

Profession: Registered Dietitian - Submitted on behalf of the Family Health Nutrition Advisory Group of the Ontario Society of Nutrition Professionals in Public Health

Sector: Public Health

Folate:

1. Please comment on the completeness of the recommendation document Nutrients of Special Concern for a Healthy Pregnancy: Folate

Overall:

- Appreciate the focus on the necessity of both supplemental and food sources, good information provided on the food sources in general.
- Suggest stress information on the importance of supplementing with folic acid during preconception even not planning to become pregnant. High rate of unplanned pregnancies is known, as is difficulty in consuming all folate required from food sources. This affects all women of childbearing age, whether planning or not.
- Include section on to provide guidance to practitioners on how to advise/counsel young girls (once start menstruating) and parents of young girls, regardless of current sexual activity.
- Suggest address 2007 Joint SOGC-Motherisk Clinical Practice Guidelines and, where relevant, rationale for not using these recommendations, for example, regarding excess folate and masking of B₁₂ deficiency as SOGC-Motherisk Clinical Practice Guidelines are contradictory to Health Canada.
- Terminology different from Canada's Food Guide, states "daily multivitamin supplement", but does not state "daily multivitamin and mineral supplement", this may cause confusion.
- Please provide more specific information on recommendations for folic acid supplementation throughout pregnancy and while breastfeeding.

Page 1:

- Suggest define or use alternate term for "feel better", as this is vague and insinuates the women feel bad.
- Suggest provide brief rationale for recommending that supplementation begin 3 months prior to pregnancy.

Page 5:

- Should be noted that manufacturers are not required to provide the %Daily Value of folate on the nutrition facts table, therefore information is not typically available which may make it difficult for women to compare.

Page 6

- Please change Vitamin B₁₂ amounts so these are expressed in ug (micrograms) and not mg (milligrams)

Page 7

- Suggest provide examples of contraindicated ingredients or how to determine if an ingredient is contraindicated (ie. look on label, speak with HCP or pharmacist).
- Suggest providing a list of risks that research has associated with long-term exposure to high concentrations of folate intakes. May also need to be define "long term exposure" and "high concentrations". Suggest expand this section so research can be better understood, eg. does this relate to fortification of flour, excess supplements, which population would be at risk, etc.
- Information is needed around the level which is considered a high dose of vitamin A (as retinol). Public education is needed to ensure they are aware of the risks.

**2. Please comment on the clarity of the recommendation document
Nutrients of Special Concern for a Healthy Pregnancy: Folate**

Folate:

Overall

- The language around folate/folic acid/food folate can be confusing. To clarify the message, suggest providing definitions as a list at the beginning of the folate guidelines, not within the text under "How folate contributes to healthy pregnancy".

Page 1:

- Add "a" to title so "How folate contributes to **a** healthy pregnancy."
- Statement "Women preparing for pregnancy..." is vague. Seems to exclude unplanned pregnancies. Suggest use terminology as in text box "Women who may become pregnant..."
- In last line of text box, change to "**Follow** Canada's Food Guide **to** help you..."

Page 2:

- Further or more clear explanation may be required for DFE vs. food folate

- Recommend not using terms “folate supplement” and “folic acid supplement” interchangeably (specifically on page 2, last paragraph)

Page 3:

- Typo on page 3, first line reads “...intake of multivitamins with multivitamins...”

Page 5:

- Suggest fourth bullet be split into two points.

Page 6:

- Suggest change in wording to “Stressing the following points will help to guide their selection:”

Page 7:

- Suggest provide explanation and reference for recommending 15 to 20 mg. Many supplements contain full RDA (27mg), women may question if they are getting too much in their supplement.
- Please define how high doses of folate need to be in order to mask manifestations of B₁₂ deficiency.
- For the note: Please clarify “...NPN that provide folate at doses ≥ 200 μg per day, must supplement with vitamin B₁₂ the RDA dosage.” Which RDA dosage is being referred to?
- Recommendation that supplements containing > 400 μg of folic acid should also contain 2.4 μg of vitamin B₁₂. Please provide guidance for supplements that do not meet these recommendations re: safety, standardized amounts (if standardized), etc.
- Suggest add word “to”, so “Remind women not **to** take more than...”.
 - Suggest include a specific note that some women will take two supplements to get the amount they need of one vitamin or mineral, for example folate, without understanding that this also doubles their dose of all the other vitamins and minerals present in the supplement and that this could be harmful. This is of particular concern in light of the SOGC/Motherisk recommendations.
- Suggest change “them” to “women” so “As with all supplements, remind **women** to store...”

Page 8:

- Please clarify first paragraph, as most supplements contain at least 1000 μg (1 mg) or more folic acid. Is it realistic for healthcare providers to test vitamin

B₁₂ status for all women taking prenatal supplements? Is this standard practice? Also, those taking more are often at high-risk of NTDs, are provided a prescription for >1mg dose and are likely screened. Is this section referring to those at high risk?

- Suggest define “very young mothers”.
- Suggest include information in last paragraph whether multivitamins may be covered by any provincial/federal benefit program.

Comments:

- Are there supplements on the market that meet the recommendations identified in this document for folate, iron and B12 (as well as vitamin A in the form of beta-carotene)? Our concern is that the population we service will not be able find supplements that support the recommendations in the document.
- In implementing these guidelines, food security issues need to be considered. Those on limited income face barriers to obtaining a multi-supplement with folic acid. In addition, a healthy diet, rich in folate can also be out of reach for those who are food insecure. Hence, there is a need to make supplements available to all considering its importance in reproductive and infant health.

Iron:

**1. Please comment on the completeness of the recommendation document
Nutrients of Special Concern for a Healthy Pregnancy: Iron**

Overall:

- Appreciate balance of food and supplement information.
- Suggest including a recommendation and reference for the relationship between supplemental iron and nausea or constipation, as this is often a question from clients. Also, please state that if supplements are constipating, see health care provider for a change in supplement or formulation. Perhaps discuss types of supplemental iron.

Page 1:

- Terminology different from Canada’s Food Guide, states “daily multivitamin supplement”, but does not state “daily multivitamin and mineral supplement”.

Page 2:

- Mentioning haem and non-haem here may be confusing, in particular with the Vitamin C information. May solve by stating “see page 3 for more information”.
- Suggest using the word “varied” instead of “mixed”.

Page 3

- Suggest expand information on levels of iron supplementation required to cause negative side effects, particularly GI symptoms
- Under note: Suggest include a statement that “women should see Health Care Provider if pre-existing anaemia is a concern.” Also, suggest define “This level” as 15 to 20 mg so “**A level of 15 to 20 mg** of supplementation...” if this is the level to which the note refers.

Page 4

- Suggest provide guidelines for recommended serving size of liver and recommended limit for frequency of consumption, as well as comment on the vitamin A content being high in liver from all animals.
- Consider including dietary sources of vitamin C.

Page 5:

- Some women find it confusing that their prenatal supplement contains both calcium and iron if calcium inhibits absorption. Please include a brief statement to address. Suggest provide more information about the inhibited absorption of iron in the presence of calcium. Are supplements that separate iron and calcium being recommended here?
- Suggest change to “...women to include at least **one serving of a food containing** vitamin C with meatless meals.” Suggest removal of word “particularly” as this recommendation only applies to non-haem iron.

Page 6

- Suggest divide second bullet at top of the page into two points.
- Address the implications on iron absorption when taking a multi-vitamin supplement that also contains calcium
- Suggest add word “to”, so “Remind women not **to** take more than...”. Suggest include a specific note that some women will take two supplements to get the amount they need of a particular vitamin or mineral, for example folate, without understanding that this also doubles their dose of all the other vitamins and minerals present in the supplement and that this could be harmful. This is of particular concern in light of the SOGC/Motherisk recommendations.

**2., Please comment on the clarity of the recommendation document
Nutrients of Special Concern for a Healthy Pregnancy: Iron
Iron:**

Page 2:

- Please change RDA for non-pregnant 14 through 18 year old to 15 mg (currently stated as 11 mg)
- Please clarify how much more supplemental iron is recommended for a pregnant woman who is vegetarian, or suggest that this individual may need to be assessed to determine supplemental iron needs.

Page 3:

- Suggest include low socioeconomic status as a risk factor for poor iron status as well as for iron deficiency.
- Suggest provide direct reference for recommending 15 to 20 mg. Many supplements contain full amount RDA (27mg), women may question if they are then getting too much.

Page 5:

- Suggest provide examples or define “vegetable proteins”

Page 6:

- Suggest provide examples of contraindicated ingredients or how to tell if it is contraindicated (look on label, speak with HCP or pharmacist).

3 We value any other feedback you may have. Please provide any additional comments below. (included for both Folate and Iron)

- Thank you for this opportunity to provide feedback, these documents are comprehensive and informative. Updating and expanding the information in Nutrition for a Healthy Pregnancy will be useful for practice. We look forward to consulting on future documents as revisions progress for *Nutrition for a Healthy Pregnancy* and *Nutrition for Healthy Term Infants*.