## The Romberg Test

## **Take Home Points**

1) Some patients are under-methylators. This means the body is not donating methyl groups via SAM. This under-methylated state translates into lowered neurotransmitters as well as the other 200 enzymes that are underfed. Part of this picture is an increased homocysteine. The cofactors B12, B6, and 5-MTHF are needed in this phase.

2) We can have over methylation which means the body is hyper-donating methyl groups the result being an excess of neurotransmitters. This process of over methylation occurs less frequently. Some of the symptoms of over methylators are: anxiety, acne, achy joints, agitation, headaches, irritability, insomnia, migraines, nausea, palpitations, and rash. Niacin is important for these patients.

3) We can have a lack or shortage of methyl groups, TMG, or betaine being the most prevalent. Biotics Research just introduced a product to their line called TMG Powder to compensate for the patients who may have a shortage of methyl groups.

4) Heavy metals and viruses will also short circuit many of the pathways and will need to be cleared. Once cleared, methylation pathways often function normally.

5) Mineral deficiencies will also reduce enzymes (SNIP) activity. See the following test sheet for options.

## Procedure

Have patient stand on one foot with eyes open, see how long it takes to lose balance. The average person should be able to stand on one foot for 10 - 20 seconds (eyes open OR closed). Have them do it again to make sure they know how to do it. Now have them stand on the other foot in the same manner. Note times for both right and left feet.

Next have the patient stand on one foot again and once they become stabile close their eyes. Again be prepared to catch them. Observe direction of first movement. Observe for overall movement and stability. Note the time it takes to lose balance for each foot.

Next observe range of motion by performing various range of motion tests and record base line inhibitions. Inquire about pain levels; ask the patient if there is normal motion that will cause pain. Record it on a 1-10 scale.

Now use the weakest indicator, in this case the situation which caused the poorest balance, and have them systematically taste the following nutrients, and retest with the nutrients IN their mouth: Folic Acid 800<sup>™</sup>, Methylfolate Plus<sup>™</sup>, B6 Phosphate<sup>™</sup>, TMG Powder<sup>™</sup>, and Niacin 100<sup>™</sup>. See which nutrient increases their strength, which will result in an increase in their balance time, increased range of motion, or a reduction in pain. If Methylfolate Plus<sup>™</sup> gives a better response than the Folic Acid 800<sup>™</sup>, chances are very strong they have a genetic weakness and an inability to convert to 5-MTHF.

Supplement with the nutrient(s) which strengthens or stabilizes balance (enhancing appropriate neurologic indicators), increases range of motion and reduces pain.

folate  $\rightarrow$  dihydrofolate  $\rightarrow$  tetrahydrofolate  $\leftrightarrow$  methyleneTHF  $\rightarrow$  5-methyl-tetrahydrofolate or 5-MTHF

Name:	Date:		
D PE	RFORM ROMBERG TEST		
	o FEET SHOULDER WIDTH, (EYES OPEN)		
	<ul> <li>NOTE <u>TIMES</u> FOR RIGHT &amp; LEFT</li> </ul>	Right	Left
	• OBSERVE FOR <u>DIRECTION</u> OF FIRST MOVEMENT	Right Left / For	rward Backwards
□ NC	TE RESPONSES, TEST <u>1 FOOT STANDING</u> (EYES CLOS	ED)	
Let pa	ient practice this twice before recording results		
	<ul> <li>NOTE TIMES FOR RIGHT &amp; LEFT FOOT</li> </ul>	Right	Left
	• OBSERVE FOR <u>DIRECTION</u> OF FIRST MOVEMENT		rward Backwards
ADDITION	IAL CONSIDERATIONS		
	a) PAIN (HAVE PATIENTS RATE ANY PAIN ON A 1 - 10 SCALE)		
	b) RANGE OF MOTION (NOTE LIMITED RANGE OF MOT	-ION)	
IF BAL	ANCE IS POOR (OR LIMITED RANGE OF MOTION OR PA	JN):	
a. <u>Ind</u> a. b. c. d. e. f. g. h.	-TEST WITH ORAL SUPPLEMENT: Listed in order of import SAMethylate Plus <sup>™</sup> (Combination Product) ividual Methylation Components: CALCIUM FOLINATE (Reduced) - Folate-5 Plus <sup>™</sup> 5-MTHF - Methylfolate Plus <sup>™</sup> P-5-P - B-6 Phosphate P-5-P - B-6 Phosphate TRIMETHYLGLYCINE - TMG Powder NIACIN - Niacin 100 <sup>™</sup> Bio-3B-G <sup>™</sup> Bio-3B-G <sup>™</sup> B12 - B12-2000 <sup>™</sup> Lozenges B2 - Bio-GGG-B <sup>™</sup> Factors that block methylation: metals/minera		
a.	Lipoic Acid Plus		
	HEAVY METAL CHELATING AGENTS - Porphyra-Zyme		
	SULFUR - MSM		
	MAGNESIUM - <b>Mg-Zyme</b>		
	ZINC - Zn- Zyme Forte™		
	MOLYBDENUM <b>Mo-Zyme Forte™</b>		
-	INFLAMMATION - KappArest™		
	LITHIUM - <b>Li-Zyme™</b>		
i.	RUBIDUIM - <b>Rb-Zyme™</b>		

Notes: