

Juven[®]: Rebuild. Recover. Heal.

Case Study: A Diabetic Foot Ulcer

Mrs. G, a 60-year old woman with a 26-year history of diabetes mellitus, visited a hospital for treatment of a non-healing diabetic foot ulcer. She reported that she had been walking with a limp for 2 months; we suspected her limp was caused by diabetes-induced neuropathic arthropathy. Results of a vibratory sensation test confirmed this diagnosis; Mrs. G felt few or no vibrations in her foot. Her longstanding diabetes, along with peripheral neuropathy, increased her risk for developing a diabetic foot ulcer.



Figure 1
Diabetic foot ulcer after debridement.



Figure 2
Just 1 week after starting Juven treatment, the wound showed signs of re-epithelialization.



Figure 4
After 20 days on Juven, the foot ulcer was completely healed.

A review of her medical history revealed other factors that undoubtedly contributed to her present non-healing foot ulcer. Mrs. G's average hemoglobin A1c (HbA1c) level over the past 2 years was 7.8% evidence that her insulin treatment regime had not been adequate. HbA1c values over 6.0% reflect poor glycemic control, a key risk factor predisposing to development of diabetic foot ulcers and subsequent healing issues. A smoking habit and high blood pressure, although being treated medically, also put her in a higher risk category.

Initial examination revealed that Mrs. G had a 7.5 cm longitudinal wound, 2.5 cm thick, on the bottom of her left foot; the inflamed, necrotic wound required immediate surgical debridement (Figure 1). Inflammation also affected her middle toe.

Mrs. G. was directed to begin a 6-day course of antibiotic treatment for infection control. Her hyperglycemic status was addressed, first, by giving her the responsibility to self-monitor blood glucose and make minor insulin dose adjustments, as needed, and, second, by increasing her usual insulin dosage by an additional 6 units/day.

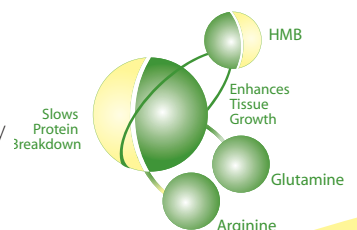
Mrs. G was also instructed to add two servings of Juven to her daily diet. For each serving, she mixed a package of Juven with 6 to 8 ounces of cold water. Mrs. G drank the beverage with breakfast and supper. A surgical consultant determined that if the ulcer and associated inflammation did not improve within 7 days, amputation of the affected toe might be necessary. After just 7 days of Juven medical nutrition treatment, there was a dramatic change in the appearance of the ulcer (Figure 2). Evidence of both tissue healing and a decrease in thickness were apparent. At this point, surgical intervention was deemed unnecessary.

Following 15 days of Juven, Mrs. G's foot ulcer was almost completely closed (Figure 3).

After consuming Juven twice a day for a total of 20 days, the "non-healing" diabetic foot ulcer was completely healed (Figure 4). Because of the dramatic degree of healing seen, the medical team decided that Mrs. G would not have to undergo any surgical intervention. Mrs. G is now completely ambulatory, and her blood glucose levels have also greatly improved.



Figure 3
After 15 days on Juven, signs of wound closure were apparent.



Only Juven is formulated with three ingredients that work together to deliver wound healing power:

HMB* The Protein Protector

- Enhances protein production and protects protein from breakdown,^{1,2} thus helping to build lean body mass to promote healing³
- Helps combat the loss of protein caused by inflammatory response^{1,2}
- Helps cells maintain strength and structure,⁴ which is important for proper healing³

β-hydroxy-β-methylbutyrate)

ARGININE The Wound-Repair Warrior

- Regulates wound healing and supports tissue repair through collagen synthesis and deposition⁵
- As a precursor of nitric oxide, increases blood flow and oxygenation through vasodilation⁶
- Stimulates secretion of the hormones that can have a positive impact on wound healing⁷

GLUTAMINE The Collagen Crusader

- Helps stimulate collagen and protein synthesis^{8,9}
- Helps maintain body protein and donates nitrogen during times of metabolic stress¹⁰
- Serves as an energy source for the cells of the immune system and GI tract, which helps prevent, and assist in recovery from, infections¹¹

Availability



Or order online at www.juven.com or call **1-877-465-8836**

	Flavor	List #	Case	List #	Carton
0.85-oz (24-g) packets					
30 packets/carton	Orange	57935	58012		
6 cartons/case	Grape	57936	58011		
180 packets/case	Unflavored	54000	56094		



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*Juven (Orange) is the recipient of the ChefsBest® Certified Award. The ChefsBest Certified Award is awarded to brands highly rated overall by independent professional chefs.

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