



WORLD ECONOMIC FORUM 2022

# Time to make a difference for patients with cancer – the impact of nutritional care

Report on Panel Discussion

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## Introduction

Patients with cancer are among a group of patients with a high risk for disease-related malnutrition, both because of the disease itself and its treatment. It's estimated that 40% of patients with cancer present with weight loss at diagnosis<sup>1</sup> and for most, their nutritional status continues to deteriorate during the disease journey. Additionally, 20-25% of cancer deaths are related to malnutrition.<sup>2,3,4</sup> Yet only 30-60% of patients with cancer who are at risk of malnutrition receive nutritional support.<sup>5,6</sup>

With almost 20 million new cancer cases every year<sup>7</sup>, it's time to make nutrition a focus in cancer care – to both improve therapeutic outcomes and patient recovery and support healthcare systems globally. So, how can the health and nutrition industry optimize nutritional management in cancer treatment? This question was raised and addressed by leading experts at World Economic Forum 2022 during a DSM-hosted panel discussion – *'Time to make a difference for cancer patients – the impact of nutritional care'*. Discover key takeaways from the session in this wrap-up report to improve cancer care with purpose.



**Patricia Malarkey**  
Chief Innovation Officer and  
member of the Executive Committee  
DSM

## A view from the industry: on the expert panel



### Helen Banks

Senior Researcher in the Health Economics and Health Technology Assessment Area, SDA Bocconi School of Management, Milan, Italy



### Andreas Busch

Business Executive Officer, Nestlé Health Science, Switzerland, and President Swiss Medical Nutrition Industry (SMNI)



### Alessandro Laviano

MD, Associate Professor of Internal Medicine, Department of Clinical Medicine, Sapienza University, Rome, Italy



### Barbara Troesch

Senior Scientific Affairs Manager, Global Pharmaceuticals and Medical Nutrition, DSM, Switzerland

**Watch the full panel discussion on-demand**

**40-80%** of all patients with cancer are malnourished during the course of the disease.<sup>8</sup>



## The impact of malnutrition on patients with cancer

Malnutrition is associated with loss of weight and muscle mass and reduced immune function. This can negatively impact quality of life, therapeutic prognosis and also a patient's response to anticancer treatment.

The early detection and management of disease-related malnutrition in patients with cancer is therefore critical for improving patient survival and recovery and increasing the effectiveness of anticancer therapies.

**Addressing malnutrition early and throughout the entire patient journey can decrease the economic burden on global healthcare systems.**

- Reduced hospital stays
- Decreased risk of infections
- Less complications
- Lower rate of readmissions

## How can nutritional management be optimized?

Taking a disease-specific approach to medical nutrition innovation is key to developing unique, purpose-led solutions that will address the special nutritional requirements and preferences of different patient populations, including those with cancer.

It's also important to address cancer care holistically. Rising evidence demonstrates the game-changing potential of tailored medical nutrition solutions in combination with other supportive care, such as physical activity, and disease-modifying therapies - like chemotherapy, radiotherapy, immunotherapy and surgery to improve prognosis.

### Steps to managing disease-related malnutrition in cancer care

1. Make it a priority in healthcare policy
2. Educate healthcare professionals and patients
3. Increase screening for malnutrition and follow-up with nutritional therapies, if necessary
4. Innovate in the medical nutrition space



**Andreas Busch**

Business Executive Officer, Nestlé Health Science, Switzerland, and President Swiss Medical Nutrition Industry (SMNI)

## Nutrients showing promise in the cancer care space

A number of nutrients are proven to support patients with cancer.

1. **Protein** – the importance of maintaining muscle mass in patients with cancer means that protein will continue to play a major role in nutritional products for cancer support.
2. **Long chain omega-3 fatty acids** – there is increased inflammation in this patient population, caused by the disease and its treatment. Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) omega-3 fatty acids help to modulate inflammation and improve conversion of dietary protein into muscle protein.
3. **Prebiotics and probiotics** – supporting gut health in patients with cancer is predicted to be a focus for future innovation.

## A look to the future: Making nutrition more accessible to patients

Patients with cancer often have mental or physical barriers to eating as a consequence of the disease or anticancer therapies – including difficulties swallowing (dysphagia), loss of appetite and nausea. To help patients get the nutrients they need and support the best possible clinical outcomes, it's therefore important to create appealing and palatable delivery formats that promote compliance and improve the nutritional status of vulnerable individuals.

Considering product attributes, like texture, smaller dosages with higher concentrations, different formats and flavors can help to deliver proteins and nutrients in a way that appeals to patient preferences.





# Organizers

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More information can be found at [www.dsm.com](http://www.dsm.com)

**Discover how DSM is helping customers develop medical nutrition solutions for cancer care.**

## References

- 1) Wigmore et al. Contribution of anorexia and hypermetabolism to weight loss in anicteric patients with pancreatic cancer. *BJS*, vol. 84, pg. 196-197, 1997.
- 2) Silva et al. Factors associated with malnutrition in hospitalized cancer patients: a cross-sectional study. *Nutr J.*, vol. 14, pg. 123, 2015.
- 3) Pressoir et al. Prevalence, risk factors and clinical implications of malnutrition in French Comprehensive Cancer Centres. *Br J Cancer*, vol. 102, pg. 966-971, 2010.
- 4) Sesterhenn et al. Significance of autopsy in patients with head and neck cancer. *Laryngorhinootologie*, vol. 91, pg. 375-380, 2012.
- 5) Freijer et al. The economic costs of disease related malnutrition. *Clin Nutr.*, vol. 32, pg. 136-141, 2013.
- 6) Planas et al. Prevalence of hospital malnutrition in cancer patients: a sub-analysis of the PREDyCES study. *Support Care Cancer*, vol. 24, pg. 429-435, 2016.
- 7) Hyuna et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin.*, vol. 71, no. 3, pg. 209-249, 2021.
- 8) Ravasco. Nutrition in cancer patients. *J Clin Med.*, vol. 8, no. 8, pg. 1211, 2019.

