

## Mediterranean Diet Benefits Lung Health

By Greg Arnold, DC, CSCS, June 23, 2008, abstracted from "Adherence to the Mediterranean diet and fresh fruit intake are associated with improved asthma control" in the July 2008 issue of *Allergy*

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Asthma affects more than 20 million Americans, including 6.1 million children<sup>1</sup>, and is recognized as "a major public health problem of increasing concern in the United States." As the third-ranking cause of hospitalization among those younger than 15 years of age, asthma costs \$3.2 billion and accounts for 14 million lost school days each year<sup>2</sup>.

Fortunately, a number of natural approaches to help lung health and asthma have been found, including antioxidants (see a [2005 study](#)<sup>3</sup> and [2006 study](#)<sup>4</sup> for more information), [magnesium](#)<sup>5</sup>, [vitamin C](#)<sup>6</sup>, [rooibos](#)<sup>7</sup>, and [vitamin E](#)<sup>8</sup>. Environmental concerns such as [damp homes](#)<sup>9</sup> and [exposure to chemical-based cleaners](#)<sup>10</sup> have been found to increase asthma risk. Now a new study<sup>11</sup> has found that the Mediterranean Diet (MD), characterized by high intakes of fruits, vegetables, nuts and fish, may also benefit lung health and asthma.

In the study, 174 patients diagnosed with asthma with an average age of 40 years completed questionnaires on their physical activity<sup>12</sup> and food intake<sup>13</sup>. The researchers used their responses to score how well they followed the MD<sup>14</sup>. This score (aMED) was based on their intake of vegetables, fruits, nuts, whole grains, fish, red and processed meats, corn, monounsaturated and saturated fats.

The researchers found that "high adherence to the [MD]" produced a 78% reduced risk of having non-controlled asthma, with consumption of more than 300 grams of fruits per day producing a 71% reduced risk of having non-controlled asthma. Higher consumption of nuts (more than 2.54 grams per day) including almonds, hazelnuts, walnuts, peanuts, pine nuts, pistachios and cashews "were positively associated" with lung function (19% reduced risk of non-controlled asthma). This is thought to be due to their high amounts of monounsaturated fatty acids and antioxidants called polyphenols<sup>15</sup>, which help with inflammation and immune system health<sup>16</sup> and have been shown previously to help with allergies<sup>17</sup> and hay fever<sup>18</sup>.

Other foods that decreased asthma risk were whole grains (more than 41.52 grams per day producing a 58% reduced risk) and vegetables (more than 211.54 grams per day producing a 40% reduced risk). Foods that increased the risk of asthma were corn and meat. More than 3.14 grams per day of corn increased asthma risk by 41% and more than 51.88 grams of red or processed meats per day increased asthma risk by 64%. Unfortunately, the researchers did not translate these gram intakes into servings or cups of the specified foods.

For the researchers, "the present study introduces a beneficial link between the adherence to a [MD diet] and adult asthma control and severity."

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