Treatment of Type 2 Diabetes with a LoBAG (Low Biologically Available Glucose) Diet
(VA Reference No. 04-075)

Novel diet for people with type 2 diabetes that will result in an improvement in the blood glucose control

Technology
The Department of Veterans Affairs has developed a diet for people with type 2 diabetes that will result in an improvement in the blood glucose control without weight loss and without pharmacological treatment. The diet is nutritionally adequate and does not result in deleterious effects on the plasma lipid profile or result in deterioration in kidney function.

Description
The low-carbohydrate diet plan developed by the VA is used to manage blood glucose levels in people who have type 2 diabetes and are still secreting insulin. The LoBAG diet is designed to consist of 20 to 30 percent carbohydrates, 30 percent protein, and 40 to 50 percent fat. In a small, controlled clinical trial in which the LoBAG diet and the control diet representing the "typical" American diet (ratios of carbohydrate:protein:fat of 55:15:30) were compared, the LoBAG diet demonstrated significant moderation of blood glucose.

Competitive Advantage
Most of the currently available diets for diabetics do not appear to have the potential to obviate the need for weight loss and pharmacetical intervention.

This diet plan:

- Functions through regulation of carbohydrate:protein:fat intake ratios but matches the patients' average caloric intake, and is thus expected to be an easy diet for diabetics to follow.
- Has been demonstrated to be functional without the necessity for weight loss.
- Could potentially minimize the need for pharmacological intervention.
- Opportunity to market a meal plan of pre-packaged foods.

Status
The Department of Veterans Affairs is looking for a partner for further development and commercialization of this technology through a license, and the VA inventors are available to collaborate with interested companies through a Cooperative Research and Development Agreement (CRADA).