

INPLASY

Effectiveness of Sucrosomial® and various Liposomal Iron Supplements as Alternatives to Conventional Iron Supplements in terms of Iron Status: A Review.

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Bauer, D.; Laumen, A. S.; Renner, O.

Corresponding author:

Daniel Bauer

bauerdaniel1912@googlemail.com

Author Affiliation:

Hochschule Niederrhein.

ADMINISTRATIVE INFORMATION

Support - No financial support.

Review Stage at time of this submission - Formal screening of search results.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 26 June 2026 and was last updated on 26 June 2026.

INTRODUCTION

Review question / Objective Are liposomal or sucrosomial iron formulations effective as an alternative to conventional iron supplements in terms of iron status for all groups of people, with or without iron-deficiency-anemia (IDA) or non-anaemic-iron-deficiency (NAID), and without any underlying medical condition like for example CKD, IBD, Celiac Disease or Oncology? Can those formulations be seen as an alternative to conventional ones? What does the study situation say about that? Effectiveness measured in change of known blood parameters for iron status and anaemia. Possible side effects (mainly gastroenterological) compared to conventional supplements?:

Condition being studied Effectiveness of Sucrosomial® and various Liposomal Iron Supplements, review of the study situation.

METHODS

Search strategy Databases: PubMed, WebOfScience, ScienceDirect, PRISMA Guidelines.

Participant or population All groups of people, including adults, children, toddlers, and infants, regardless of gender; pregnant women and women in the postpartum period, with or without iron-deficiency-anemia (IDA) or non-anaemic-iron-deficiency (NAID), and without any underlying medical condition like for example CKD, IBD, Celiac Disease or Oncology.

Intervention Sucrosomial® and/or various Liposomal Iron Supplements, Vitamin C addition is allowed. Combinations with Vitamin B12, Folic Acid, Vitamin B6 and maybe other relevant nutrients for hämoglobin-synthesis or erythropoesis are excluded.

Iron-Enriched food or food products are also excluded.

Comparator Conventional Iron supplements (oral and intravenous) or placebo.

Combinations with Vitamin B12, Folic Acid, Vitamin B6 and maybe other relevant nutrients for h moglobin-synthesis or erythropoiesis are excluded.

Iron-Enriched food or food products are also excluded.

Study designs to be included RCT, CT, non-controlled intervention trials, observational trials, pilot trials.

Eligibility criteria Published and peer-reviewed RCT, CT, non-controlled intervention trials, observational trials, pilot trials.

All groups of people, including adults, children, toddlers, and infants, regardless of gender; pregnant women and women in the postpartum period, with or without iron-deficiency-anemia (IDA) or non-anaemic-iron-deficiency (NAID), and without any underlying medical condition like for example CKD, IBD, Celiac Disease or Oncology.

Trials measuring no relevant blood parameters for iron status/anaemia are excluded.

Supplement-Combinations (for Intervention or Comparison) with Vitamin B12, Folic Acid, Vitamin B6 or maybe other relevant nutrients for h moglobin-synthesis or erythropoiesis are excluded.

Iron-Enriched food or food products are also excluded.

Information sources PubMed, WebOfScience, ScienceDirect.

Main outcome(s) In Progress.

Quality assessment / Risk of bias analysis

Systematic Research and extraction, followed by a structured narrative synthesis of the methods used in the identified trials.

Risk of bias in progress.

Strategy of data synthesis Systematic Research and extraction, followed by a structured narrative synthesis of the methods used in the identified trials.

Subgroup analysis None reported.

Sensitivity analysis None reported.

Language restriction Main Language: English, but no language is excluded.

Country(ies) involved Germany.

Keywords Iron, Iron Deficiency, Iron-Deficiency-Anaemia, Liposomal Iron, Sucrosomial Iron, Supplementation, Non-Anaemic-Iron-Deficiency, Microencapsuled Iron, Microencapsuled Ferric Pyrophosphate, Liposomes.

Contributions of each author

Author 1 - Daniel Bauer.

Email: bauerdaniel1912@googlemail.com

Author 2 - Annika Laumen.

Email: annika.laumen@hs-niederrhein.de

Author 3 - Olga Renner.

Email: olga.renner@hs-niederrhein.de