

Omega-3 plus vitamins may prevent bed sores in hospitals

8/16/2007 - **Bed sores, which afflict up to one-tenth of hospital patients, may be prevented by adding key supplements to a standard hospital diet, reports new research from Israel.**

The treatment of pressure ulcers, caused by pressure, friction and moisture, is estimated to cost as much as £3m per year in a typical 600-bed general hospital, and an annual £1.4bn to £2.1bn across the UK - equivalent to 4 per cent of total National Health Service (NHS) spending.

The new study, published in the journal *Clinical Nutrition*, looked at the effects of supplementing the with the fatty acids eicosapentanoic acid (EPA) and gamma-linolenic acid (GLA) and vitamins A, C, and E on pressure ulcers in patients hospitalised with an acute lung injury.

Researchers from Tel Aviv University, randomly assigned 100 patients to receive the normal hospital diet or the normal diet supplemented with the lipids and vitamins. The study was a prospective, randomised non-blinded trial.

They reported that at the end of the seven-day study, the number of pressure ulcers in the control group increased by 24, but by only 15 in the intervention group.

"A diet enriched with [EPA](#), GLA and vitamins A, C and E is associated with a significantly lower occurrence of new pressure ulcers in critically ill patients with acute lung injury," they wrote.

The researchers state that wound healing is a complex biological process, which starts immediately after injury. An inflammatory response is quickly initiated and it is against this response that EPA and GLA may offer benefits, they said.

"We can conclude that our study using an EPA, GLA and antioxidant-enriched diet administered to critically ventilated patients has not enough data to support the suggestion that this specialized nutrition support is influencing significantly pressure ulcer occurrence," concluded the researchers.

"It may prevent their progression in severe (Grade 3) existing pressure ulcers. This hypothesis has to be demonstrated by a prospective randomized study designed for this purpose."

Currently, guidelines for physicians does not account for micronutrient supplementation. Previous research on the impact of supplements on pressure ulcer has been unconvincing, prompting a 2005 report by the Royal College of Nursing and the National Institute for Health and Clinical Excellence (NICE) to conclude: *"There is no*

evidence to support the routine administration of nutritional support/ supplementation... to promote the healing of pressure ulcers."

However, all NICE guidance is reviewed regularly and may take into account the small but growing body of science supporting the benefits of micronutrient supplementation for the prevention of [bed sores](#).