

reported¹⁶⁻¹⁸. Thus it seems plausible to conclude that alterations in enzymes may occur as a function of adaptation and habitat of the organism.

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NEWS

MRI AND MRS

...“During the past few years, magnetic resonance imaging (MRI) has become a widely accepted diagnostic tool for physicians. By subjecting a patient's body to strong magnetic fields, the presence of certain chemical elements, notably hydrogen, which indicates water in body tissue, can be imaged. Unlike computerized tomography, MRI readily distinguishes different materials in the body—bone, muscle, fat—without x-rays or dye injections. In order to examine a wider range of chemical elements than can normally be imaged with MRI, and determine the amount of chemicals present in parts of the body, researchers are turning to a complementary technique—magnetic resonance spectroscopy (MRS)—that may render MRI an even more powerful diagnostic tool. MRS does not produce images, but it generates spectra that show the distribution of an element within the body. The technique would allow researchers and physicians to

examine such elements as phosphorus, lithium, sodium, potassium, fluorine, and carbon, whose properties aid in diagnosing heart disease and cancer. Research at the General Electric Research & Development Ctr. (Schenectady, New York) under Paul Bottomley has led to the development of a whole body imaging and spectroscopy research system. A similar system has been built at the Massachusetts Inst. of Technology... Bottomley's best results so far have occurred in phosphorus spectroscopy of the heart. Spectra obtained in minutes can help determine whether a patient's symptoms indicate a heart attack or a minor ailment.”

[(Hugh Aldersey-Williams in *High Technology* 7(2):62, February 1987). Reproduced with permission from Press Digest, *Current Contents*⁽¹⁰⁾, No. 12, March 23, 1987. Published by the Institute of Scientific Information⁽¹⁰⁾, Philadelphia, PA, USA].
