: Daily Record of Severity of Problems, PMS: PreMenstrual Syndrome, SF-36: Short Form 36.

1 Risk of bias: serious. Due to limitations in study designs.

Imprecision: very serious. Due to low number of participants in only one study.

2 Risk of bias: serious. Due to limitations in the study designs.

Imprecision: very serious. Due to low number of participants and overlap with the limits of the 95% confidence interval of the minimal clinically important difference.

3 Risk of bias: serious. Due to limitations in the study designs.

Imprecision: very serious. Due to low number of participants in only study and overlap with the upper limit of the 95% confidence interval of the minimal clinically important difference.

4 Risk of bias: serious. Due to limitations in the study designs.

Imprecision: very serious. Due to low number of participants and optimal information size is not reached