

幾丁質與幾丁聚醣在膳食營養的應用=the application of chitin and chitosan on dietary nutrition

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摘要

在人體營養生化上，幾丁質與幾丁聚醣及其衍生物(俗稱甲殼質)被報導具有降低血膽固醇，或減少食物中脂肪於腸道中之消化與吸收能力，而此功能亦可能與其帶正電性有關。有學者指出可將幾丁質經去乙醯作用後製成降膽固醇之保健食品。

因人體腸道並無可分解甲殼質的酵素，且其構造類似膳食纖維，故甲殼質生理作用如膳食纖維。再者甲殼質於胃或腸道中可能也會整合其它礦物質元素及脂溶性維生素，減少人體的吸收而排出體外。此外，幾丁聚醣於腸道中對有益菌的增殖作用；對腸壁黏膜細胞之影響；於飲食中的最適量（指副作用影響最低時）；去乙醯度或分子量效應；於胃腸中与其它帶正/負電荷或帶極性的有機分子之作用等，皆需更多醫學及營養的研究報導以證實其利弊。行政院衛生署遲未允許甲殼質納入健康食品，可能因其仍有部分負面影響尚未釐清並證實。因此一味地強調甲殼質的特殊功能性之時，我們也需以較客觀的思維以探討甲殼質的其它性質。 本文將由動物實驗及細胞生物學研究觀點來討論其在生理學之影響與膳食營養的應用。

關鍵詞：幾丁質；幾丁聚醣；膽固醇；健康食品；膳食纖維

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