**Supplemental table 2:** Evaluation of the risk of bias for the included articles (Yes; low risk of bias, No; high risk of bias, Unclear; Unclear risk of bias)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | SYRCLES items with signalling questions | | | | | | | | | |
|  | 1. Sequence generation (selection bias) | 2. Baseline characteristics (selection bias) | 3. Allocation concealment (selection bias) | 4. Random housing (performance bias) | 5. Blinding (performance bias) | 6. Random outcome assessment (detection bias) | 7. Blinding (detection bias) | 8. Incomplete outcome data (attrition bias)\* | 9. Selective outcome reporting (reporting bias) | 10. Other sources of bias |
|  | Was the allocation sequence adequately generated and applied? | Were the groups similar at baseline, or were they adjusted for confounders in the analysis? | Was the allocation adequately concealed? | Were the animals randomly housed during the experiment? | Were the caregivers and/or investigators blinded from knowledge which intervention each animal received during the experiment? | Were animals selected at random for outcome assessment? | Was the outcome assessor blinded? | Were incomplete outcome data adequately addressed? | Are reports of the study free of selective outcome reporting? | Was the study apparently free of other problems that could result in a high risk of bias? |
| **(**[**33**](#_ENREF_33)**)** | Unclear | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| **(**[**40**](#_ENREF_40)**)** | Unclear | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| **(**[**31**](#_ENREF_31)**)** | Unclear | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| **(**[**32**](#_ENREF_32)**)** | Unclear | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| **(**[**37**](#_ENREF_37)**)** | Unclear | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| **(**[**38**](#_ENREF_38)**)** | Unclear | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| **(**[**39**](#_ENREF_39)**)** | Unclear | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| **(**[**36**](#_ENREF_36)**)** | Unclear | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| **(**[**35**](#_ENREF_35)**)** | Unclear | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| **(**[**41**](#_ENREF_41)**)** | Unclear | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| **(**[**42**](#_ENREF_42)**)** | Unclear | Unclear | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |
| ([34](#_ENREF_34)) | Unclear | Yes | Unclear | Yes | Unclear | Unclear | Unclear | Yes | Unclear | Unclear |

\*For main outcome in the present systematic review and meta-analysis, i.e., serum/plasma total cholesterol concentration