Thesis Title	Effect of Tube Feeding Formulas on Lipid Metabolism in Patients with Carcinoma of the Larynx
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ABSTRACT

The purpose of this study is to evaluate 2 types of enteral formulas, ie, Isocal RTU and Ramathibodi blenderized formula (RBF) on lipid metabolism in 60 patients with carcinoma of the larynx. They were divided into 2 groups according to the type of tube feeding formulas. Patients in both groups were rather homogenous in terms of gender, age, underlying diseases and type of operation. Both groups had inadequate protein-energy status. Out of 60 patients, 58 patients received enteral formula via nasogastrictric tube. Ninety percent of patients in group I and 95% in group II received tube feeding for $\geq$6 days.

Group I consisted of 40 patients receiving Isocal RTU with a mean daily supply of 1809 kcal derived from, 58g protein 76g fat and 228g maltodextrins. Fat in Isocal RTU, contributing 37% of total energy, was derived from 20% of medium-chain triglyceride and 80% of soy oil. This fat regimen provided of 15% of total dietary energy as 18:2 n-6 and 2% as 18:3 n-3 and it was cholesterol-free. The benefical effects of Isocal RTU feedings in group I were evidenced by no further decreases in their body fat and fat-free mass, significant increase in their visceral protein status, the correction of their biochemnical linoleate depletion to adequate linoleate status, and the maintenance of normal alpha-linolenate status.

Group II consisted of 20 patients receiving RBF with a mean daily supply of 1902 kcal derived from 75g protein, 67g fat, 176g sucrose and 58g carbohydrate from chicken liver, egg, banana and pumkin.

Sucrose is the major source of carbohydrate in RBF and contributed 37% of total energy. The fat sources of RBF were chicken liver, egg and soy oil, providing 33% of total dietary energy. This fat regimen provided 7.4% of total dietary energy as 18:2 n-6, 0.7% as 18:3 n-3, 0.3% as 20:4 n-6, 0.02% as 20:5 n-3 and 0.05% as 22:6 n-3 and 1464 cholesterol/1000 kcal. The beneficial effects of RBF feedings in group II on their protein-energy status were