

## Stress Testing

Stress, whether we like it or not, is an inescapable part of our lives.

As the late Dr. Hans Selye, the internationally acknowledged Canadian expert on stress said: "any situation in life that puts demands upon our adaptive mechanisms creates stress".

Stress may result from tension at home, at work or at play. Psychologically, "distressing" occurrences such as frustration, failure and humiliation are among the most stressful events we experience. However, success on the job or victory on the playing field also produce stress, albeit of a more pleasurable nature. In fact, without the physiological effects produced by stress, we might not succeed. Stress can be a source of energy and strong motivation to succeed.

It is how we cope with stress – the way we master it and make it work for us before it takes control – and how we adapt to its presence, that is infinitely more important than the fact that we have it. In reality, stress, when properly handled, is the spice of life.

The fact is, countless millions of human beings suffer from undue stress and, more importantly, mishandled stress. For them, stress has become the master and they the servant. As such, over time, they face very real health risks. Stress overload is now considered to be a major cause of illness, both physical and mental.

Physical fitness, through recreation activities such as jogging, swimming, cycling and the like, has become a major commitment for thousands of people. We are, in fact, in the midst of an unprecedented era of personal physical fitness training, fuelled by growing and irrefutable medical proof of its value in improving and maintaining good health.

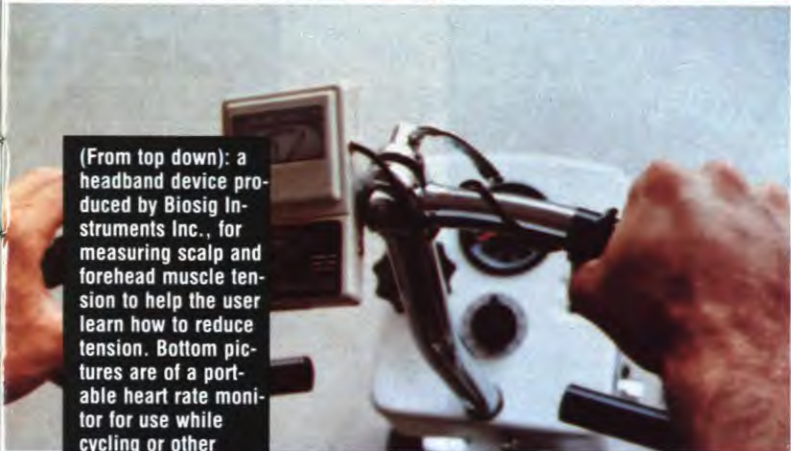
Not only is such activity good for the general improvement and upkeep of the body through improved cardiovascular and respiratory performance, as well as muscle conditioning and weight control, it has the added benefit of helping to burn off pent-up stress, so common among people spending their working hours in sedentary desk jobs.

Fitness buffs are not only keen on knowing how their body systems are improving as a result of exercise but many are determined, for their own curiosity, satisfaction and safety to have visual proof of how they are standing up to, and improving physically from such activity.

Then there are very valid reasons – health and safety reasons – for determining a person's fitness level and how much exercise he or she can stand before embarking on strenuous activity such as jogging. In fact, everyone over the age of 35 should have a full medical and exercise stress test before beginning such activity, especially if it is a new venture.

Biosig Instruments Inc. of Montreal, Quebec, produces a full line of biomedical devices for heart-rate monitoring during exercise.

One such aid is a hand-held heart rate monitor for use on bicycles, treadmills or other cardiovascular equipment. The device, which does not require the use of electrodes attached to the body, weighs only three ounces and monitors the electrical signals that cause the heart to contract. It also displays the time interval between each beat, making it possible for the user to maintain the heart rate at the effective "training" level and to monitor the recovery rate to normal resting pulse after completing an exercise workout. It is produced in several models for different exercise situations.



(From top down): a headband device produced by Biosig Instruments Inc., for measuring scalp and forehead muscle tension to help the user learn how to reduce tension. Bottom pictures are of a portable heart rate monitor for use while cycling or other forms of exercise.