Web Table 1. Comparison of Fecundability Odds Ratios (FOR) for Fat-Soluble Micronutrients and Time to Pregnancy (TTP) Obtained From Complete-Case Analysis and Several Different Methods of Imputing Outcome Information on 128 Women Who Withdrew Early From the Study

Micronutrient	Complete-Case ^a	Survival Probability Using Kaplan-Meier MI ^b	Pregnant in 1 Cycle After Withdrawal ^c	Not Pregnant ^d
	FOR (95% CI)	FOR (95% CI)	FOR (95% CI)	FOR (95% CI)
Zeaxanthin (µg/dL)	1.12 (0.89, 1.39)	1.05 (0.85, 1.31)	1.00 (0.81, 1.24)	1.17 (0.94, 1.46)
Cryptoxanthin (µg/dL)	1.06 (0.88, 1.28)	1.03 (0.86, 1.23)	1.01 (0.85, 1.21)	1.08 (0.90, 1.30)
Lycopene (µg/dL)	1.19 (0.99, 1.43)	1.18 (0.99, 1.41)	1.17 (0.99, 1.38)	1.18 (0.99, 1.42)
α -Carotene ($\mu g/dL$)	1.17 (1.00, 1.36)	1.08 (0.93, 1.26)	1.05 (0.90, 1.21)	1.22 (1.05, 1.42)
β -Carotene (μ g/dL)	1.12 (0.98, 1.28)	1.04 (0.92, 1.19)	1.02 (0.90, 1.15)	1.18 (1.04, 1.35)
α -Tocopherol ($\mu g/dL$)	1.23 (0.85, 1.78)	1.17 (0.82, 1.67)	1.14 (0.81, 1.61)	1.29 (0.90, 1.86)
γ -Tocopherol ($\mu g/dL$)	0.83 (0.62, 1.11)	0.89 (0.67, 1.18)	0.94 (0.71, 1.23)	0.79 (0.59, 1.05)

CI, confidence interval; FOR, fecundability odds ratio; MI, multiple imputation.

^a Potential pregnancy outcomes of women who withdrew early were not imputed.

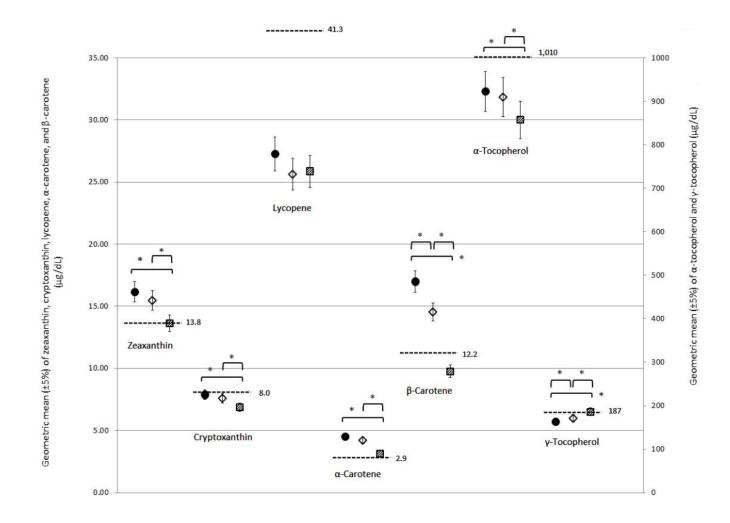
^b Potential pregnancy outcomes of women who withdrew early were imputed using the survival probability derived from the complete case analysis using Kaplan-Meier multiple imputation (1,000 imputations).

^c Potential pregnancy outcomes of women who withdrew early were imputed assuming they achieved pregnancy in the cycle after withdrawal.

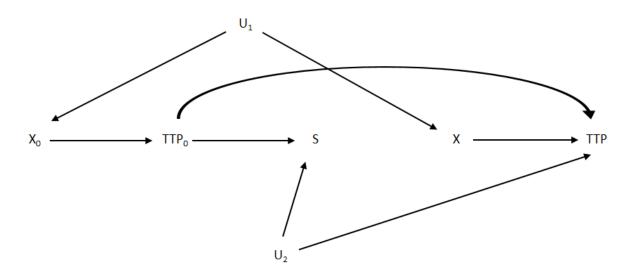
^d Potential pregnancy outcomes of women who withdrew early were imputed assuming they did not achieve pregnancy after six cycles.

Note: Fat soluble micronutrient concentrations were log-transformed. All models adjusted for (year), body mass index (kg/m²), race (white or non-white), cigarette smoking (never, few, or daily), alcohol (never, sometimes, or often), physical activity (high, moderate, or low), income (<\$20,000, \$20,000-\$40,000, \$40,000-\$75,000, \$75,000-\$100,000, or >\$100,000), vitamin use (yes or no), total cholesterol concentration (mg/dL), treatment arm (low dose aspirin or placebo), and study sites.

Web Figure 1. Comparison of fat-soluble micronutrients by pregnancy status measured in the Effects of Aspirin in Gestation and Reproduction (EAGeR) trial (N = 1,207) and the National Health and Nutrition Examination Survey (NHANES), 2005–2006. Closed circle, pregnant women (n = 787); open diamond, nonpregnant women (n = 294); shaded square, women who withdrew (n = 126).



Web Figure 2. Directed acyclic graphs illustrating potential associations between preconception fat-soluble micronutrients and time to pregnancy (TTP) in the EAGeR Trial.



X: Current serum micronutrient concentrations

X₀: Past serum micronutrient concentrations

S: Reproductive history (EAGeR enrollment criteria)

TTP: Prospective time to pregnancy (study outcome)

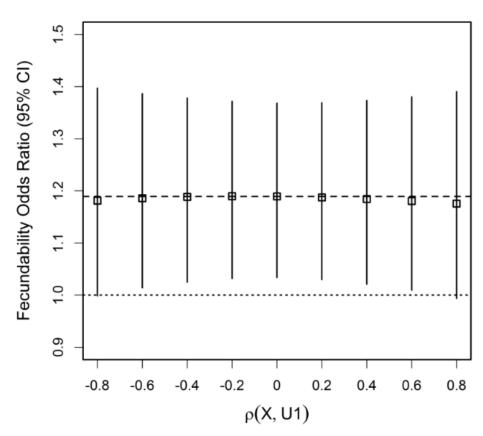
TTP₀: Past time to pregnancy

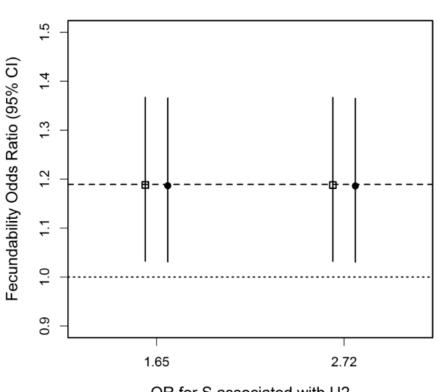
U1: Unmeasured confounder (e.g., dietary behavior)

U₂: Unmeasured confounder (e.g., genetic factor)

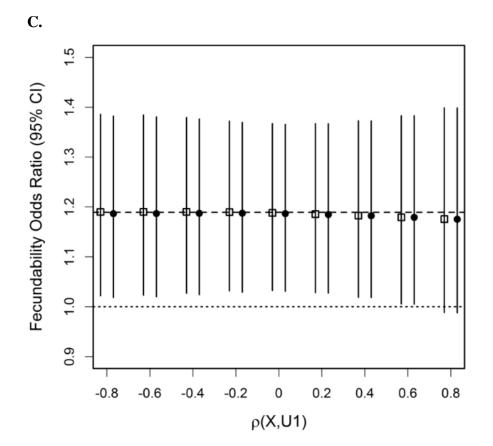
Web Figure 3. Association between α -carotene and time to pregnancy (TTP) adjusted for unmeasured confounders. A) Adjusted for U_1 (e.g., dietary behavior); B) adjusted for U_2 (e.g., genetic factor), where associations between U_2 and TTP were set to fecundability odds ratios (FOR) of 0.7 (open squares) and 0.5 (closed circles), respectively; C) adjusted for previous fecundability (TTP₀), U_1 , and U_2 . Dashed line indicates FOR unadjusted for unmeasured confounders (FOR = 1.17).

А.









B.