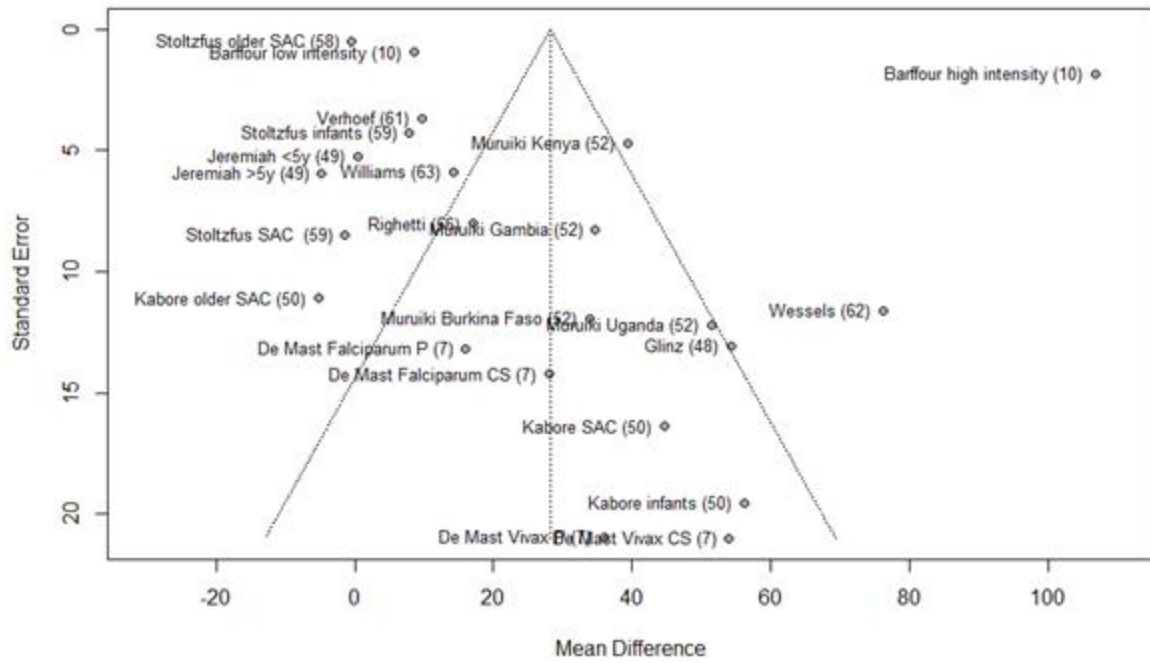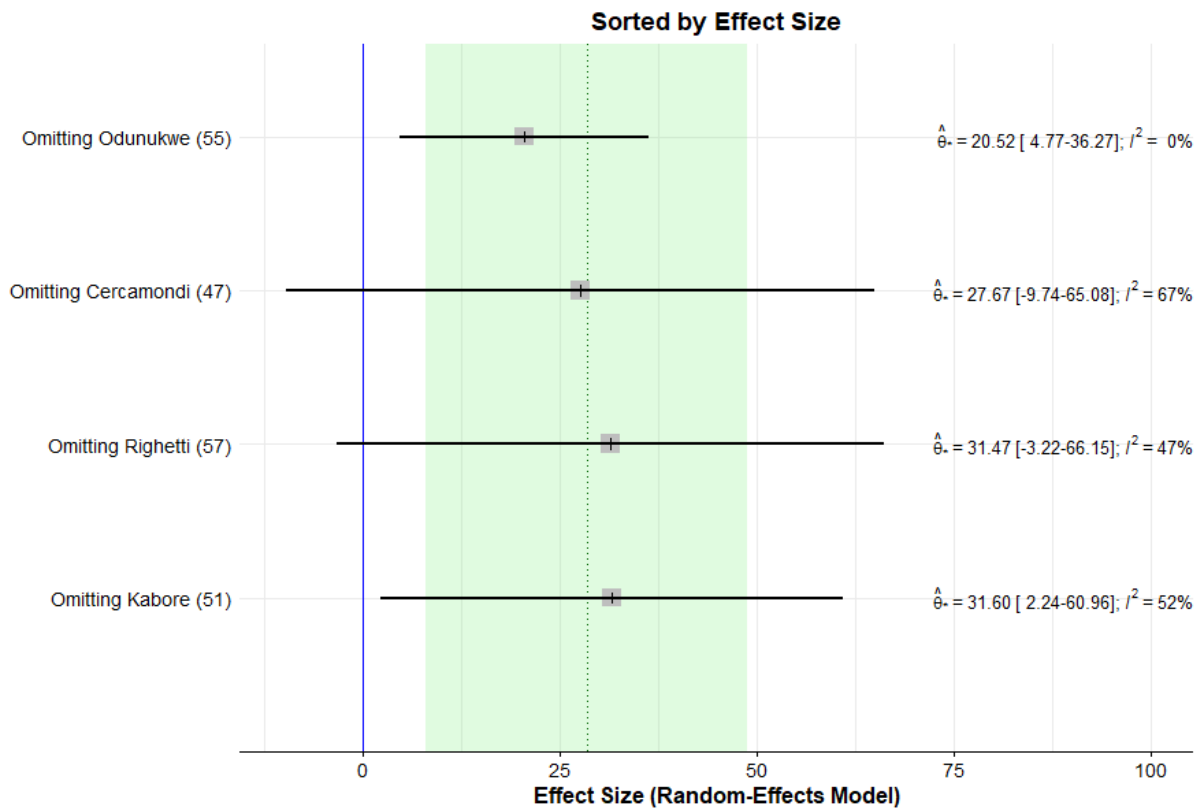S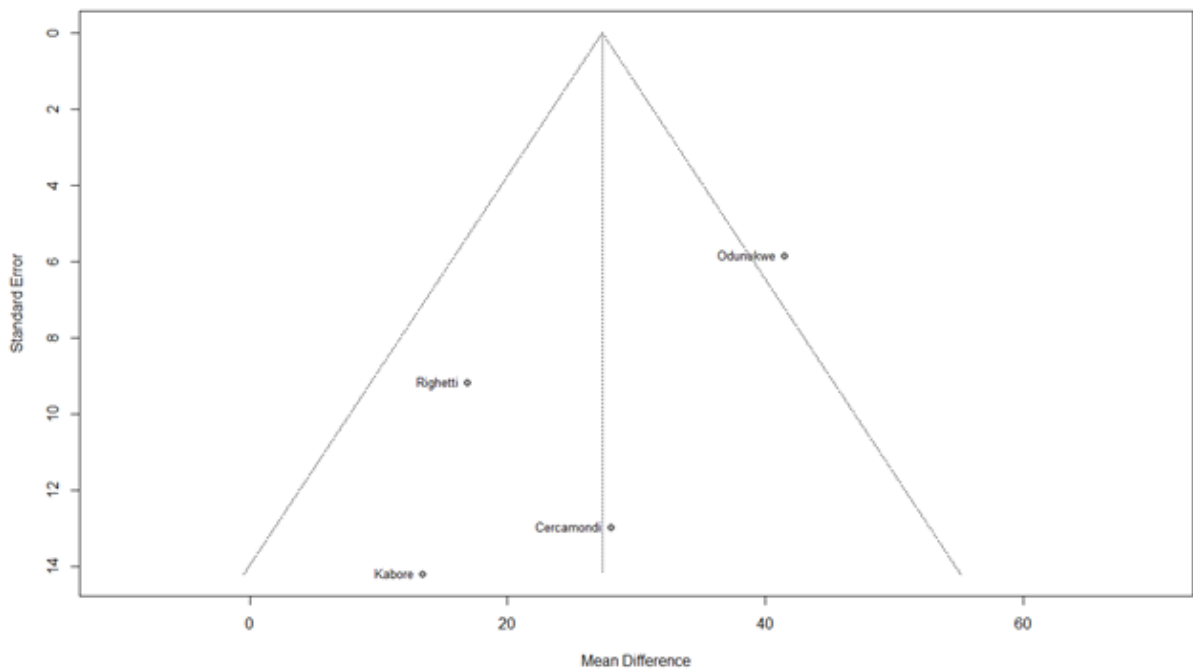upplementary figure 1: Sensitivity analysis of ferritin concentration (μg/L) between asymptomatic malaria and control in children, using leaving-one out analysis. Recalculated pooled effects, with one study omitted each time. The dashed line and shaded area represent the original pooled mean difference and its 95% confidence interval. CS, cross-sectional; SAC, school-age children; P, prospective
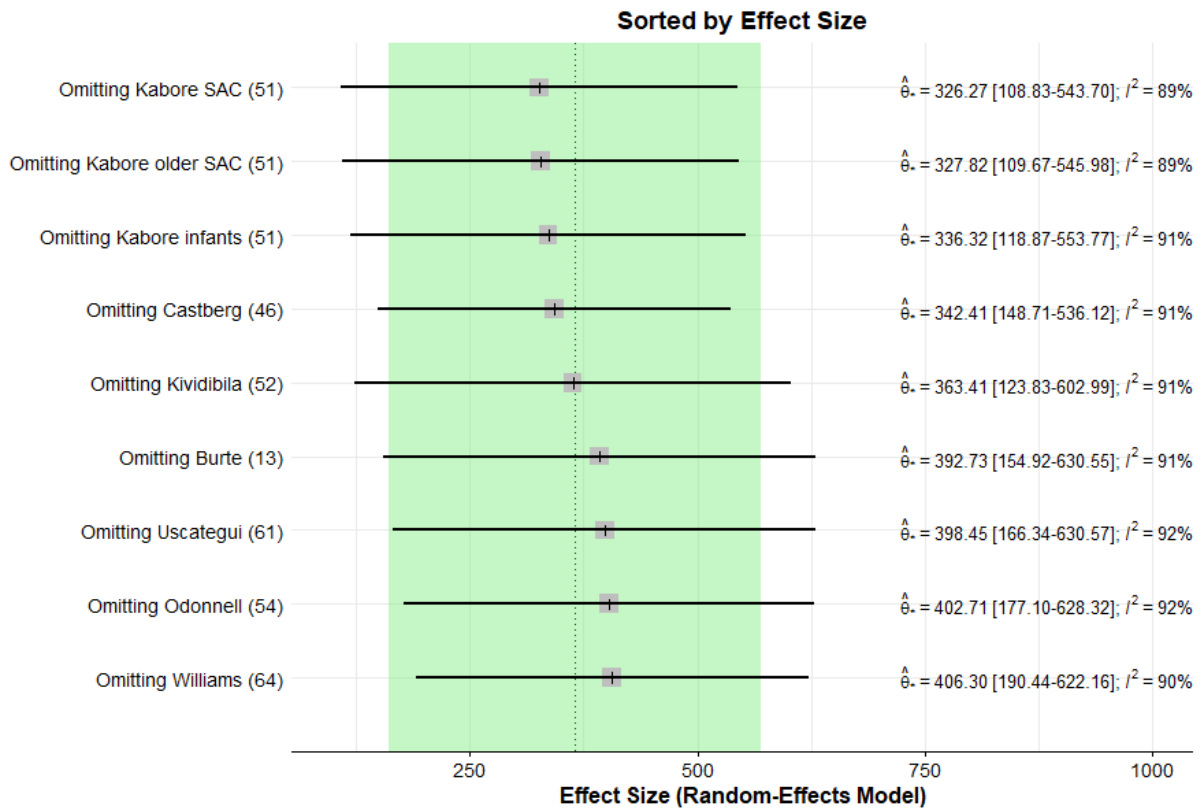
Supplementary figure 2: Funnel plot showing publications related to asymptomatic malaria and ferritin concentration (µg/L) in children. CS, cross-sectional; SAC, school-age children; P, prospective

Sorted by Effect Size

Omitting Odunukwe (55) $\hat{\theta}_{-} = 20.52\ [\ 4.77\text{-}36.27];\ I^2 = 0\%$

Omitting Cercamondi (47) $\hat{\theta}_{-} = 27.67\ [\text{-}9.74\text{-}65.08];\ I^2 = 67\%$

Omitting Righetti (57) $\hat{\theta}_{-} = 31.47\ [\text{-}3.22\text{-}66.15];\ I^2 = 47\%$

Omitting Kabore (51) $\hat{\theta}_{-} = 31.60\ [\ 2.24\text{-}60.96];\ I^2 = 52\%$

Effect Size (Random-Effects Model)

Supplementary figure 3: Sensitivity analysis of ferritin concentration (µg/L) between asymptomatic malaria and control in adults, using leaving-one out analysis. Recalculated pooled effects, with one study omitted each time. The dashed line and shaded area represent the original pooled mean difference and its 95% confidence interval.

Supplementary figure 4: Funnel plot showing publications related to asymptomatic malaria and ferritin concentration (µg/L) in adults

Sorted by Effect Size

| Omitting	Effect Size
Omitting Kabore SAC (51)	$\hat{\theta}_. = 326.27\ [108.83\text{-}543.70]$; $I^2 = 89\%$
Omitting Kabore older SAC (51)	$\hat{\theta}_. = 327.82\ [109.67\text{-}545.98]$; $I^2 = 89\%$
Omitting Kabore infants (51)	$\hat{\theta}_. = 336.32\ [118.87\text{-}553.77]$; $I^2 = 91\%$
Omitting Castberg (46)	$\hat{\theta}_. = 342.41\ [148.71\text{-}536.12]$; $I^2 = 91\%$
Omitting Kividibila (52)	$\hat{\theta}_. = 363.41\ [123.83\text{-}602.99]$; $I^2 = 91\%$
Omitting Burte (13)	$\hat{\theta}_. = 392.73\ [154.92\text{-}630.55]$; $I^2 = 91\%$
Omitting Uscategui (61)	$\hat{\theta}_. = 398.45\ [166.34\text{-}630.57]$; $I^2 = 92\%$
Omitting Odonnell (54)	$\hat{\theta}_. = 402.71\ [177.10\text{-}628.32]$; $I^2 = 92\%$
Omitting Williams (64)	$\hat{\theta}_. = 406.30\ [190.44\text{-}622.16]$; $I^2 = 90\%$

Effect Size (Random-Effects Model)

Supplementary figure 5: Sensitivity analysis of ferritin concentration (µg/L) between clinical malaria and control in children, using leaving-one out analysis. Recalculated pooled effects, with one study omitted each time. The dashed line and shaded area represent the original pooled mean difference and its 95% confidence interval. SAC, school-age children
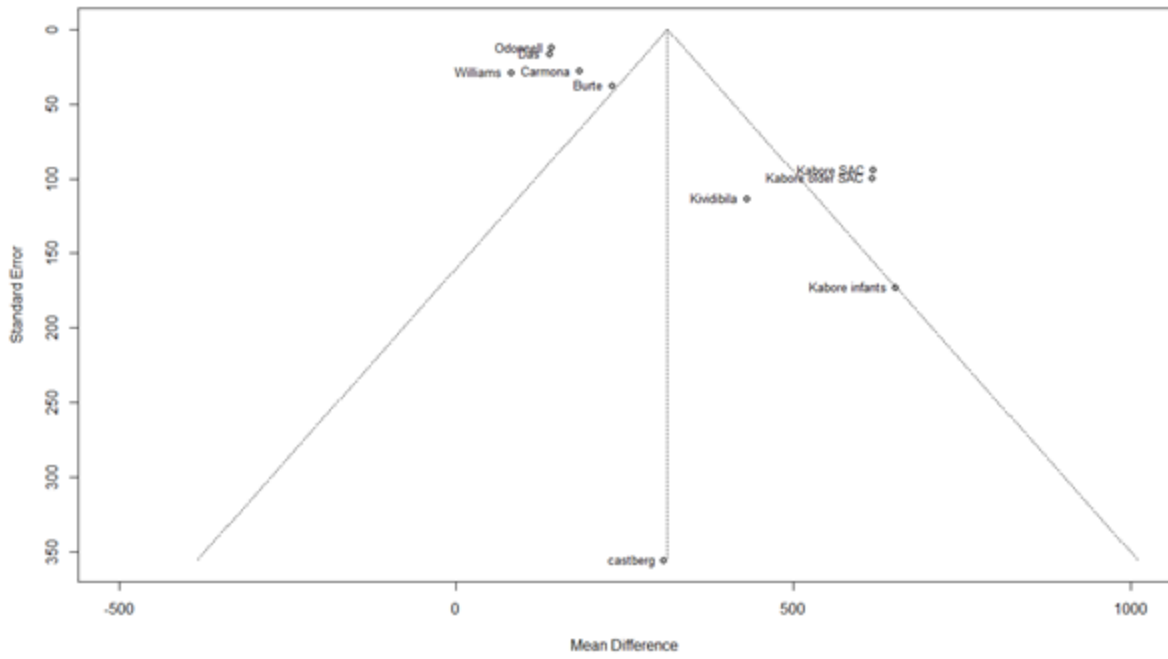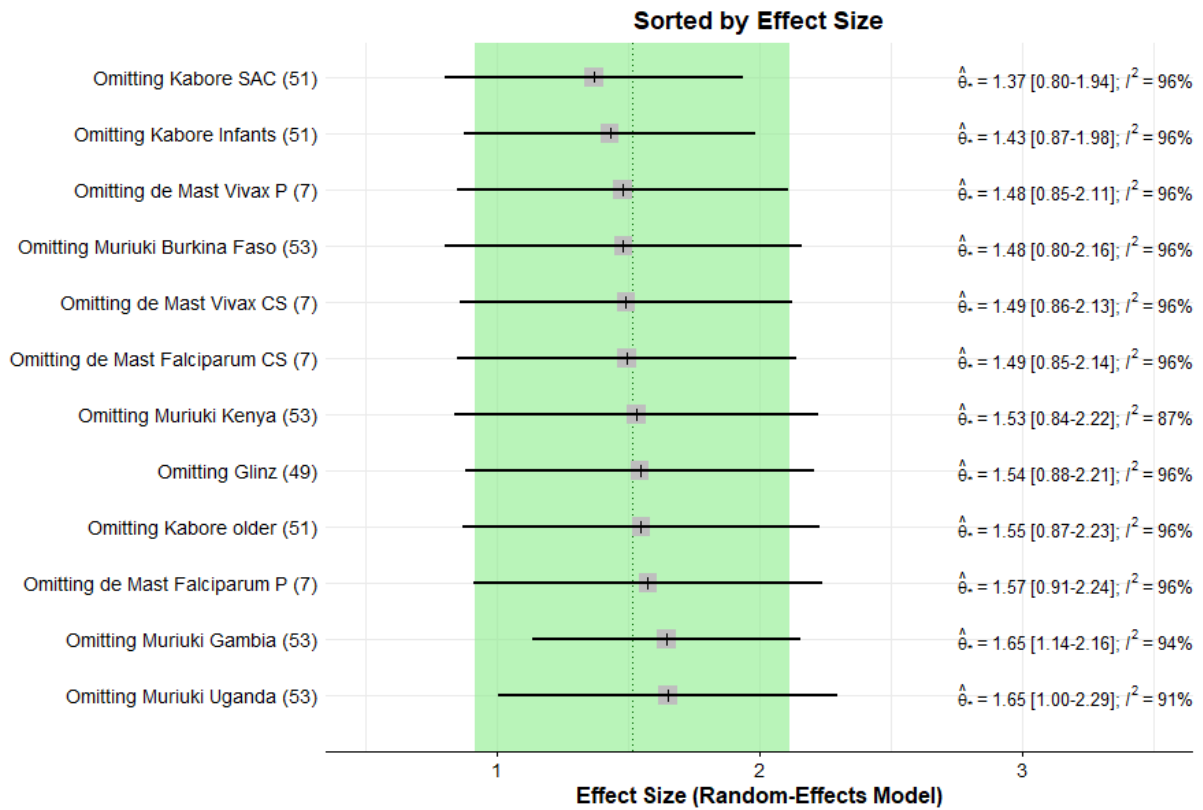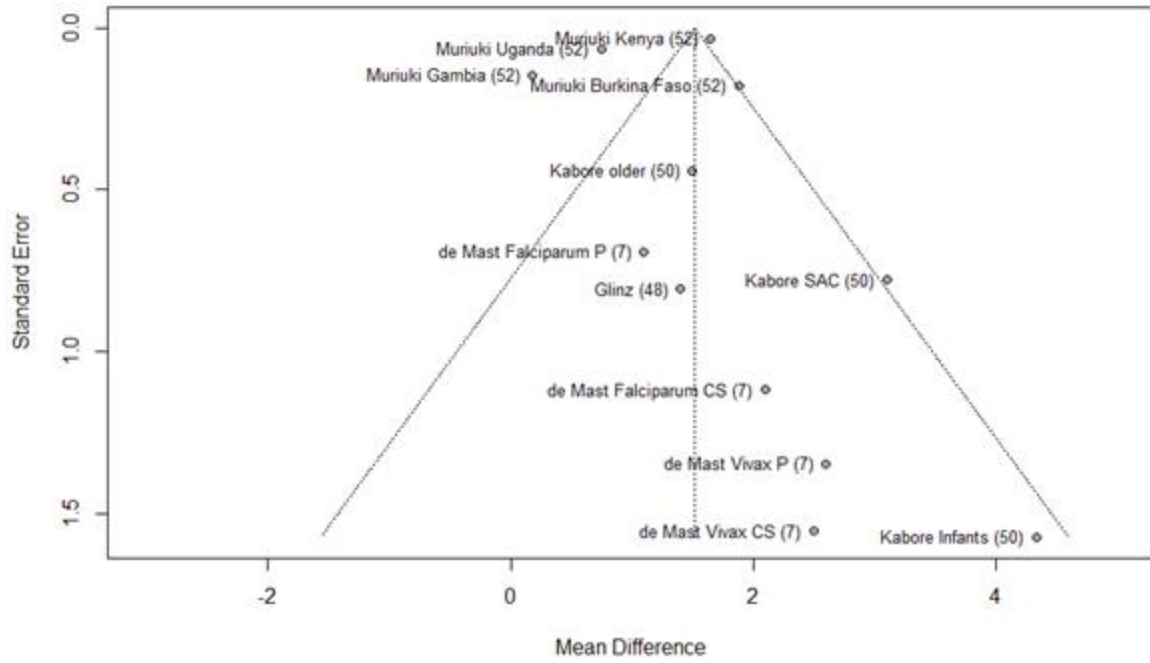
Supplementary figure 6: Funnel plot showing publications related to clinical malaria and ferritin concentration (µg/L) in children. SAC, school-age children

Sorted by Effect Size

Study	Effect Size
Omitting Kabore SAC (51)	$\hat{\theta}_{-} = 1.37\ [0.80\text{-}1.94];\ I^2 = 96\%$
Omitting Kabore Infants (51)	$\hat{\theta}_{-} = 1.43\ [0.87\text{-}1.98];\ I^2 = 96\%$
Omitting de Mast Vivax P (7)	$\hat{\theta}_{-} = 1.48\ [0.85\text{-}2.11];\ I^2 = 96\%$
Omitting Muriuki Burkina Faso (53)	$\hat{\theta}_{-} = 1.48\ [0.80\text{-}2.16];\ I^2 = 96\%$
Omitting de Mast Vivax CS (7)	$\hat{\theta}_{-} = 1.49\ [0.86\text{-}2.13];\ I^2 = 96\%$
Omitting de Mast Falciparum CS (7)	$\hat{\theta}_{-} = 1.49\ [0.85\text{-}2.14];\ I^2 = 96\%$
Omitting Muriuki Kenya (53)	$\hat{\theta}_{-} = 1.53\ [0.84\text{-}2.22];\ I^2 = 87\%$
Omitting Glinz (49)	$\hat{\theta}_{-} = 1.54\ [0.88\text{-}2.21];\ I^2 = 96\%$
Omitting Kabore older (51)	$\hat{\theta}_{-} = 1.55\ [0.87\text{-}2.23];\ I^2 = 96\%$
Omitting de Mast Falciparum P (7)	$\hat{\theta}_{-} = 1.57\ [0.91\text{-}2.24];\ I^2 = 96\%$
Omitting Muriuki Gambia (53)	$\hat{\theta}_{-} = 1.65\ [1.14\text{-}2.16];\ I^2 = 94\%$
Omitting Muriuki Uganda (53)	$\hat{\theta}_{-} = 1.65\ [1.00\text{-}2.29];\ I^2 = 91\%$

Effect Size (Random-Effects Model)

Supplementary figure 7: Sensitivity analysis of hepcidin concentration (nmol/L) between asymptomatic malaria and control in children, using leaving-one out analysis. Recalculated pooled effects, with one study omitted each time. The dashed line and shaded area represent the original pooled mean difference and its 95% confidence interval. SAC, school-age children; P, prospective; CS, cross-sectional.
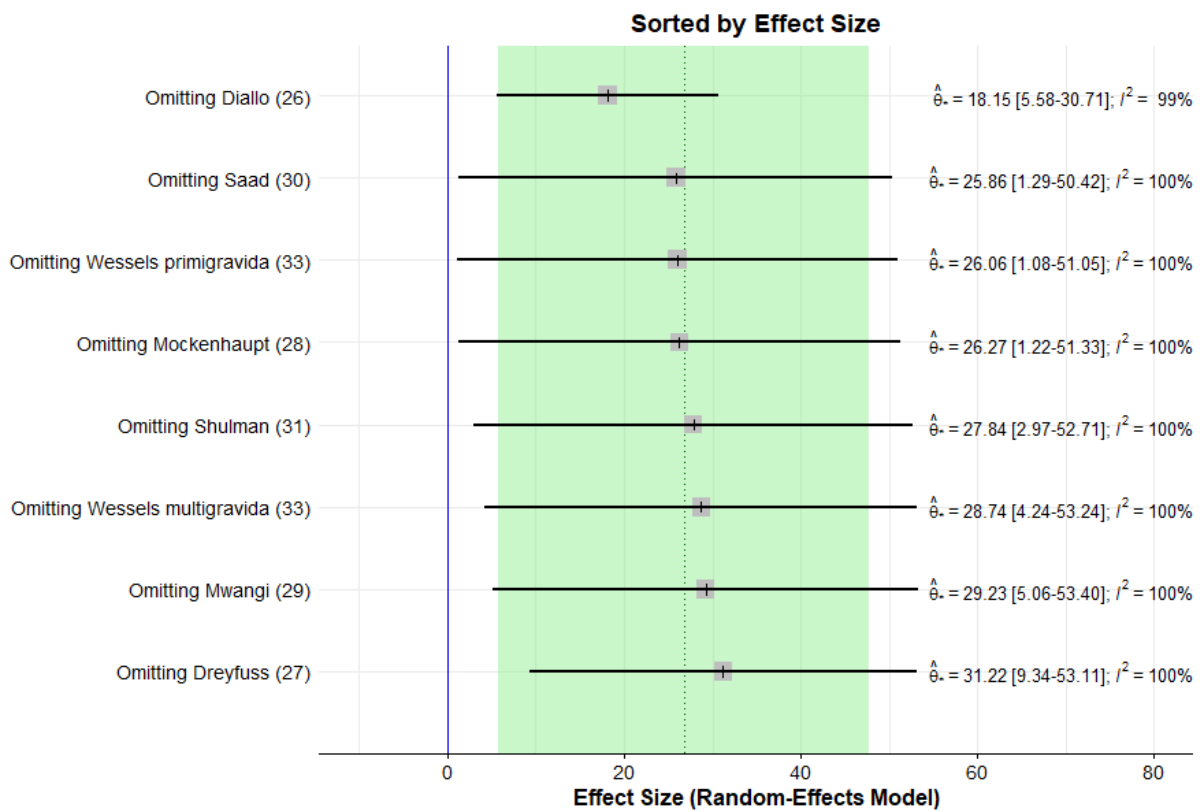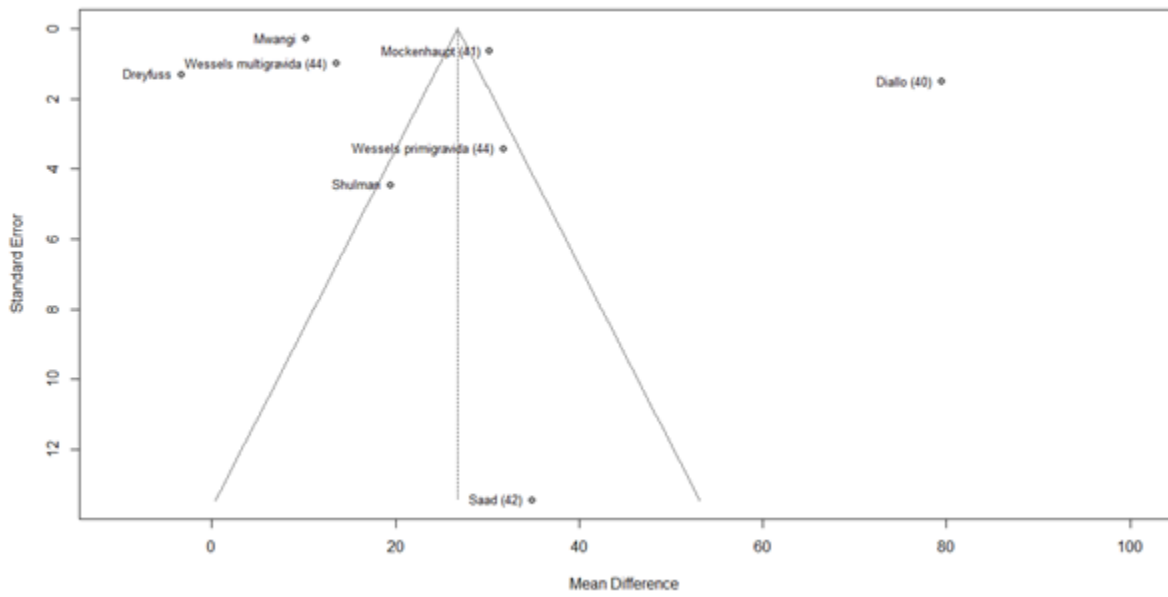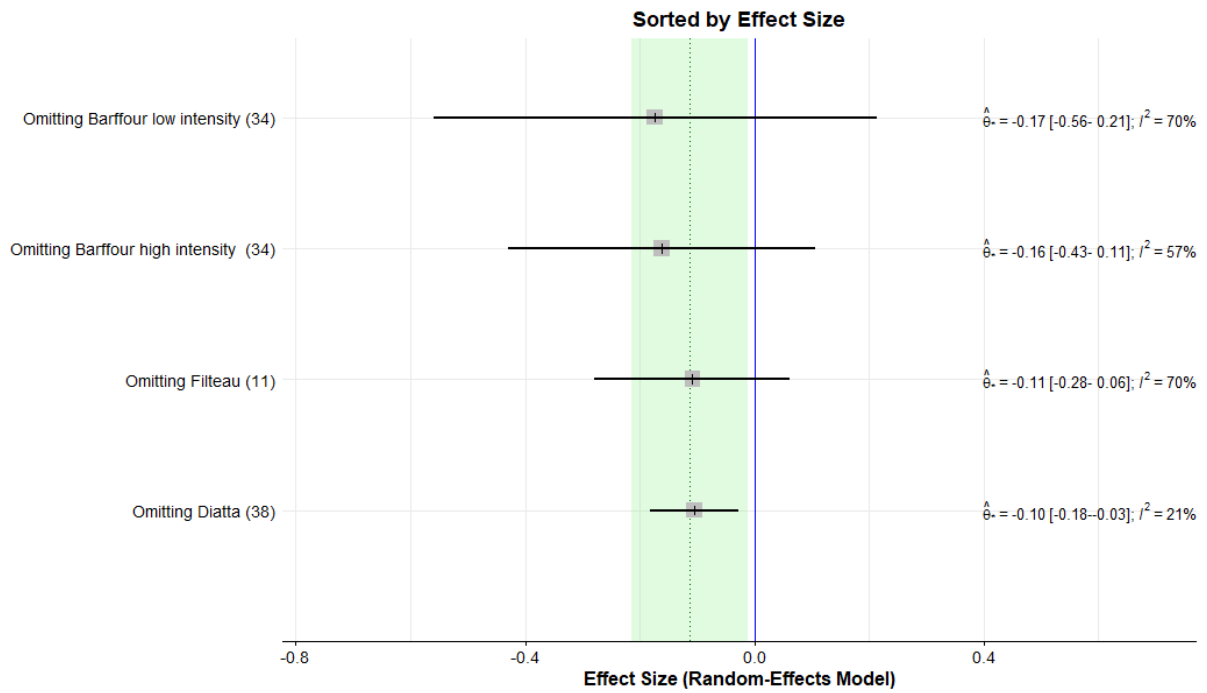
Supplementary figure 8: Funnel plot showing publications related to asymptomatic malaria and hepcidin concentration (nmol/L) in children. SAC, school-age children; P, prospective; CS, cross-sectional.

Sorted by Effect Size

Omitting Diallo (26)	$\hat{\theta}_{-} = 18.15\ [5.58\text{-}30.71];\ I^2 = 99\%$
Omitting Saad (30)	$\hat{\theta}_{-} = 25.86\ [1.29\text{-}50.42];\ I^2 = 100\%$
Omitting Wessels primigravida (33)	$\hat{\theta}_{-} = 26.06\ [1.08\text{-}51.05];\ I^2 = 100\%$
Omitting Mockenhaupt (28)	$\hat{\theta}_{-} = 26.27\ [1.22\text{-}51.33];\ I^2 = 100\%$
Omitting Shulman (31)	$\hat{\theta}_{-} = 27.84\ [2.97\text{-}52.71];\ I^2 = 100\%$
Omitting Wessels multigravida (33)	$\hat{\theta}_{-} = 28.74\ [4.24\text{-}53.24];\ I^2 = 100\%$
Omitting Mwangi (29)	$\hat{\theta}_{-} = 29.23\ [5.06\text{-}53.40];\ I^2 = 100\%$
Omitting Dreyfuss (27)	$\hat{\theta}_{-} = 31.22\ [9.34\text{-}53.11];\ I^2 = 100\%$

Supplementary figure 9: Sensitivity analysis of ferritin concentration (µg/L) between malaria and control in pregnant women, using leaving-one out analysis. Recalculated pooled effects, with one study omitted each time. The dashed line and shaded area represent the original pooled mean difference and its 95% confidence interval.
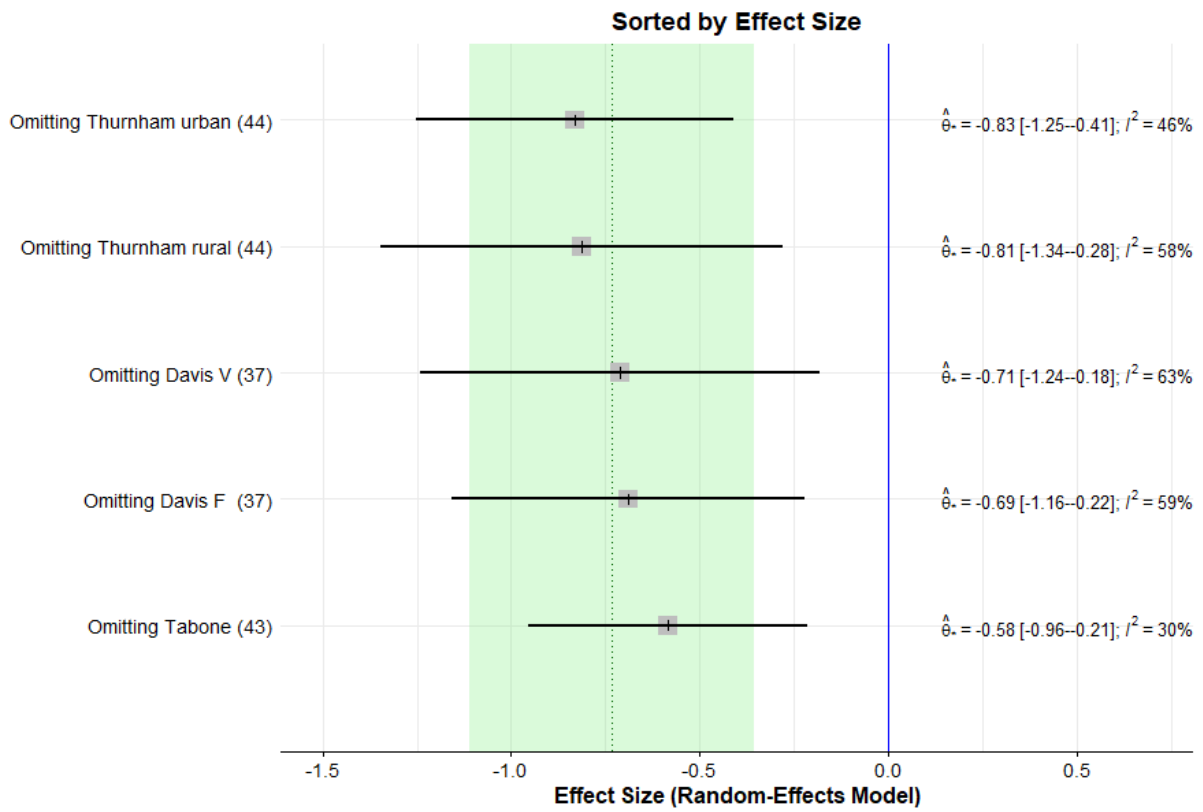
Supplementary figure 10: Funnel plot showing publications related to malaria and ferritin concentration (µg/L) in pregnant women

Sorted by Effect Size

|	
Omitting Barffour low intensity (34)	$\hat{\theta}_{-} = -0.17 \ [-0.56 - 0.21]; \ I^2 = 70\%$
Omitting Barffour high intensity (34)	$\hat{\theta}_{-} = -0.16 \ [-0.43 - 0.11]; \ I^2 = 57\%$
Omitting Filteau (11)	$\hat{\theta}_{-} = -0.11 \ [-0.28 - 0.06]; \ I^2 = 70\%$
Omitting Diatta (38)	$\hat{\theta}_{-} = -0.10 \ [-0.18 - -0.03]; \ I^2 = 21\%$

Effect Size (Random-Effects Model)

Supplementary figure 11: Sensitivity analysis of retinol concentration (μmol/L) between asymptomatic malaria and control in children, using leaving-one out analysis. Recalculated pooled effects, with one study omitted each time. The dashed line and shaded area represent the original pooled mean difference and its 95% confidence interval.
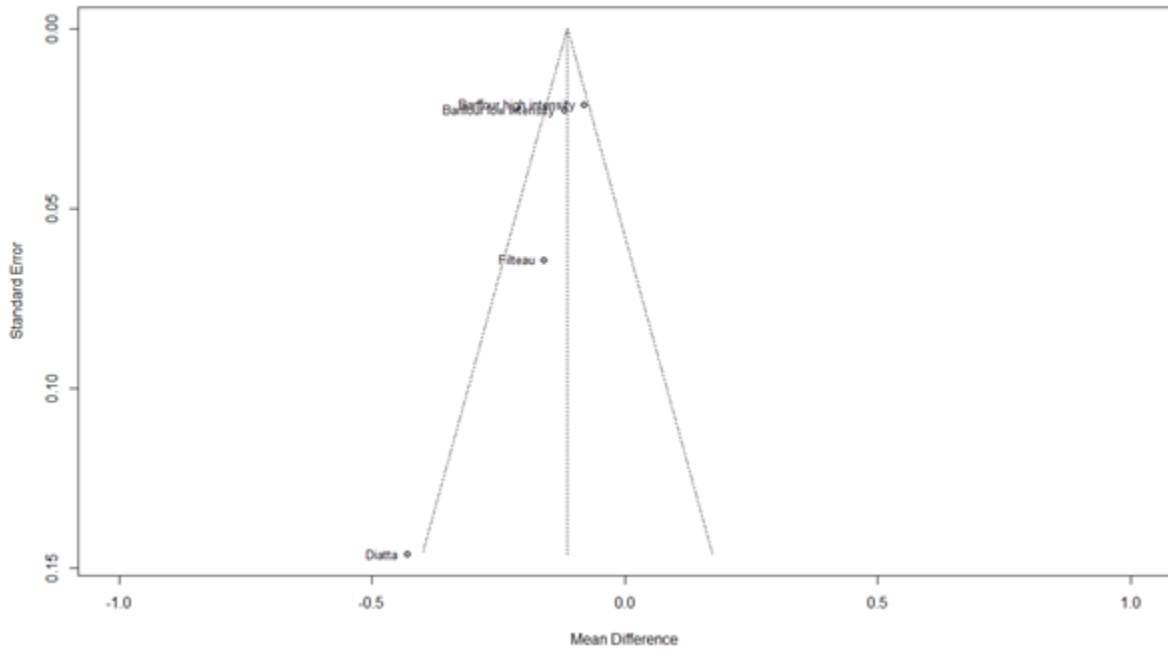
Supplementary figure 12: Funnel plot showing publications related to asymptomatic malaria and retinol concentration (μmol/L) in children

Sorted by Effect Size

Omitting Thurnham urban (44)	$\hat{\theta}_- = -0.83\ [-1.25\text{-}-0.41];\ I^2 = 46\%$
Omitting Thurnham rural (44)	$\hat{\theta}_- = -0.81\ [-1.34\text{-}-0.28];\ I^2 = 58\%$
Omitting Davis V (37)	$\hat{\theta}_- = -0.71\ [-1.24\text{-}-0.18];\ I^2 = 63\%$
Omitting Davis F (37)	$\hat{\theta}_- = -0.69\ [-1.16\text{-}-0.22];\ I^2 = 59\%$
Omitting Tabone (43)	$\hat{\theta}_- = -0.58\ [-0.96\text{-}-0.21];\ I^2 = 30\%$

Effect Size (Random-Effects Model)

Supplementary figure 13: Sensitivity analysis of retinol concentration (μmol/L) between malaria and control in adults, using leaving-one out analysis. Recalculated pooled effects, with one study omitted each time. The dashed line and shaded area represent the original pooled mean difference and its 95% confidence interval. V, Vivax; F, Falciparum
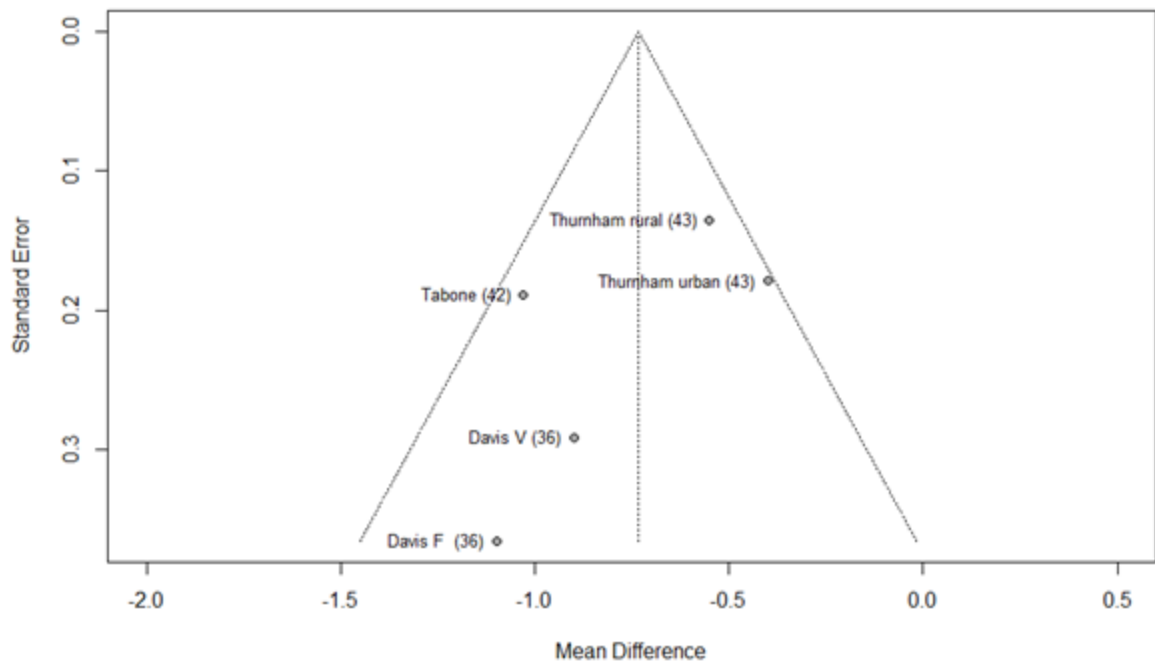
Supplementary figure 14: Funnel plot showing publications related to malaria and retinol concentration (μmol/L) in adults. V, Vivax; F, Falciparum