

## COMMENTARY

Data on perinatal choline, neurodevelopment sparking practice changes Pregnant women at University of Illinois at Chicago will be offered choline supplements

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Finally, the evidence is in: Three evidence-based studies show that perinatal choline supports proper neurodevelopment in fetuses.<sub>1,2,3</sub>



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As anyone who has been following my prevention efforts knows, 4 out of 10 patients at Jackson Park Hospital on Chicago's Southside who presented to their family medicine clinic for psychiatric care have clinical profiles that are consistent with neurobehavioral disorder associated with prenatal alcohol exposure (ND-PAE).4 Furthermore, since only a little can be done to ameliorate these patients' psychopathology, I have sought out prevention interventions to stem the tide of what I have thought was a silent epidemic ("occult prenatal alcohol exposure") for decades.

So I have been heartened that there is some sound science to suggest that perinatal choline supplementation could help. That reality, along with the American Medical Association's resolution to support evidence-based amounts of choline in all prenatal vitamins, spurred the University of Illinois at Chicago to do something.

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Thanks to the support of Enrico Benedetti, MD, professor and head of the department of surgery at the University of Illinois at Chicago, pregnant women will be offered choline supplements to support their fetuses' neurodevelopment. In addition, there will be a video streaming in the obstetrical waiting rooms at the University of Illinois at Chicago/Mile Square clinics explaining the need for choline supplementation.

Other efforts are afoot aimed at getting this prevention intervention up and running. For example, Yavar Moghimi, MD, who is the behavioral health director for a Medicaid managed care organization in Washington, recently informed me that its clinical policy committee approved a policy highlighting the evidence behind choline supplements during pregnancy.

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I am hoping the University of Illinois at Chicago initiative, entitled the "Healthy Prenatal Brain Program" will help all women by preventing the unrecognized problem I have seen among African American women who engage in social drinking before they realize that they are pregnant.5 After all, the problem of choline deficiency is not tied simply to prenatal alcohol exposure but also to dietary habits. For example, a study by Helen H. Jensen, PhD, and her associates found that 90% of pregnant women do not get enough choline.6 It is just that low-income people are the "canaries in the coal mine" when it comes to being alerted to major public health problems in America.

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Another positive development is a website set up by Robert R. Freedman, MD, former chairman of the psychiatry department at the University of Colorado Denver. The site, called prenataldoctoradvice.com, provides guidance to patients about steps they can take, such as taking choline supplements during pregnancy, to improve their children's brain development and mental health.

The public health fix we are suggesting in not difficult; after all, choline is an over-the-counter nutrient, and it does not have to be prescribed by a physician. Ideally, the public health initiatives being advocated are so affordable and easy to implement that this practice will become ubiquitous, and our children will be healthier as a result. It is just a matter of taking action. Now that the evidence is finally in that perinatal choline supplements support proper neurodevelopment in fetuses, we all should move forward – and do something.

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## References

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- \*This column was updated 11/30/2018.

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