**Evidence Table 3a. Study characteristics: yoga breathing technique versus control**

| **Study**  | **Country** | **Group** | **N random-ized** | **Age (mean)** | **% Female** | **SABA use** | **ICS use** | **FEV1 % pred.** | **Inclusion criteria** | **Exclusion criteria** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Khare 199160 | India | IG (yoga breath-ing) | 17 | 38.9 | 0 | NR | NR\* | NR | Aged 25 to 50y, male asthmatics not suffering from other disease (e.g., coronary heart disease, valvular disease, chronic bronchitis and emphysema). Pts on vegetarian diet only. | Cigarette smokers |
| CG | 17 |
| Kligler 201161 | United States | IG (yoga) | 77 | 44.6 | 81.2 | NR | 79%‡ | NR | Aged 18 to 80y, Class II through IV asthma sufferers (mild, moderate and severe persistent asthma); ability to read/write at 5th grade level; willingness to comply with study instructions; English speakers. | Pregnant or lactating; concurrent serious or life-threatening illness as determined by clinical judgment; psychiatric disorder as determined by clinical judgment; inability to understand and following direction associated with the clinical study as determined by clinical judgment; fish allergy; history of adverse reaction to vitamin C or fish oil as determined by clinical history. |
| CG | 77 |
| Sabina 200562 | United States | IG (yoga breath-ing) | 29 | 51 | 74.2 | 1 puffs /d | NR | NR | Aged ≥ 18y, dx of mild to moderate asthma for ≥ 6m (ATS spirometry criteria: FEV1/FVC below lower limit of normal, response to bronchodilator [≥ 12 percent increase and ≥ 200mL absolute increase in FEV1 15min after two puffs of short-acting beta2-agonist]), taking ≥ one of the following: inhaled corticosteriods, inhaled beta2-agonists, methylxanthines, anticholinergics, leukotriene inhibitors, receptor antagonists, or mast cell-stabilizing agents > 6m, stable medication dosing for ≥ 1m. | Smoked currently (within past 12m), smoking history > 5 pack years, lung disease, only EIA, practices yoga in past 3y, pregnancy, chronic medical condition that required tx w/ oral corticosteroids within 1m, medical condition that contraindicated exercise, or another unstable medical condition. |
| CG | 33 |
| Saxena 200963 | India | IG (yoga breath-ing) | 25 | 29.25 | 50 | NR | NR | 72 | Bronchial asthma pts with diagnostic confirmation: sx of asthma, FEV1 < 85 percent, reversibility (increase in FEV1) > 12 percent after 20min of two salbutamol puffs. Study cases has FEV1 > 70 percent, interest in yoga and a 6m minimum experience in performing yogic practices. | Pts with sx suggestive of disease other than bronchial asthma like ischemic heart disease, bronchitis, and anemia; history of smoking. |
| CG | 25 |
| Vempati 200964,74,83-87 | India | IG (yoga breath-ing) | 30 | 33.45 | 42.1 | 2.1 puffs/d (plus 11 non-users) | 339 mcg/d (plus 25 non-users) | 66 | Aged ≥ 18y; had an established diagnosis of mild-to-moderate asthma for at least 6m (meeting the ATS spirometry criteria for mild-to-moderate asthma, which requires either FEV1/FVC < the lower limit of normal w/a significant response to a bronchodilator [a ≥ 12 increase and a ≥ 200mL absolute increase in FEV1 15min after the administration of two puffs of a SABA] or PEFR variability > 20%); taking at least one of the following: inhaled beta2-agonists, methylxanthines, anticholinergics, ICS; and stable medication dosing for the past 1m. | Smoked currently (or in the past year) or had a smoking history of > 5 pack years; had a concomitant lung disease; were taking leukotriene inhibitors or receptor antagonists, or mast cell-stabilizing agents for at least 6m; practiced yoga or any other similar discipline during 6m prior to the study; pregnant; had a chronic medical condition that required treatment with oral or systemic corticosteroids in the past 1m; had a medical condition that contraindicated exercise; or had an unstable medical condition. |
| CG | 30 |

\*19/34 (56%) “disturbed sleep and dyspnea on daily routine work which was relieved by oral drugs”; 8/34 (24%) “asthma required injection frequently to control dyspnea or admission in the hospital”

†Median puffs/d, typical dose per puff = 100 mcg

‡Percent using corticosteroid or other asthma medication

Abbreviations: ATS: American Thoracic Society; CG: control group; d: day(s); dx: diagnosis; EIA: exercise-induced asthma; FEV1: forced expiratory flow in 1 second; FVC: forced vital capacity; ICS: inhaled corticosteroids; IG: intervention group; m: month(s); min: minute(s); mL: milliliter(s); NR: not reported; PD20: provocative dose causing a decrease in FEV1 of 20 percent; PEFR: pulmonary expiratory flow rate; pts: participants; pred: predicted; SABA: short-acting beta2-agonists; sx: symptoms; tx: treatment; μmol: micromole(s); US: United States; y: year(s)