



INNOVATIONS IN WOMEN'S MENTAL & REPRODUCTIVE HEALTH

Women of All Ages and their HCPs,
Desire Treatment Options Designed
to Address their Unique Mental and
Reproductive Health Needs
Effectively and Safely

References can be found at the end of this presentation



Clinically Proven Effectiveness for:

- ❖ Depression and Anxiety
- ❖ Including in and Around Pregnancy
- ❖ PMS/PMDD & Menopause
- ❖ High or Low Risk Prenatal Vitamin

EnBrace HR Small Gel Cap

INGREDIENTS

“EnBrace HR contains the exact clinically recommended vitamin coenzymes, mineral cofactors and omegas needed to normalize uterine and CNS intracellular methylation for normal mental and reproductive clinical outcomes.”

Towny Robinson, CEO JayMac Pharmaceuticals
Inventor of EnBrace HR

Most Diverse Natural Folates: FDA 15mg DFE

L-Methylfolate Magnesium	7mg
Folinic Acid	2.5mg
Folic Acid	1mg

B Vitamins in their Bioactive Coenzyme Form

B12 (Adenosylcobalamin)	50mcg
B6 (Pyridoxal-5-Phosphate)	25mcg
B1 (Thiamine Pyrophosphate)	25mcg
B2 (Flavin Adenine Dinucleotide)	25mcg
B3 (Nicotinamide Adenine Dinucleotide)	25mcg
Piperine (B Vitamin Bioenhancer)	500mcg

Minerals in their Bioactive Cofactor Form

Magnesium Ascorbate	24mg
Magnesium L-Threonate	1mg
Zinc Ascorbate	1mg
Iron (Ferrous Glycine Cysteinate)	1.5mg

Phospholipid Form – Brain Ready

PS-Omega-3 (Phosphatidylserine, EPA, DHA)	20mg
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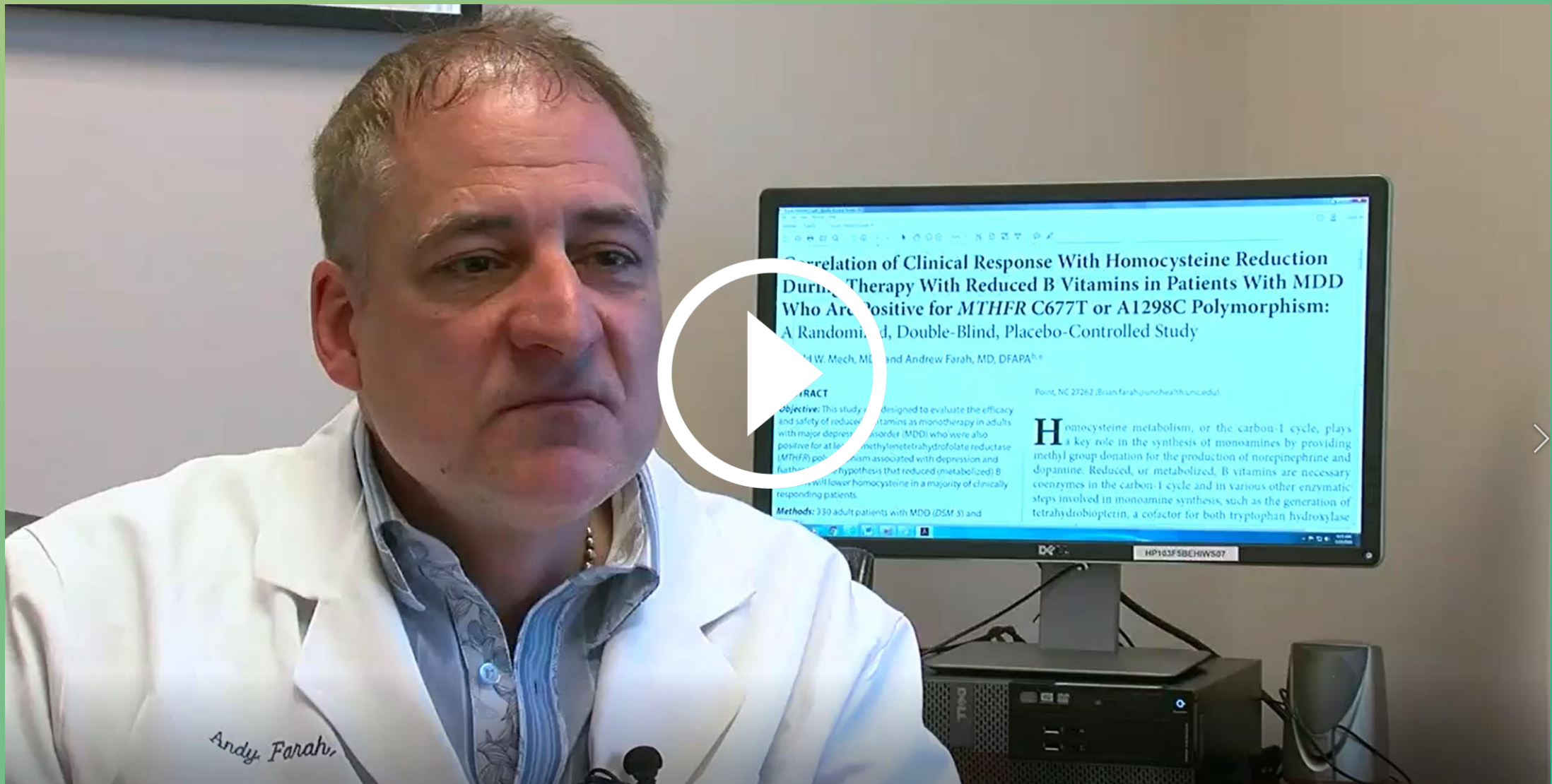
Absorption Enhancer

Sodium Citrate	10mg
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Energizer

CoQ10	500mcg
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CLINICAL STUDY OVERVIEW



Correlation of Clinical Response With Homocysteine Reduction During Therapy With Reduced B Vitamins in Patients With MDD Who Are Positive for MTHFR C677T or A1298C Polymorphism: A Randomized, Double-Blind, Placebo-Controlled Study

H.W. Mech, MD, and Andrew Farah, MD, DFAPA®

Point, NC 27262 (brian.farah@unc.edu)

ABSTRACT

Objective: This study was designed to evaluate the efficacy and safety of reduced B vitamins as monotherapy in adults with major depressive disorder (MDD) who were also positive for at least one methylenetetrahydrofolate reductase (MTHFR) polymorphism associated with depression and further test the hypothesis that reduced (metabolized) B vitamins will lower homocysteine in a majority of clinically responding patients.

Methods: 330 adult patients with MDD (DSM-5) and

Homocysteine metabolism, or the carbon-1 cycle, plays a key role in the synthesis of monoamines by providing methyl group donation for the production of norepinephrine and dopamine. Reduced, or metabolized, B vitamins are necessary coenzymes in the carbon-1 cycle and in various other enzymatic steps involved in monoamine synthesis, such as the generation of tetrahydrobiopterin, a cofactor for both tryptophan hydroxylase

Andy Farah,

THE JOURNAL OF CLINICAL PSYCHIATRY

330 ADULT PATIENT RANDOMIZED DOUBLE BLIND PLACEBO CONTROLLED STUDY

OBJECTIVE:

This 8-week study was designed to evaluate the efficacy and safety of EnLyte/EnBrace HR as monotherapy in adults with major depressive disorder (MDD) who were also positive for at least 1 methylenetetrahydrofolate reductase (MTHFR) polymorphism associated with depression and further test the hypothesis that EnLyte/EnBrace HR will lower homocysteine in a majority of clinical responding patients.

MAY 2016

Correlation of Clinical Response With Homocysteine Reduction During Therapy With EnLyte/EnBrace HR in Patients With MDD Who Are Positive for MTHFR C677T or A 1298C Polymorphism - Andrew Farah, MD

1) Mean MADRS Symptom Score of EnBrace HR Versus Placebo



2) 30% Reduction in Homocysteine Levels (Compared to Placebo)

**NO SIDE EFFECT WAS REPORTED AT GREATER RATE
THAN PLACEBO**

ONSET OF ACTION: 2 WEEKS

ENBRACE HR STUDY

... study included women with histories of MDD who were planning antepartum depression for pregnancy. Group 1 participants were well (not in depressive episodes) and planned to continue antidepressant medication during pregnancy. Group 2 participants were depressed at baseline. Primary outcome was MDD relapse and depressive symptoms, verified with the Mini International Neuropsychiatric Interview and the Montgomery-Åsberg Depression Rating Scale (MADRS), respectively. Secondary outcomes were folic acid metabolism and inflammation were collected.

Group 1 participants (N=11; well at baseline) experienced no significant decreases in MADRS scores during pregnancy (27.3%; p=0.005) than expected when compared to historical controls. Group 2 participants (depressed at baseline) experienced significant improvements in MADRS scores (p<0.001), with 50% of participants improving >50% and one improving 33.3%. One adverse event occurred, a hospitalization for depression.

Results suggest EnBrace HR is a well-tolerated intervention with potential efficacy for the treatment of perinatal depression. Larger controlled trials are necessary.

Introduction

Major Depressive Disorder (MDD) and Major Depressive Episodes (MDEs) in Women: MDD is approximately twice as often in women compared to men.^{1,2} High risk for MDEs during pregnancy and the postpartum period.³ Women often discontinue standard antidepressant medications prior to or during pregnancy for safety concerns.^{4,5}

Few evidence-based alternatives to antidepressant medications for the treatment and prevention of perinatal depression exist, leaving pregnant women and clinicians with the clinical dilemma of weighing potential exposure to medication against impact of untreated maternal depression.

Folate and Folate-Related Therapies: Folate suggests various folate forms including folic acid, folinic acid, and methylfolate may have antidepressant effects.⁶⁻¹² These interconvertible folate forms constitute the one-carbon cycle and are essential for neurotransmitter synthesis.¹³ Folate may exert an antidepressant effect by impacting neurotransmitter synthesis.¹³ Folate must be converted to its active form, methylfolate, for use in the body. Polymorphisms in the MTHFR gene may limit the efficacy of folic acid as an intervention targeting MDD.^{14,15} Folate methylation may limit the efficacy of folic acid as an intervention targeting MDD.^{14,15} Folate may be more readily absorbed in the brain than folic acid, and methylfolate has potential as a treatment for MDD.¹⁷⁻²⁰ Folate treatment in early trials has been found to induce significant improvement in depressive symptoms both when used as an adjunct to antidepressant therapy and when used as a monotherapy.^{21,22} Folate-related compounds reduce rates of neural tube defects and improve child neurodevelopmental outcomes, conferring benefits and minimizing potential risks of antidepressants during pregnancy.²³⁻²⁵

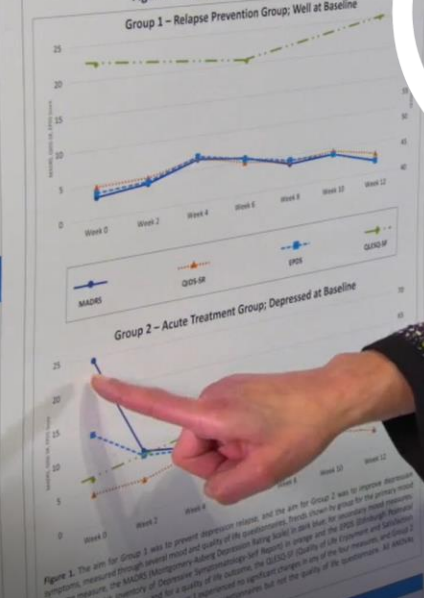
EnBrace HR: EnBrace HR is a prescription prenatal/postnatal dietary management product that contains 5.53 mg L-methylfolate and other folate derivatives (1 mg folic acid, and 2.2 mg folinic acid), optimal for a population with high rates of polymorphisms that affect folic acid metabolism.

Methods

- Group 1: Well at Baseline; Relapse Prevention Group**
- Inclusion Criteria:**
- Age ≥18
 - MDD as primary diagnosis
 - Have prescribing clinician
 - Planning to conceive or <28 weeks pregnant at enrollment
 - No dose increase of current antidepressant medication start of new antidepressant medication verified by MINI
 - Currently depressed, as verified by MINI
 - “Depressed”, baseline MADRS score ≥15
- Primary Outcome:** To obtain preliminary data on the efficacy of EnBrace HR for treatment of acute MDEs and to avoid starting an antidepressant during pregnancy.

Characteristic	N (%)
Age (years), mean ± SD	32.8 ± 5.0
Race	
White/Caucasian	28 (84.7%)
Black/African American	1 (3.0%)
Native Hawaiian or other Pacific Islander	0
Asian	2 (6.3%)
American Indian or Alaska Native	0
Ethnicity	
Non-Hispanic or non-Latina	38 (94.7%)
Hispanic or Latina	1 (2.5%)
Marital status	
Married	34 (84.2%)
Separated/divorced/widowed	1 (2.5%)
Never married/single	2 (5.3%)
Education	
Some high school	0
High school or received GED	1 (2.5%)
Some college or Associate Degree	4 (10.3%)
Graduated college (BA, BS)	11 (27.9%)
Master's Degree	11 (27.9%)
Doctoral Degree (PhD, MD, etc.)	3 (7.5%)
Employment status	
Full or part-time work	17 (42.5%)
Homemaker	7 (17.5%)
Student	7 (17.5%)
Reproductive history	
Pregnancy status	
Planning pregnancy/Trying to conceive	12 (30.3%)
Pregnant at enrollment	7 (17.5%)
Assisted Reproductive Technology (ART)	
Use for conception/Attempted conception	5 (12.5%)
No use of ART	14 (35.0%)
Pregnancy events during trial	
Became pregnant	4 (10.1%)
Pregnant/lost	2 (5.0%)
Delivered	2 (5.0%)

Figure 1. Mood and Quality of Life Outcomes

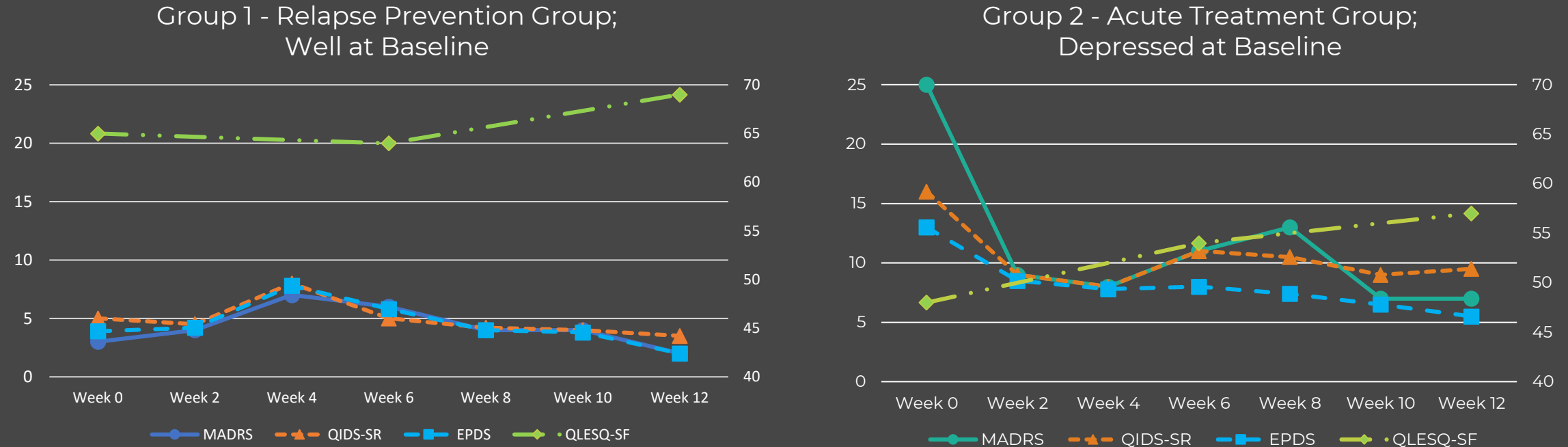


Adverse Event	N (%)
Headache	1 (2.5%)
Nausea	1 (2.5%)
Constipation	1 (2.5%)
Diarrhea	1 (2.5%)
Stomach pain	1 (2.5%)
Back pain	1 (2.5%)
Joint pain	1 (2.5%)
Insomnia	1 (2.5%)
Dizziness	1 (2.5%)
Fatigue	1 (2.5%)
Weight gain	1 (2.5%)
Weight loss	1 (2.5%)
Changes in appetite	1 (2.5%)
Changes in bowel habits	1 (2.5%)
Changes in menstrual cycle	1 (2.5%)
Changes in skin	1 (2.5%)
Changes in hair	1 (2.5%)
Changes in vision	1 (2.5%)
Changes in hearing	1 (2.5%)
Changes in taste	1 (2.5%)
Changes in smell	1 (2.5%)
Changes in voice	1 (2.5%)
Changes in breathing	1 (2.5%)
Changes in circulation	1 (2.5%)
Changes in sweating	1 (2.5%)
Changes in body temperature	1 (2.5%)
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EnBrace HR For The Treatment and Prevention of Depression in Women

Trying to Conceive and During Pregnancy

Marlene P. Freeman, MD et al, Annals of Clinical Psychiatry February 2019



CONCLUSION

Study results suggest EnBrace HR is a novel and well tolerated intervention with efficacy for the prevention and treatment of depression among women planning pregnancy and who are pregnant.

Figure 1. The aim for Group 1 was to prevent depression relapse, and the aim for Group 2 was to improve depression symptoms, measured through several mood and quality of life questionnaires. Trends shown by group for the primary mood outcome measure, the MADRS (Montgomery-Asberg Depression Rating Scale) in dark blue; for secondary mood measures, the QIDS-SR (Quick Inventory of Depressive Symptomatology-Self Report) in orange and the EPDS (Edinburgh Postnatal Depression Scale) in light blue; and for a quality of life outcome, the QLESQ-SF (Quality of Life Enjoyment and Satisfaction Questionnaire -Short Form) in green. Group 1 experienced no significant changes in any of the four measures, and Group 2 experienced significant improvements in the mood questionnaires but not the quality of life questionnaire. All ANOVAs indicating significance are reported in Table 3.

PMS

(Premenstrual Syndrome)

Mild/Moderate

Menopause

Cyclic hormonal changes of the menstrual cycle causes fluctuations of serotonin levels leading to adverse symptomology
– Mayo Clinic –

PMDD

(Premenstrual Dysphoric Disorder)

Severe (DSM-5)



**Tension/Anxiety, Depressed Mood – Irritability/Anger – Appetite Changes – Cravings – Insomnia
– Social Conflict Withdrawal– Feeling overwhelmed – Hopelessness – Hot Flashes**

Biochemical Wellness

EnBrace HR normalizes serotonin levels and is an effective, all-natural, safe, root cause monotherapy option or adjunct to SSRIs, oral contraceptives, NSAIDs, diuretics, and/or HRT in the prevention or treatment of PMS/PMDD/MENOPAUSE.

Dietary B Vitamin Intake and Incident of Premenstrual Syndrome. Manson et al. Am J Clin Nutr. 2011

Clinical Result Example

A 17-year-old on Paxil for PMDD experienced side effects and withdrawal symptoms after discontinuing Paxil. She was hesitant to resume antidepressant medications after presenting again with PMDD depression, and a MADRS of 20. The patient elaborated she was “putting on a happy face”. She was prescribed EnBrace HR and within 4 weeks her MADRS dropped from 20 to 6.

Coenzyme Treatment of Childhood and Adolescent Depression: A Case Series. Farah et al. Clinical Psychiatry Vol 7 #5S3:93 April 2021

“For the emotional dysregulation of PMS, PMDD, and Menopause we turned first-line to the natural, broad spectrum B vitamin coenzymes and mineral cofactor agent, EnBrace HR. This product has provided safe and effective relief for countless patients with female hormonal fluctuations or deficiency”

Andrew Farah, MD

Attending Psychiatrist, Novant Health System, Winston-Salem, NC
Medical Director of Strategic Mental Health Interventions



Provides the most diverse combination of folates and methylation vitamin coenzymes and mineral cofactors for maximum prevention of NTDs and other birth defects in low or high-risk pregnancies.

An optimal serum folate level for birth defect prevention should be reached 4 weeks prior to conception, 50% of pregnancies are unplanned.

Mechanism of Cellular Action

Normalize impaired cellular “homocysteine/methionine” metabolism disorders that can lead to placental inflammation, impaired fetal perfusion, impaired nucleotide and DNA synthesis and faulty epigenetic expression.

To Prevent or Reduce Risk For:

- ❖ **All Neural Tube Defects**
- ❖ **Congenital Heart & Kidney Disorders**
- ❖ **Down Syndrome**
- ❖ **ADHD**
- ❖ **Autism Spectrum Disorders**
- ❖ **Orofacial Clefts**
- ❖ **Drug Related Birth Defects**
- ❖ **Pregnancy Complications**
- ❖ **Congenital Structural Malformation**

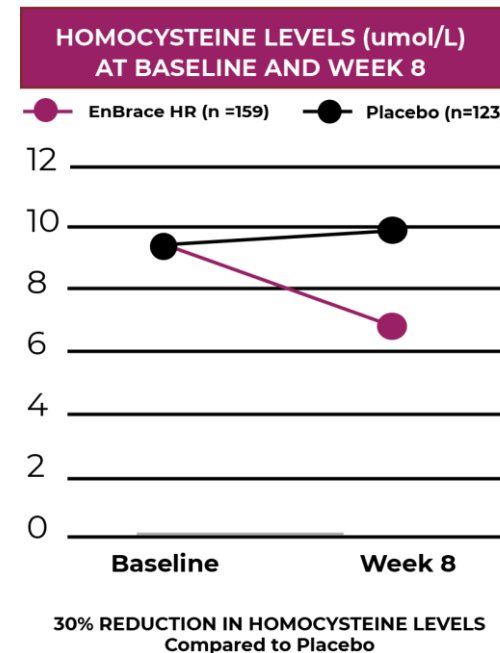
EnBrace HR Helps Eliminate the Risk for Adverse Pregnancy Outcomes, NTDs, and Other Birth Defects Associated with the effects of MTHFR Gene Variant

MTHFR gene variants prevent the production of the enzyme that converts folate to methylfolate leading to high homocysteine and low neurotransmitter production causing negative reproductive and CNS outcomes.

- 60%** of women have the heterozygous form of MTHFR gene variant
- 25%** of women have the homozygous form of MTHFR gene variant
- 50%** of folate related NTDs and other birth defects are linked to MTHFR
- 85%** of depressed and addicted women have an MTHFR gene variant

MTHFR Polymorphisms are Documented Risk Factors for these Adverse Pregnancy Outcomes:

- Miscarriage
- Perinatal/ Post-Partum Depression
- Pre-Term Delivery
- Low Birth Weight
- Pre-Eclampsia
- Placental Inflammation
- Impaired Fetal Perfusion
- Chromosomal Abnormalities



EnBrace HR is proven in a 330 patient, randomized, controlled trial in patients with an MTHFR variant to lower homocysteine 30% compared to placebo group.

Andrew Farah, MD et al.
Journal of Clinical Psychiatry, May 2016

HOW TO PRESCRIBE

STEP 1

USE OUR ONLINE PRESCRIBER FORM

Fill in prescriber and patient information and then hit “submit”

[CLICK HERE](#)

STEP 2

WE WILL OFFER YOUR PATIENT THEIR FIRST 60 DAYS FOR \$60

We will also provide them with the insurance steps and help determine the most cost-effective option moving forward

STEP 3

IF IT'S COVERED ON INSURANCE, WE WILL CONTACT YOUR OFFICE WITH PRESCRIBING INFO

If your patient does not have coverage or has a high co-pay, we will offer our discounted cash-pay option for EnBrace HR. No further action is needed for your office.

References

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