**eAppendix**

Our sensitivity analysis for unmeasured confounding by physical activity and fish intake was adapted from prior work by Lash and Fink.[1](#_ENREF_1) To quantify the degree of unmeasured confounding by physical activity and fish intake, we parameterized the relative risk due to confounding using a trapezoidal distribution. The following 3 parameters were used for the physical activity analyses:

1. 0.77 odds ratio for the effect of physical activity on preeclampsia.[2](#_ENREF_2)
2. 20% to 25% prevalence of vitamin D deficiency among women who exercise.[3](#_ENREF_3)
3. 0.76 odds ratio for the effect of exercise on vitamin D deficiency.[3](#_ENREF_3)

The following 3 parameters were used for the fish intake analyses:

1. 0.67 odds ratio for the effect of fish intake on preeclampsia. [4](#_ENREF_4)
2. 20% to 40% prevalence of vitamin D deficiency among women who eat fish.[5](#_ENREF_5),[6](#_ENREF_6)
3. 0.2 to 0.5 odds ratio for the effect of eating fish on vitamin D deficiency. [5](#_ENREF_5),[6](#_ENREF_6)

The limit of the relative risk due to confounding was then calculated according to the work of Flanders and Khoury. [7](#_ENREF_7) The sensitivity analysis iterations reflected systematic error only. Random error was incorporated by resampling from the distribution of the conventional parameter. [1](#_ENREF_1)

**References**

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