Filling The Provision Gap for Patients who consume Vegetarian Puree

LEE H(1)(4), WONG A(2)(4), CHING K M(1)(4), DCMS Team(3)
(1)Dietetic Department,(2)Food Services Department,(3)HAHO, (4)Ruttonjee & Tang Shiu Kin Hospitals

Keywords:
Hospital Meal
vegetarian diet
puree diet

Introduction
RTSKH Food Services Department (FSD) orders cook-chilled products from PYNEH’s central producing unit (CPU). The cooked–chilled products were then reheated and distributed to patients. The logistic of the patient’s meal provision was supported by the Dietetic and Catering Management System (DCMS). The system captures real time diet orders including patient’s therapeutic requirement, texture, oral supplement, menu choice, patient’s preferences and allergy etc. The system performs automatic compilation of patient diet orders for production and generation of relevant meal tickets for food distribution. Approximately 2 patients per day request for vegetarian puree diets choice. The reason might due to their chewing and swallowing ability and their religious or personal preference. There is no vegetarian protein puree cook-chilled product available for purchase in the CPU. Thus, in RTSKH the DCMS is not able to select vegetarian protein puree for the patient. Only puree rice and vegetable are provided. In the past, this suboptimal food provision was spotted by nursing staff. These patients were referred to Dietitians for meal arrangement to top up their protein provision with nutrition supplement.

Objectives
Dietetic Department looked into this meal provision gap and would like to guarantee these patients to receive vegetarian protein puree by utilizing the DCMS.

Methodology
In September, 2017, Dietetic Department discussed the issue with Dietitians in DCMS team and RTSKH’s Food Services Department. The following work process was developed after the discussion:

October 2017
i)DCMS team dietitians searched DCMS database for vegetarian protein puree recipes.
21 recipes with nutrient analysis and production logistic were identified.
ii) RTSKH dietitian discussed with FSD chefs about the feasibility of producing the identified vegetarian protein puree products. FSD studied the recipes and identified few recipes suitable for production. Local blending process was required.

iii) FSD developed work process and critical control point according to the ISO 22000 and HACCP requirement. Manpower was assigned for this process.

Production: Reheat vegetarian protein entree to >85°C
   - Blend to puree form
   - Steam to > 85°C
   - Plate with 65°C on meal tray.

iv) FSD purchased new equipment in consideration of religion implication. 1 small size blender was purchased and 1 temperature probe was isolated and labeled with ‘only for vegetarian protein puree use’.

   November 2017

FSD uploaded the new vegetarian protein puree recipes onto the DCMS’s cycle menu.

Production and provision commenced on 7th November, 2017 for RTSKH patients.

**Result**

Serving proper texture meals with sufficient macronutrients to patients is an important part of the meal service in hospital. The automated DCMS will cover the needs of patients and thus, enhancing productivity and minimizing errors in suboptimal food provision.