Good news from a messenger

INSULIN, long used for treating diabetes, now has a remarkable new use. It can be used as a "targeting agent" to deliver substances through the human bloodstream to the

body's muscles.

As a result, diseases which have proved fatal until now may be treated satisfactorily. Such a disease is glycogenosis, a disorder of the body's energy storage system. Glycogen is a form of carbohydrate stored in the human body until it is converted to sugar to provide energy. When too much glycogen is stored it can smother the muscle cells of the heart and lungs, leading to heart and lung failure.

The enzyme which could digest and disperse the excess glycogen has been previously injected directly into the bloodstream, but it never makes it as far as the heart and lung muscles. Carrier agents have aroused immune reactions.

But a group of Canadian researchers financed by Canada's medical research council has cracked the problem: insulin, as a carrier agent, can get through, combined in advance with the necessary enzyme. As a combined substance, the insulin with the enzyme riding on its back rushes straight for the muscles.

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