EXERCISE-INDUCED BRONCHOSPASM, ASTHMA & OBESITY

What is the Problem and What is Known About it so Far?
Exercise-induced bronchospasm (EIB), a commonly seen condition of difficulty breathing occurring with exertion but whose precise frequency is unknown, is seen commonly in patients with asthma. In the only nationwide study to determine the occurrence of the disorder, (the EIB Landmark Study), the frequency varied from 16.3% in children age 4–12, to 33.9% in adolescents age 13–17, and 22.8% of adults reporting a history of EIB. Since exercise limitation is known to occur in asthmatic patients, this can lead to obesity which can add to the difficulty in breathing.

Why did the Researchers do this Particular Study?
To reanalyze the EIB Landmark Study and to find out the relationship between asthma, EIB and obesity.

Who or What was Studied?
A nationwide random sample of subjects with asthma from the EIB Landmark Study were interviewed by telephone in a multi-center study of children age 4–12 (n = 250), adolescents age 13–17 (n = 266), and adults age 18+ (n = 1001).

How was the Study Done?
The subjects were questioned regarding the control of asthma by their symptoms, medication use, and height and weight were then assigned to 3 groups as ‘well controlled’, ‘not well controlled’ or ‘very poorly controlled’.

What were the Limitations of the Study?
The results of information obtained by questionnaire are subject to error and inconsistencies and the study design did not take into consideration other risk factors which could contribute to the results such as increasing environmental pollution.

What are the Implications of the Study?
The researchers found that children, adolescents and adults with asthma rarely have “well” controlled disease. A history of EIB and exercise-related respiratory symptoms occur more commonly in patients with “not well” and “very poorly” controlled asthma. Obesity was found more often in the “not well” and “very poorly” adolescent and adult groups and less frequently in children. Patients with asthma should be aware not only of the need to take their medicines as prescribed but also that their respiratory symptoms may be aggravated by their obesity and that weight reduction may be a factor in relieving symptoms.