

Dear Physician,

Your patient is interested in registering for a seminar in which **an advanced breathing technique , called Sudarshan Kriya (acronym SK) plus preparatory breathing practices, collectively referred to as Sudarshan Kriya Yoga (SKY), is either taught or practiced under the aegis of Art of Living Foundation USA.**

We have advised your patient to consult with you on this, due to the potential risk that SKY may pose to individuals with a medical history of one of the following medical conditions: Seizure Disorder, Bipolar Disorder, Schizophrenia, Schizoaffective disorders, Major Surgery within the past 8 weeks, or Pregnancy. These conditions are considered contraindications for learning SKY.

**Please carefully read the description of what is taught on the program and the theoretical risks cited in published articles in the medical literature, before making an informed decision on whether to advise your patient to take this program.** Please be advised that historically, individuals with these medical conditions have been discouraged from learning SKY, and several patients have opted to participate in an alternative meditation program named Sahaj Samadhi Meditation, which is considered safe and relaxing.

**Program description:** The program involves SKY, a combination of breath-based practices as referenced above, with benefits including stress relief. SKY requires the participant to breathe in specific, cyclic patterns of breath of varying speeds, for prolonged periods, and includes breathing in a rapid cycle breath under the guidance of a teacher. The practice is well tolerated in healthy subjects.

However, there are both theoretical concerns published in the medical literature and anecdotal evidence of potential risks to patients with the conditions cited above.

1. Bipolar Disorders (Type I and II)

Psychiatry literature discusses the significant yet theoretical risk of rapid cyclic breath work triggering mania/ manic episode, or hypomania. This risk increases should the individual be noncompliant with prescribed medications given by a provider for bipolar disorder. Additionally there is theoretical concern that lithium clearance is increased in patients who are on this medication likely from increased renal filtration. There is an added potential risk of patients who have mania deciding to terminate medication due to the euphoric like experience reported by some bipolar individuals during and after SKY practice.

2. Schizophrenia and Schizo-affective Disorders

There is a theoretical and high risk published in the literature for rapid cyclic breath work to increase / trigger dissociative symptoms or a dissociative, psychotic episode in a patient with schizophrenia or schizoaffective disorders. Acute or uncontrolled psychosis has been discussed as a “contraindication” for rapid cyclic breath work, including SKY, in several medical publications.

3. Seizure Disorders

Concern exists for reduction in seizure threshold during the first 2-3 sessions of SKY

secondary to transient hypocapnia. During the rapid cycle phase of SKY, there can be transiently decreased CO<sub>2</sub> levels (hypocapnia), and therefore a decrease in arterial CO<sub>2</sub> levels, which in and of itself, reduces the seizure threshold. The medical literature has countless citations of hypocapnia, low CO<sub>2</sub> levels, as a method of seizure induction.

It is theorized that these CO<sub>2</sub> levels normalize after the first 2-3 sessions of practicing SKY in healthy participants but we have no guarantee that this is definitely the case for individuals with a seizure disorder, especially those with intractable or uncontrolled seizures.

#### 4. Major Surgery within 8 weeks of course commencement date

Given a theoretical concern for increased intra-abdominal pressure, or intra-thoracic pressure immediately after surgery, we advise participants wait for 8 weeks for appropriate surgical wound healing in order to prevent any difficulties such as intra-abdominal hernia, sternal incision reopening or pain with breathing during the practices. Additionally pain in recent surgery patients may impede the laying down phase of SKY from being performed correctly.

#### 5. Pregnancy

Traditionally, pregnant women were discouraged from participating in SKY. However, there is no data to indicate that it is safe or unsafe.

### **Literature Citations / References:**

1. Brown R.P, and Gerbarg P.L. (2005). Sudarshan Kriya Yogic Breathing in the Treatment of Stress, Anxiety, and Depression: Part II – Clinical Applications and Guidelines. *The Journal of Alternative and Complementary Medicine*. Volume 11 (No. 4), pp 711-717
2. Muskin, R.P., Gerbarg P.L., Brown R.P. (2013). Complementary and Integrative Therapies for Psychiatric Disorders, An Issue of Psychiatric Clinics, 1e (The Clinics: Internal Medicine) 1st Edition
3. Sageman S. and Brown R. (2006). Free at Last, in DSM-IV-TR Case Book, edited by R.L. Spitzer, M.B. First, J.B.W. Williams, M. Gibbon. American Psychiatric Publishing, Inc. Washington D.C. pp 109-121
4. Brown R.P, and Gerbarg P.L. (2005). Yoga: A breath of relief for Hurricane Katrina refugees. *Current Psychiatry Online*. Volume 4 (No. 10), pp 55-67
5. Tasman, Allan, Kay, Jerald., Jeffrey A. Lieberman, Michael B. First, Mario Mah Third edition vol 1(2013). Retrieved from <https://books.google.com/books?isbn=1118845471>
  1. John Wiley and Sons—Wiley publishers
6. Blume, W. T. (2006). Hyperventilation, More Than Just Hot Air. *Epilepsy Currents*, 6(3), 76–77. <http://doi.org/10.1111/j.1535-7511.2006.00103.x>
7. Miller, J. W. (2011). Stopping Seizures With Carbon Dioxide. *Epilepsy Currents*, 11(4), 114–115. <http://doi.org/10.5698/1535-7511-11.4.114>