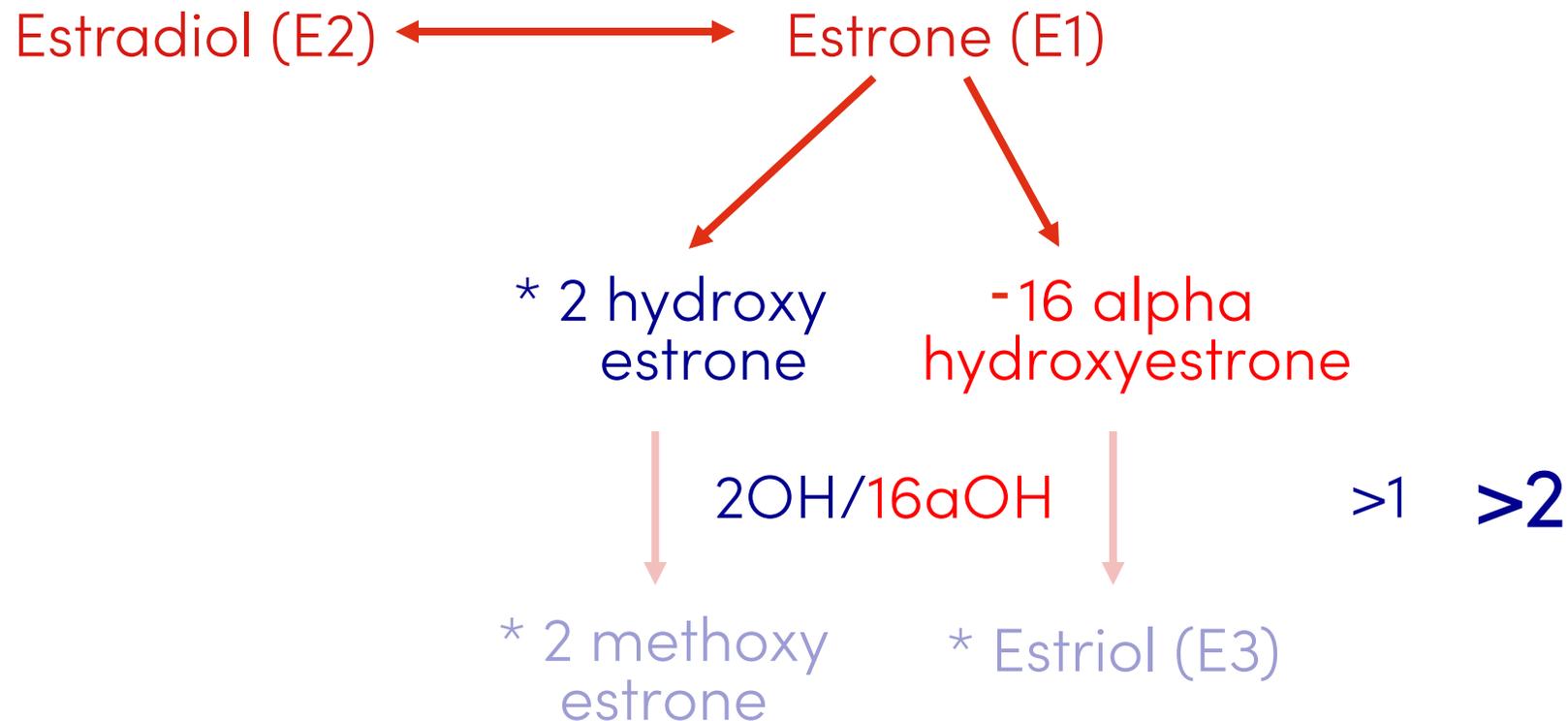


Ovarian Hormones: Estrogens & Metabolites



2-OH/16α-OH: Risk Reduction

Risk for breast cancer includes decreased 2OH/16αOH, increased testosterone, deficiency of estriol, and insufficient progesterone. Brassica's, DIM, can be beneficial to reduce risks as well as a lower prolactin being risk reducing.

Reducing the Hormone Related Cancer Risk
(Or cabbages, sex hormones and their metabolites).
By Jonathan Wright MD: Nutrition and Healing

<http://www.antiaging-systems.com/extract/cancerrisk.htm>

Risk for breast cancer includes
insufficient progesterone
deficiency of estriol
increased testosterone
decreased 2OH/16aOH

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Estrogen Metabolite Ratio Re-affirmed

...In conclusion, we have shown that the preponderance of evidence from the study of estrogen metabolites in tissues and urine supports the EMR [estrogen metabolite ratio] hypothesis, and that the EMR can be modulated in a predictable manner through dietary changes and use of certain nutraceuticals.

Response to Dr. Jacob Schor's Article 'Estrogen Metabolite Ratios: Time for Us to Let Go' Thomas Klug PhD Townsend Letter. April 2013. p100 – 106.

Estrogen Metabolite Ratio Re-affirmed

...In conclusion, we have shown that

- the preponderance of evidence from the study of estrogen metabolites in tissues and urine supports the EMR [estrogen metabolite ratio] hypothesis,
- and that the EMR can be modulated in a predictable manner through dietary changes and use of certain nutraceuticals.

Relationship of serum estrogens and estrogen metabolites to postmenopausal breast cancer risk: a nested case-control study

Conclusions: Women with more extensive hydroxylation along the 2-pathway may have a reduced risk of postmenopausal breast cancer. Further studies are needed to clarify the risks for specific EM and complex patterns of estrogen metabolism. This will require aggregation of EM results from several studies.

Roni T Falk (falkr@mail.nih.gov) Louise A Brinton
Breast Cancer Research 2013, 15:R34

Conclusions:

Women with more extensive hydroxylation along the 2-pathway may have a reduced risk of postmenopausal breast cancer.

Reminder:

Cancer Growth vs Initiation

The development of cancer from the first malignant tumour cell to clinical diagnosis takes many years. Hormones can influence tumour growth, but it is questionable whether hormones induce malignant tumours de novo. It is much more likely that hormones 'merely' promote the growth of already existing tumour cells.

Hormone replacement therapy: pathobiological aspects of hormone-sensitive cancers in women relevant to epidemiological studies on HRT: a mini-review
Human Reproduction Vol.20, No.8 pp. 2052–2060, 2005
M.Dietel^{1,4}, M.A.Lewis² and S.Shapiro³

- The development of cancer from the first malignant tumour cell to clinical diagnosis takes many years. Hormones can influence tumour growth, but...
- it is questionable whether hormones induce malignant tumours de novo. It is much more likely that hormones 'merely' promote the growth of already existing tumour cells.