

**Background:** During heart surgery a solution called cardioplegia is used to keep the heart still. Previous research suggested that adding a drug called propofol to the cardioplegia solution during heart surgery may protect the heart muscle and reduce damage. Propofol is widely used as a general anaesthetic.

**Aim:** We wanted to investigate whether adding propofol to the cardioplegia solution during heart surgery is beneficial and if the benefit is greater the more propofol is used.

**Method:** This trial recruited a total of 240 participants who were split into three groups randomly, so that each participant had an equal chance of being in any group. The three groups were: low dose propofol supplementation, high dose propofol supplementation and no propofol at all (a placebo using saline instead of propofol). Participants were asked to provide blood samples so we could measure any damage to their heart, and to complete a questionnaire before surgery and at 3 months and 12 months after their surgery so we could measure how well they recovered, and their health-related quality of life.

**Results & Conclusions:** The findings show that although adding propofol to the cardioplegia solution at both doses was safe, it did not protect the heart muscles. The findings from the questionnaires revealed that there were no differences between groups in terms of health-related quality of life.

**Please note: the citation will be added here in due course.**