

For Immediate Release

# A HKSH screening has found that About 25% Cancer Patients Suffered from Malnutrition during Treatment

(30 September 2020, Hong Kong) About 25 percent cancer patients suffered from malnutrition on moderate to severe levels, with a weight loss of 5% to over 10% during treatment period, a screening by Hong Kong Sanatorium & Hospital has found.

The screening, conducted by the Hospital's Department of Dietetics on 203 patients receiving treatment at the Hospital's Comprehensive Oncology Centre between November 2018 and March 2020, was the first such screening in Hong Kong using the Global Leadership Initiative on Malnutrition (GLIM). The patients were receiving treatments including chemotherapy, target therapy and immunotherapy at the time they were screened.

GLIM was established in 2018 as the first-ever global consensus around core diagnostic criteria for malnutrition. Many studies showed that a 5% drop in weight would have significant impact on cancer treatment outcomes. GLIM is a two-step approach using a validated screening tool to identify at-risk patients, to be followed by an assessment for diagnosis and grading the severity of malnutrition by registered dietitians.

Ms. Jessica CHOW Ming Yan, Dietitian of Department of Dietetics of the Hospital said the screening outcome was a cause for concern and reminded cancer patients of the importance of weight keeping to avoid malnutrition which might impact on treatment outcomes. Patients are also advised to seek professional assistance for an early intervention.

During the screening, patients were surveyed on their weight, food intake, symptoms, activities and functions to assess their nutritional status using Patient-Generated Subjective Global Assessment Short Form (PG-SGA SF). Those at risk of malnutrition were then identified to receive further diagnosis and assessment of the severity of malnutrition.

Ms. CHOW said that 99 out of 203 patients (49%) scored 4 or above under PG-SGA and were at risk of malnutrition, while another 51 patients (25%) were rated as moderately or severely malnourished under the GLIM diagnostic criteria. The top five cancer types among the malnourished patients are lymphoma, gastrointestinal cancer, lung cancer, head and neck cancer and breast cancer.

She explained that cancer and cancer treatment such as chemotherapy or radiotherapy could cause malnutrition in patients due to side effects such as dryness in mouth, taste change, mucositis, nausea and vomiting. This would have a serious impact on the digestion and absorption of nutrients from food for patients under treatment. "In particular, head and neck cancer patients are among the high risk groups of malnutrition due to severe dryness in mouth after radiotherapy," she said.

"Patients need to have sufficient nutrient intake to keep up the fight against cancer. Our clinical experience has shown that many patients and caregivers are misled by myths and fallacies of cancer dietary they gathered from friends and on the Internet and other social platforms, thus making them even weaker in the process," she added.

The loss of appetite and weight will have a substantial impact on the progress and effectiveness of cancer treatment. For instance, patients who are underweight may be advised by doctors to delay chemo injection or surgical procedures, or to reconstruct the immobilisation device for radiotherapy



as a result of the change in body size or contour. Treatment may have to come to a halt for severe cases.

If the situation does not improve and has become a vicious cycle, cachexia may be developed. In this instance, patients are encountering weight loss of over 5%, sarcopenia, anorexia or metabolic change. According to a research conducted by The European Society for Clinical Nutrition and Metabolism (ESPEN), one-fifth of cancer patients died from malnutrition instead of cancer. Therefore, the effect of malnutrition on cancer patients cannot be ignored. In extreme cases, cachexia would lead to ongoing muscle loss that cannot be reversed and no nutrients would be absorbed despite food intake.

Ms. Flavia U, Senior Dietitian and Coordinator of Department of Dietetics of the Hospital said, "To prevent cachexia from worsening, cancer patients are reminded to receive screening or conduct self-assessment of nutritional status, intake more and maintain their weight to prevent cachexia or intervene in the early stage of cachexia to break the vicious cycle. Patients in need should get professional advice to ensure that they are sufficiently and intentionally nourished to fight the cancer battle."

"Conditions and nutritional needs can vary among different cancer types and individual patients. Dietitians will assess patients' conditions and tailor-made recipes based on their needs. Moreover, dietitians will also help monitor changes in patients' weight and dietary intake throughout the cancer recovery journey, providing timely and practicable dietary advice which will enable them to keep a healthy body weight and minimise the risk of interrupted treatment," Ms. U said.

In view of the nutritional needs of cancer patients under different treatment stages, HKSH dietitians have introduced a four-pronged approach in effective body building and protection targeted for cancer patients.

"Supplement" – add nutrients and strengthen immunity to the body with high-protein intake and at the same time, maintaining an adequate/high-calorie diet (including protein, starch, and fat). Patients should also increase intake of antioxidants such as vitamins and minerals to protect cells from oxidative attacks.

"On the Guard": To tackle the side effects of treatment, weight loss and decreased immunity which are common during the treatment stage, patients should eat small portion meals frequently while recipes may be customised to cope with side effects of different cancer types. To cater for a change in taste, sauces can be used to make food more appealing. To tackle chewing and swallowing issues, soft meals or mashed food can be served. Nutritional supplement formula, whole fat milk or milkshake may also help patients who are unable to take solid food.

"Combat": When side effects begin to diminish, patients are advised to take a more proactive approach in diet intake through supplementing extra nutrients - a high-calorie, high-protein diet is deemed fit.

"Prevent": Upon completion of the treatment, patients should go for a balanced diet and continue with regular exercise to maintain muscle mass, reduce fat and guard against a relapse.

<sup>&</sup>lt;sup>1</sup> J. Arends et al. ESPEN expert group recommendations for action against cancer related malnutrition, Clinical Nutrition 36 (2017) 1187-1196 <sup>2</sup> Bruggeman, A.R., Kamal, A.H., LeBlanc, T.W., Ma, J.D., Baracos, V.E., Roeland, E.J. (2016). Cancer Cachexia: Beyond Weight Loss. *Journal of Oncology Practice*, 12(11): 1163-71.

<sup>&</sup>lt;sup>3</sup> Penet, M. F., & Bhujwalla, Z. M. (2015). Cancer cachexia, recent advances, and future directions. Cancer journal (Sudbury, Mass.), 21(2), 117–122.



The HKSH Dietetic team has since 2018 been providing free preliminary nutritional assessment to new cancer patients. To date, about 500 patients have been assessed to reduce their risk of malnutrition.

Seven dietitians from HKSH Department of Dietetics recently co-authored a book entitled *Eating Well Before*, *During and After Cancer Treatment* to share the diet strategies, common dietary fallacies and 32 simple nutritious recipes for cancer patients.

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## **Patient Case Sharing**

#### Case Study 1:

Mr. Chan, 25 years old, is diagnosed with the first stage of nasopharyngeal carcinoma and required radiotherapy and chemotherapy concurrently. He had swallowing pain, poor appetite, taste change and fatigue. Mr. Chan weighed 143 pounds originally and dropped by 11% to 127 pounds after 28 radiotherapy treatment sessions. Dietitian found out that his daily calorie intake at the time of screening only reached 1,200 kcal and 80 grams of protein per day, much lower than his required daily intake of 2,200 to 2400 kcal and 120 grams of protein. He was advised to adopt high-protein and high-calorie diets together with nutritional supplement formula.

The problem of taste change continued after Mr. Chan completed radiotherapy and chemotherapy. Therefore, the dietitian recommended some cooking tips to boost his appetite. Mr. Chan was also advised to do moderate exercises for strengthening his muscles. Recently, his weight has returned to pre-treatment level (about 141 pounds) and his condition is under control. He needs to visit the doctor regularly for follow-up and follow the recipe recommended by the dietitian for muscle gain.

### Case Study 2:

Winny was diagnosed with breast cancer in 2014 and underwent a surgical procedure, but relapsed within a year and required chemotherapy. After the first chemotherapy, she lost 10 pounds to 120 lbs within a week and was affected by a poor appetite. Dietitian recommended her to eat six meals a day with high-protein recipes. Her case relapsed again in August 2019 which also affected her lymph nodes in the lung.

Winny followed dietitian's advice and started to do more exercise to help overcome the side effects of treatment. She has put on weight for working at home in the COVID-19 period thinking that she needed to "store nutrient in the body" to fight cancer. Her weight rose to 145 pounds recently and the dietitian advised her to control it as soon as possible to avoid the risk of cancer recurrence and other diseases such as cardiovascular disease or diabetes due to overweight. Dietitian has tailor-made nutritional recipes for Winny to note her progress, symptoms and physical conditions while also addressing the side effects of treatment. At present, her weight has come down and cancer under control.



## **HKSH Medical Group**

Officially launched in September 2017, promotes public health and advanced medicine through a multi-faceted, coordinated approach in clinical services, medical education, scientific research and public health education. Members of the Group, including Hong Kong Sanatorium & Hospital, HKSH Healthcare HKSH Eastern Medical Centre, are dedicated to offering top-quality holistic care to patients, upholding the motto "Quality in Service, Excellence in Care".

### **Hong Kong Sanatorium & Hospital**

Hong Kong Sanatorium & Hospital is one of the leading private hospitals in Hong Kong. With the motto "Quality in Service Excellence in Care", the Hospital is committed to serving the public as well as promoting medical education and research.

#### **Department of Dietetics**

Dietetic service is available for all inpatients and outpatients during treatment in order to ensure that patients' nutritional status and/or symptoms are monitored, maintained or improved wherever possible. Our Registered Dietitians have the professional knowledge and experience to assess the nutritional needs and to recommend appropriate nutritional treatment for referred patients. Dietitians will evaluate and monitor dietetic intervention to help ensure a positive effect on patients' nutritional status, aid the recovery process, control symptoms and improve well-being.

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# Photos:

1. HKSH Dietetic team and Deputy Medical Superintendent of Hong Kong Sanatorium & Hospital, Dr. Joseph Chan, pictured at the press briefing. The Dietetic team recently coauthored a book entitled "Eating well before, during and after cancer treatment".



2. Ms. Flavia U says that dietitians tailor-made recipes for cancer patients, as well as advising them on diet tips.





3. Ms. Jessica CHOW Ming Yan reminds patients on the importance of seeking timely advice from dietitians to avoid malnutrition during treatment.



4. Nutritious recipes tailor-made for cancer patients contained in the book.





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