

## 癌症病患之營養照護

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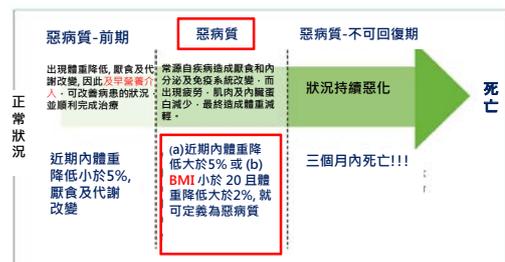
## 演講內容大綱

- 認識癌病營養不良症
  - 惡病質
- 癌症病人的營養及飲食建議
  - 病人飲食攝取不足之處置
  - 補充足夠熱量及較高蛋白質的作法
  - 有效率及有效益的癌症營養補充選擇
- 癌症恢復調養期飲食
  - 復甦免疫自癒力，讓三餐一同抗癌
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  - 打造個人化養生防癌營養處方

## 癌病營養不良症

# 惡病質

## 何謂惡病質 ( Cachexia ) ?



身體質量指數(BMI)=體重(公斤) ÷ 身高(公尺)<sup>2</sup> Ferron et al, Lancet Oncol, 2011

## 癌症病人的營養及飲食建議

- 病人飲食攝取不足之處置
- 補充足夠熱量及較高蛋白質的作法
- 有效率及有效益的癌症營養補充選擇

## 病人飲食攝取不足之處置

### 提供

- 喜好性食物
- 調整食物供應份量、頻率及質地
- 高熱量、營養密度食物補充建議

### 飲食攝取不足之處置

- 變化飲食供應 **口味、型式**
  - 普通飲食
  - 麵食
  - 西餐
  - 日式料理
  - 藥膳
  - 點心



### 病人飲食攝取不足之處置

- 改變供餐 **份量、次數**
  - 量少多餐原則
  - 正餐減少供應份量
  - 兩餐之間補充點心
  - 6-8餐/日



### 病人飲食攝取不足之處置

- 改變供餐 **質地**
  - 煮軟(soft diet)
  - 切碎(ground diet)
  - 切細煮爛成半流質(semi-liquid diet)
  - 絞打成流質(full-liquid diet)
  - 煮爛過濾成泥漿狀或加入食物增稠劑(puree diet)



高熱量、營養密度食物補充建議

### 如何增加蛋白質及能量攝取

資料詳見附錄講義



### 病人飲食攝取不足之處置

#### 提供

- 喜好性食物
- 依需求改變食物質地、份量及供餐頻率
- 高熱量密度食物
- 正餐替代品
  - 人工營養(水分)補充品



### 補充口服營養品對癌症營養不良病人之系統性分析研究

REVIEW

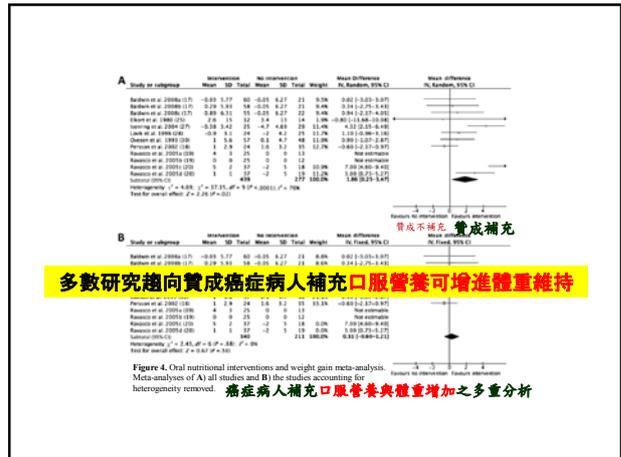
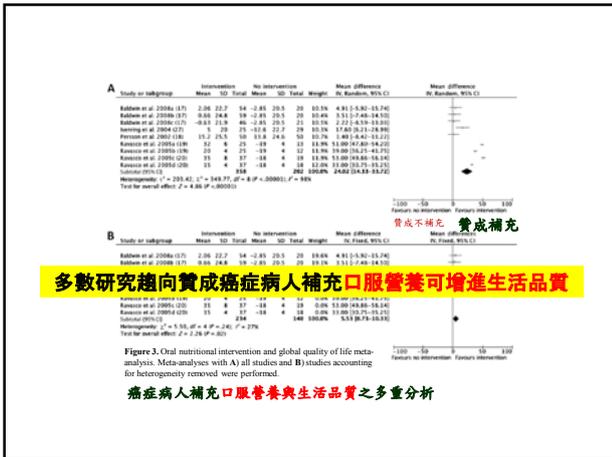
#### Oral Nutritional Interventions in Malnourished Patients With Cancer: A Systematic Review and Meta-Analysis

Christine Balshine, Agnes Espin, Roger Adams, Peter D. Emery

Manuscript received April 16, 2011; revised December 12, 2011; accepted December 19, 2011.

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J Natl Cancer Inst 2012;104:371-385



## 歐洲腸道靜脈營養醫學會 老年人腸道營養指引 2006

ESPEN Guidelines on Enteral Nutrition: Geriatrics<sup>1,2</sup>

**D. Volker<sup>1,2,\*</sup>, Y.N. Berner<sup>3</sup>, E. Berry<sup>4</sup>, T. Cederholm<sup>5</sup>, P. Coti Bertrand<sup>6</sup>, A. Milne<sup>7</sup>, J. Palmblad<sup>8</sup>, St. Schneider<sup>9</sup>, L. Sobotka<sup>10</sup>, Z. Stanga<sup>11</sup>, D.GEM<sup>12</sup>, R. Lenzen-Grossimlinghaus, U. Krys, M. Pirlich, B. Herbst, T. Schütz, W. Schriber, W. Weinreb, J. Ockenga, H. Lochs**

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Received 18 January 2006; accepted 19 January 2006

Subject	Recommendations	Grade <sup>1,2</sup>	Number
<b>Indications</b>	In patients who are undernourished or at risk of undernutrition use oral nutritional supplementation to increase energy, protein and micronutrient intake, maintain or improve nutritional status, and improve survival.	A	2,1
	In frail elderly use oral nutritional supplements (ONS) to improve or maintain nutritional status.	A	2,1
	Frail elderly may benefit from TF as long as their general condition is stable and/or terminal phase of illness.	B	2,1
	In degenerative use TF to terminate the phase of severe anorexia and loss of motivation.	C	2,6
	In demented patients ONS or tube feeding (TF) may lead to an improvement of nutritional status.	2,7	
	In early and moderate dementia consider ONS, and eventually TF, to ensure adequate energy and nutrient supply and to prevent undernutrition.	C	2,7
	In patients with terminal dementia, tube feeding is not recommended.	C	2,7
	In patients with dysphagia the prevention of aspiration pneumonia using TF is not proven.	2,9	
	ONS, particularly with high protein content, can reduce the risk of developing pressure ulcers.	A	2,10
	Based on positive clinical experience, EN is also recommended in order to improve healing of pressure ulcers.	C	2,10

**有效**

**有虛弱症老年人使用口服全營養補充品有助於增進或維持營養狀況**

## 癌症恢復調養期飲食

- 復甦免疫自愈力，讓三餐一同抗癌
  - 從腸道排廢角度
  - 從細胞代謝角度
  - 從肝臟解毒角度

「食物本身就是我們一日三餐的化學。」 - William W. Li M.D.

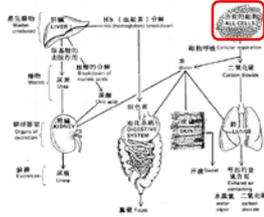
## 由2017一篇會議論文: 癌症免疫療法研究開始關注人體腸道菌對健康之整體影響

Meeting Abstracts

Association of the diversity and composition of the gut microbiome with responses and survival (PFS) in metastatic melanoma (MM) patients (pts) on anti-PD-1 therapy.

Abstract Topics: IBA, Life Sciences, etc.

### 從細胞角度看代謝



Seifried and Becker Nutrition & Metabolism (2019) 7:7  
<https://www.nutritionandmetabolism.com/content/7/1/7>



REVIEW Open Access

### Cancer as a metabolic disease

Thomas H Seyfried<sup>1</sup>, Laura M Shelton<sup>1</sup> **癌症是一項代謝異常疾病**

**Abstract**  
 Emerging evidence indicates that impaired cellular energy metabolism is the defining characteristic of nearly all cancers regardless of cellular or tissue origin. In contrast to normal cells, which derive most of their usable energy from oxidative phosphorylation, most cancer cells become heavily dependent on substrate level phosphorylation to meet energy demands. Evidence is reviewed supporting a general hypothesis that genomic instability and especially all hallmarks of cancer, including senescence, apoptosis, genomic events, can be linked to impaired mitochondrial function and energy metabolism. A view of cancer as primarily a metabolic disease will impact approaches to cancer management and prevention.

**生理代謝不良增加婦女結腸直腸癌風險**  
**Poor Metabolic Health Increased Risk for Colorectal Cancer in Women**  
 News | February 13, 2017 | Colorectal Cancer, Sudden Metabolic Change  
 Normal weight women should be evaluated for metabolic health to reduce their risk for colorectal cancer, according to the results of a study published in *Cancer Epidemiology, Biomarkers & Prevention*.  
 Results from the study showed that among the 100 of colorectal cancer patients that had metabolic laboratory measurements, and that the group with a worse metabolic health had a higher risk for colorectal cancer.  
 The results of this long-term prospective study of women suggest that colorectal cancer risk is associated with metabolic health. Women with a higher risk of colorectal cancer had a higher risk of metabolic syndrome, which is a cluster of conditions, including high blood pressure, high blood sugar, excess body fat around the waist, and abnormal cholesterol levels, that often occur together. Metabolic syndrome increases the risk of heart disease and type 2 diabetes.  
 Visit [www.OncoTherapyNetwork.com](http://www.OncoTherapyNetwork.com)

### 癌症病人營養失調評估

表 癌症惡病質發展階段 (Fearon et al. 2011)

Precachexia 惡病質前期	Cachexia 惡病質	Refractory Cachexia 難治性惡病質
體重流失 ≤ 5% (過去6個月平常體重)	體重流失 > 5% (過去6個月平常體重) 或 BMI < 20 並體重流失 > 2% 或 肌少症 並 體重流失 > 2%	多項惡病質
厭食	減少食物攝取	癌症合併異化代謝前期及 對抗癌症治療無反應
新陳代謝改變	系統性發炎反應	身體功能指數低 ECOG/WHO-2 或 Karnofsky 分數 ≤ 50% < 3個月存活預期

### 歐洲腸道靜脈營養醫學會 癌症病人營養指引 2016

ESPEN guidelines on nutrition in cancer patients  
 Jans Arends, Patrick Bachmann, Nicole Baracos, Nicola Barthelmy, Martinus Bertsch, Federico Boszaris, Karl Fearon, Elisabeth Holmberg, Elizabeth Jeune, Brian Kasperk, Zeljko Kozmaric, Barry Laird, Maria Larsson, Alessandro Laviano, Stefan Mihaljevic, Maurizio Muscarini, Lina Odénrot, Paola Passaro, Toril Solheim, Florian Strasser, Marjan van Bokhorst, De van der Schueren, Jean-Charles Preiser  
 PB: 00291-6814/16/01181-8  
 DOI: 10.1016/j.clnu.2016.07.015  
 Reference: YCLNU 2882  
 To appear in: Clinical Nutrition  
 Received Date: 21 July 2016  
 Accepted Date: 28 July 2016

B2 - 3	Choice of energy substrates 能量來源營養素之選擇
Strength of recommendation STRONG	針對有體重流失合併有胰島素抵抗之癌症病人，建議轉移碳水化合物熱能比例至增加之脂肪熱能比例，這項取代性做法可提高飲食熱能密度並降低升糖負荷。
Level of evidence	Low
Questions for research	effect of a high fat diet on clinical outcome in patients with systemic inflammation/insulin resistance effect of varying the fat composition





## 讓食物幫你消炎

- 正確油脂
  - Omega-3/6、9
- 蔬果
- 全穀
- 堅果
- 深海魚
- 薑黃、綠茶、可可、香草



## 結論

- 打造個人化養生防癌營養處方



## 癌症病人飲食方針

1. 適時監測**體重、體組成、體能及代謝變化**，**避免營養不良**問題產生
2. 有生理代謝問題者，需**控醣、斷糖、多用好油**，提供能量，並攝取**足量蛋白質**，避免肌肉流失
3. 一旦發現有問題立即尋求營養專業協助
4. 不要迷信單一食品療效



## 癌症病人飲食方針

5. 日常飲食原則
  - 儘量選擇有機友善農法種(清淨) / 養殖及天然原始樣態食物 (粗食)
  - 飲食內容種類多樣化(多樣)
  - 簡單烹煮調理(少加工)
6. 配合均衡飲食**增加身體活動及適當休息**，在體能(安全)狀況允許下，執行**鍛鍊增強肌肉質量**



*Be Strong and Smile....*

Thank you

