

Designed by Dr. Penny Kendall-Reed, N.D. in collaboration with Pure Encapsulations®, the Healthy Sleep Protocol is meant to help you deliver the most effective care and support for your patient's sleep health. Products from other trusted Atrium Innovations brands such as Genestra Brands® have been added to provide a complete and robust protocol.

The key to resetting a patient's sleep patterns and not just sedating them is decoding why they don't sleep. Stress remains the leading cause of sleep disturbances and may negatively impact healthy sleep via multiple pathways. A stress-induced rise in corticotropin-releasing hormone (CRH) throughout the day leads to hyper-stimulation of the hypothalamic-pituitary-adrenal (HPA) axis. Stress may also affect an individual's sleep architecture, decreasing the brain's ability to transition into Stage 4 delta wave or slow-wave sleep. This stage is critical to restorative sleep and disruption can significantly compromise sleep quality and overall health.

MAIN CLINICAL CONCERN & PATIENT SYMPTOMS	PRODUCT RECOMMENDATIONS	RECOMMENDED DOSE	CLINICAL INSIGHTS & CONSIDERATIONS	
	Pure Encapsulations®  Sereniten Plus  (Order Code: SRP4C-C)	2 capsules twice daily on an empty stomach*	Suggest one dose be taken before bed to reset the HPA axis, decrease CRH, and decrease the stress response.	
	Pure Encapsulations®  Magnesium Glycinate  (Order Code: MG1C-C)	2 capsules before bed	Encourage muscle and nerve relaxation.	
Problem falling asleep:  • Takes 30 minutes or more to fall asleep	Pure Encapsulations®  Best-Rest Formula  (Order Code: BRF1C-C)  OR	2-3 capsules at 8:30 p.m.**	Sedative to help sleep onset. Contains melatonin to help push one into deep Stage 4 sleep.	
Tired going to bed, wide awake once they get in bed	Genestra Brands® Sleep Gummies (Order Code: 10656-60C) OR	3-5 gummies at 8:30 p.m.**	Mild sedative with melatonin. Helps relax racing thoughts and increase Stage 4 sleep.	
Nervous about bedtime and not falling asleep	Pure Encapsulations®  Melatonin 3 mg  (Order Code: ME36C-C)	2 pills at 8:30 p.m.**	Do not use time-release melatonin here.	
	The following 2 products may be used with Best-Rest Formula, Sleep Gummies or Melatonin 3 mg.			
	Genestra Brands®  Passiflora Combination  (Order Code: MG1C-C)	30-60 drops at bedtime	Relaxes racing thoughts and calms the body before bed. Does not contain melatonin.	
Adjunct Tests: Problem falling asleep  Orthostatic Blood Pressure Serum ACTH Serum ACTH Serum Cortisol urine analysis  Genetic Testing: FKBP5, NR3C2, ADRB2, CLOCK, CRY1 Sleep Study				



MAIN CLINICAL CONCERN & PATIENT SYMPTOMS	PRODUCT RECOMMENDATIONS	RECOMMENDED DOSE	CLINICAL INSIGHTS & CONSIDERATIONS
Problem staying asleep: (waking at 2-4 a.m.):  • Falls asleep easily – within 5-15 mins of going to bed  • Wakes most nights between	Pure Encapsulations® <b>Sereniten Plus</b> (Order Code: SRP4C-C)	2 capsules twice daily on an empty stomach* Take 2 extra capsules upon waking between 2:00-4:00 a.m.	Suggest one dose be taken before bed to help reset the HPA axis, decrease CRH, and decrease the stress response.  Helps reset the abnormal peak of cortisol that occurs at 2:00 a.m. from stress.
2-4 a.m.  • Difficulty falling back asleep once awake  • Tired in the morning	Pure Encapsulations®  Melatonin-SR  (Order Code: MESR6C-C)	2 capsules at 8:30 p.m.**	Helps regulate circadian rhythms and encourage Stage 4 delta wave deep sleep.
Adjunct Tests: Problem staying  Orthostatic Blood Pressure Serum ACTH 24-hour cortisol urine analy	☐ Genetic Testi☐ Sleep Study	ng: FKBP5, NR3C2, ADRB2, CLOCK, CR 2 capsules twice daily on	Suggest one dose be taken before bed to reset the HPA axis.
Difficulty falling and staying asleep:  • Takes 30 mins or more to fall asleep	Pure Encapsulations®  Sereniten Plus  (Order Code: SRP4C-C)	an empty stomach*  Take 2 extra capsules upon  waking between 2:00-4:00 a.m.	decrease CRH, and decrease the stress response.  Helps reset the abnormal peak of cortisol that occurs at 2:00 a.m. from
<ul><li>Wakes between 2-4 a.m.</li><li>Difficulty falling back asleep</li></ul>	Pure Encapsulations®  Best-Rest Formula  (Order Code: BRF1C-C)  OR	2-3 capsules at 8:30 p.m.**	Sedative to help sleep onset. Contains melatonin to help push or into deep Stage 4 sleep.
• Tired on waking	Genestra Brands®  Sleep Gummies  (Order Code: 10656-60C)	3-5 gummies at 8:30 p.m.**	Mild sedative with melatonin. Help relax racing thoughts and increase Stage 4 sleep.
Adjunct Tests: Difficulty falling  Orthostatic Blood Pressure  Serum ACTH  24-hour cortisol urine analy	☐ Genetic Testi☐ Sleep Study	ng: FKBP5, NR3C2, ADRB2, CLOCK, CR	Y1



MAIN CLINICAL CONCERN & PATIENT SYMPTOMS	PRODUCT RECOMMENDATIONS	RECOMMENDED DOSE	CLINICAL INSIGHTS & CONSIDERATIONS
Waking at 5:00 a.m. :	Pure Encapsulations®  Sereniten Plus  (Order Code: SRP4C-C)	2 capsules twice daily on an empty stomach* Take 2 extra capsules upon waking at 5:00 a.m.	Suggest one dose be taken before bed to reset the HPA axis, decrease CRH, and decrease the stress response.
<ul> <li>Able to fall asleep easily.</li> <li>Wakes at 5:00 a.m. and can't fall back asleep until 6:30 or 7:00 a.m. when they need to get up.</li> </ul>	Pure Encapsulations®  SeroPlus  (Order Code: SOP1C-C)  OR  Pure Encapsulations®  5-HTP 100 mg  (Order Code: HYD16C-C)  OR  Genestra Brands®  5-HTP 100 mg  (Order Code: 06456)	1 capsule 2x daily with or without food	To boost serotonin and prevent the 5:00 a.m. waking.
Adjunct Tests: Waking at 5:00  Orthostatic Blood Pressure Serum ACTH 24-hour cortisol urine analy	☐ Genetic Testir☐ Sleep Study	ng: FKBP5, NR3C2, ADRB2, CLOCK, CR	Suggest one dose be taken before bed to reset the HPA axis,
Sleeping 8-10 hours but waking unrested:  • No trouble falling or staying asleep.  • Sleeps many hours but waking	(Order Code: SRP4C-C)  Genestra Brands®  TAD+ (60/120 caps)  (Order Codes: 08301/08301120)  OR  Genestra Brands®  TADS  (Order Code: 08300)	an empty stomach*  1 tablet 1-2x daily with food at breakfast and lunch	decrease CRH, and decrease the stress response.
<ul> <li>Sleeps many hours but waking unrested, as if have not slept.</li> <li>Tired the next, possibly lightheaded on standing.</li> </ul>	Pure Encapsulations®  Melatonin-SR  (Order Code: MESR6C-C)	1 capsule at 8:30 p.m.**	Helps regulate circadian rhythms and encourage Stage 4 delta wave deep sleep.
	Pure Encapsulations®  Melatonin 3 mg  (Order Code: ME36C-C)	1 capsule at 8:30 p.m.**	Taken with the time-released melatonin above.
Adjunct Tests: Sleeping 8-10 h  Orthostatic Blood Pressure Serum ACTH 24-hour cortisol urine analy	☐ Genetic Testir☐ Sleep Study	ng: FKBP5, NR3C2, ADRB2, CLOCK, CR	Y1





To further emphasize the importance of healthy sleep, research shows that sleeping 7 vs 8 hours a night increases CRP, ESR, IL6 and IL1 B within 1 month.<sup>2</sup> Similarly, 1 hour less sleep per night was shown to alter insulin processing to the same amount as food within 4 days.<sup>3</sup> It is important to always treat sleep when attempting to treat any inflammatory or metabolic condition.

## **REFERENCES:**

- 1. Rodenbeck A, Huether G, Rüther E, Hajak G. Neurosci Lett. 2002 May 17;324(2):159-63.
- 2. Mullington JM, Simpson NS, Meier-Ewert HK, Haack M. Best Pract Res Clin Endocrinol Metab. 2010 Oct;24(5):775-84.
- 3. Aschbacher K, O'Donovan A, Wolkowitz OM, Dhabhar FS, Su Y, Epel E. Psychoneuroendocrinology. 2013 Sep;38(9):1698-708.

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