Low GI Kueh Bahulu Formulation for Haemodialysis Patients

Haemodialysis is the process of purifying the blood of a Kidney Disease patient, and it is the most common method to treat advanced and permanent kidney failure. Maintaining the right chemical balance in the blood is crucial in keeping the patient’s blood pressure under control.

A special diet is recommended for Chronic Kidney Disease (CKD) patients. The diet has to contain low sodium and phosphorus levels, low to moderate potassium levels, the right protein intake, and potential restrictions in fluids intake (depending on severity of CKD stage).

CKD patients who do not stick to the recommended diet risk developing the following conditions: increased blood pressure; heart attacks; shortness of breath; swelling in limbs; muscle cramps; muscle weakness; arrhythmia; itchy skin, weak bones and joint pains.

Some of the existing formulated products in the market for CKD patients have a metallic aftertaste and the patients find it to be unpalatable.

The Kueh Bahulu formulation meets all the criteria of being low in sodium, phosphorous and potassium, and contains sufficient protein content to meet the CKD patients’ nutritional needs. In addition, the formulation is also low GI, which helps diabetic patients manage their blood sugar levels. Being a familiar snack item, patients will also be more agreeable in trying out a specially formulated Kueh Bahulu.

Technology Features & Specifications

- Suitable for Haemodialysis patients
- Low GI

Market Trends & Opportunities

According to statistics from National Registry of Diseases Office under Health Promotion Board and Ministry of Health Singapore, there is an increasing trend in elderly patients receiving haemodialysis treatment. In 2013, elderly patients made up more than half of the dialysis patients in Singapore. There is thus a need to develop better tasting diabetic-friendly foods for dialysis patients, so as to provide them with a better quality of life.

Disclaimer

Although due care and attention have been taken to ensure that the preparation of this material is as accurate as possible, the contents of this brochure are provided for information purposes only. Neither the Singapore Polytechnic nor the inventors offer any warranty, written express or implied, as to the accuracy of the said contents. Applicants are advised to undertake independent evaluation of the technology.