EXCERPTS FROM
Position Paper
Nutrient Specifications and Nutritional Considerations for Bellybar™

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Summary
Many women in the US fail to consume adequate levels of certain vitamins and minerals before and during pregnancy. Lack of adequate nutrient intake may compromise maternal and fetal health, and the health of infants in the short- and long-term. One approach to improving women's nutrient intakes is to provide dietary assessment and counseling services. A second approach is to prescribe a prenatal multivitamin and mineral supplement. A third approach would be to offer preconceptional and pregnant women a fortified food (the "Bellybar") that provides supplementary amounts of nutrients most likely to be lacking in their diets. The Position Paper addresses the third approach to meeting preconceptional and prenatal nutrient needs.

An evidence-based approach is used to identify nutrients most likely to be consumed in low amounts in the diets of US women before and during pregnancy, and supplementary amounts needed to increase intakes to recommended levels. National data on nutrient intakes from food and the Institute of Medicine's recommendations for intake levels are used to identify nutrients and supplementary doses recommended for the Bellybar. Results of randomized, controlled clinical trials and other research studies are used to support conclusions made on nutrient selections and amounts.

Consumption of a Bellybar daily before and during pregnancy along with nutrients provided by the diet would meet established nutrient needs of over 90% of healthy US pregnant women. Dose levels of nutrients provided by a Bellybar do not pose overdose risks when combined with usual levels of nutrient intake from diets.

Scientific Rationale
Adequate nutrient intakes during pregnancy support women's health, fetal growth and development, and women's nutrient needs for breastfeeding. Nutrient adequacy during breastfeeding helps re-stock maternal nutrient stores and affects the nutrient content of breastmilk.

Ideally, nutrient needs of women (and men) throughout life would be met through a healthy selection of foods. However, most adults do not consume diets that provide recommended levels of essential nutrients.

In the US, the main approach to ensuring nutrient adequacy in women before, during, and after pregnancy is the use of prescribed prenatal multivitamin and mineral supplements. Prenatal multivitamin and mineral supplements are prescription only because they contain 1 mg or more folic acid. Dose levels of nutrients in prenatal supplements tend to be much higher than needed to "supplement" women's diets. High levels of iron in some prenatal supplements cause sufficient gastrointestinal discomfort that women quit taking supplements altogether. A number of prenatal supplements provide a larger assortment of vitamins and minerals than can be justified based on usual nutrient intake from food and potential benefits to pregnancy outcome.

The purpose of supplements should be to supplement the diet with nutrients consumed in amounts lower than those recommended. For the nutrients that are under-consumed in foods, doses should be set at levels that fill the gap between usual and recommended levels of intake. **Some nutrients are more completely absorbed when taken with food than water, and a snack bar may represent a more acceptable way to get needed nutrients than a large pill.**

Criteria
Nutrients selected for supplementation in the Bellybar, along with appropriate amounts of each, are primarily based on the difference between recommended and usual intake levels of US women during pregnancy. Supplementation of the Bellybar through nutrient fortification at levels that bring 10th percentile intakes over the Estimated Average Requirement (EAR) level will theoretically meet the nutrient needs of 95% or more of healthy US women during pregnancy ….Nutrients are excluded from the Bellybar if combined nutrient intakes from the Bellybar and levels of intake at the 99th percentile exceed Tolerable Upper Intake Levels (ULs).

	Bellybar	Total Preg Intake Level			10%'ile intake + Bellybar	Mean intake + Bellybar
Nutrient	Level	10th	Mean	Preg DRI	%DRI	%DRI
FOLATE, µg	800	158	471	600	160%	212%
VITAMIN A, µgRAE	200	450	7,575	770	84%	124%
VITAMIN B_6, mg	2.0	1.2	1.9	1.9	168%	205%
VITAMIN B_{12}, µg	1.0	4.4	5.3	2.6	208%	242%
VITAMIN C, mg	20	75	124	85	112%	169%
VITAMIN D, µg	2.5	-	2.5	5.0	0%	100%
VITAMIN E, mg	7.0	7.0	10.1	15.0	93%	114%
IRON, mg	17.0	10.2	15.3	27.0	101%	120%
MAGNESIUM, mg	75	210	292	350	81%	105%
ZINC, mg	3.0	7.7	11.2	11	97%	129%
CALCIUM, mg	250	758	1,168	1,000	102%	142%

One Bellybar daily may contain all the supplemental nutrients needed during normal pregnancies and nursing – consult your physician or health care provider.

The complete position paper is available upon request. Contact: info@nutrabella.com or 800.95.BELLY