Copyright 1994 COMLINE News Service COMLINE Daily News Biotechnology and Medical Technology May 6, 1994

Headline: Kirin Sees Chitosan as Diet Aid Candidate

The applied research center at Kirin Brewery Co., Ltd. recently announced that chitosan (beta-l, 4-poly-D-glucosimine), derived from the shells of crustaceans and known to relieve high blood pressure, could also help reduce fat intake as well as promote excretion from the body of certain essential minerals such as iron. The substance is currently used as a flocculent in water treatment as well as in artificial skin and is believed to be a promising health food ingredient for its ability to reduce blood pressure and cholesterol levels.

Kirin researchers conducted tests which demonstrated that rats given feed with 20% corn oil and 5% chitosan for two weeks reduced fat uptake by 50% compared to 95% uptake in the controls. The addition of vitamin C to the diet suppressed fat uptake a further 13%. The more the chitin is deacetylated to chitosan, the more pronounced the effect.

The findings suggest a promising substance for preventing retention of too much fat in diets. However, mouse studies indicate that uptake of calcium and magnesium were reduced by 60% and essential iron minerals and vitamin E were lost. If such deficiencies can be corrected, the company foresees the development of new types of diet aid.

Ref. Nikkan Kogyo Shimbun, 05/02/94, p. 11