Sampling: a technique for examining part of the material in order to make some statement about the total body of material.

Population: the total set of units begin studied.

Sample: any subset of units from the population.

Representative Sample: a sample that accurately reflects the diversity of the population.

Statistic: the sample value.

Parameter: the population value.

Statistical inference: the process of arguing from statistics to parameters.

Accuracy: equated with validity; How close/accurate is sample to the population value? Are we measuring what we think we are measuring?

Precision: equated with reliability or replicability; Will we get the same results if we measure them again?

Sampling Stratum: an internally homogeneous sub-population of a population.
New study: Don't exercise, be happy

by Martha Irvine
The Associated Press

CHICAGO - Couch potatoes can improve heart and lung fitness just as much by doing everyday activities such as raking leaves and climbing stairs as they would working up a sweat in a gym, researchers reported today.

The authors of two studies in today's Journal of the American Medical Association say their findings are good news for anyone who doesn't exercise.

The study followed 235 men and women, ages 35 to 60, who were divided into two groups and monitored over two years. One group spent 20 to 60 minutes vigorously exercising - swimming or biking, for example - up to five days a week. The other incorporated 30 minutes a day of the so-called "lifestyle" exercise.

Researchers found that, at the end of six months, both groups had similar - and significant - improvements in cholesterol ratios, blood pressure and body fat percentages. However, the lifestyle group had to exercise three times longer than those at the gym to burn the same amount of calories. The second study, which followed 40 obese women, had similar results.

The studies are among the first clinical trials to find that moderate exercise is beneficial for the one in four Americans who spend most of their time sitting and put themselves at greater risk for heart disease, the leading cause of death in the United States.

"This is great news for the millions of Americans who are not
getting enough physical activity," Dr. Claude Lenfant, director of the National Heart, Lung and Blood Institute, said in a statement applauding the two studies.

Researchers say people who usually don't exercise are more likely to stick to a regimen of doing everyday activities than keep up with a daily gym routine.

"If we don't develop approaches that are easier for people ... we'll continue to have the public-health problem that we have at the moment" said Andrea Dunn, a Cooper Institute researcher and lead author of the study.

A recent study by the Mayo Clinic suggested that merely moving around or fidgeting can help people stay trim. But these researchers aren't recommending that people stop working out at the gym or saying that a lunchtime walk here and a set of stairs there will do the trick. "It has to be a little more structured than that," said Ross Andersen of Johns Hopkins University, who led the study of obese women. "And it has to be done at a purposeful pace."