Study Eligibility Criteria.

Inclusion Criteria
• Healthy female participants > 18 years old • Premenopausal (experiencing regular menstrual cycles) • Hemoglobin > 11.0 g/dL • Serum ferritin < 70 ng/mL • C-reactive protein (CRP) < 3 mg/L • BMI 18-29 kg/m^2 • No intake of dietary supplements containing iron 30 days prior to enrollment • Willing and able to give written informed consent • Able to read, understand, sign and date the informed consent document (English only) • Able and willing to comply with the schedule visit(s) and study requirements
Exclusion Criteria
• Currently taking (within the past 14 days) dietary supplements including, vitamins (any), minerals, protein shakes, vitamin water, other supplements • History of gastrointestinal disorders that could lead to uncertain absorption of the study supplements, (i.e., inflammatory bowel disease, ulcerative colitis, Crohn's disease, colostomy, or eating disorder) • History or current malignancy • Receiving chemotherapy agents or radiation treatments • Prior health issues showing high CRP or other inflammatory markers • Pregnancy or has breast fed within 3 months prior to enrollment • BMI <18 or >30 kg/m^2 • Diagnosis of a terminal illness • Use of prescription medications that impact digestion (i.e., proton pump inhibitor medications, other) • History of alcohol abuse • History or current drug abuse • History or current cigarette smoke (including vaping) within the past 14 days from the screening visit • Insulin-dependent diabetes and/or metformin use • Chronic kidney or liver disease • Anemia • Has significant concurrent illnesses (controlled or uncontrolled), such as diabetes, lupus, epilepsy, or cardiac disorders, hepatitis B/C, HIV, serious mental health illness such as dementia or schizophrenia; psychiatric hospitalization in the past two years, or other, which in the opinion of the investigator, such condition might be aggravated because of treatment • The investigator feels that for any reason the participant is not eligible to participate in the study • History of uncontrolled cardiovascular disease (i.e., myocardial infarction, hypertension, hypercholesterolemia, peripheral vascular disease, other) • History of or current bleeding disorders (i.e., hemophilia or von Willebrand disease), or anticipated treatment with prescription anticoagulants • Developmental disability or cognitive impairment that would preclude adequate comprehension of the informed consent form and/or ability to follow study participant requirement and/or record the necessary study measurements • A family member of the investigator or an employee of the investigator • Participation in any other investigational study within 30 days prior to consent