

Surgical Preparation

REFERENCES

- Acil M, Basgul E, et al. Perioperative effects of melatonin and midazolam premedication on sedation, orientation, anxiety scores and psychomotor performance. *Eur J Anaesthesiol*. 2004 Jul;21(7):553–7.
- Aiko S, Yoshizumi Y, et al. The effects of immediate enteral feeding with a formula containing high levels of omega-3 fatty acids in patients after surgery for esophageal cancer. *JPEN J Parenter Enteral Nutr*. 2005 May;29(3):141–7.
- Alleva R, Nasole E, et al. alpha-Lipoic acid supplementation inhibits oxidative damage, accelerating chronic wound healing in patients undergoing hyperbaric oxygen therapy. *Biochem Biophys Res Commun*. 2005 Jul 29;333(2):404–10.
- Alvarez W, Mobarhan S. Finding a place for immunonutrition. *Nutr Rev*. 2003 Jun;61(6 Pt 1):214–8.
- Angele MK, Chaudry IH. Surgical trauma and immunosuppression: Pathophysiology and potential immunomodulatory approaches. *Langenbecks Arch Surg*. 2005 Aug;390(4):333–41.
- Antall GF, Kresevic D. The use of guided imagery to manage pain in an elderly orthopaedic population. *Orthop Nurs*. 2004 Sep;23(5):335–40.
- Asher ME. Surgical considerations in the elderly. *J Perianesth Nurs*. 2004 Dec;19(6):406–14.
- Ates E, Yilmaz S, et al. Perioperative immunonutrition ameliorates the postoperative immune depression in patients with gastrointestinal system cancer (prospective clinical study in 42 patients). *Acta Gastroenterol Belg*. 2004 Jul;67(3):250–4.
- Babcock TA, Dekoj T, et al. Experimental studies defining omega-3 fatty acid antiinflammatory mechanisms and abrogation of tumor-related syndromes. *Nutr Clin Pract*. 2005 Feb;20(1):62–74.
- Bansal C, Scott R, et al. Decubitus ulcers: A review of the literature. *Int J Dermatol*. 2005 Oct;44(10):805–10.
- Bansal V, Syres KM, et al. Interactions between fatty acids and arginine metabolism: Implications for the design of immune-enhancing diets. *JPEN J Parenter Enteral Nutr*. 2005 Jan;29(1 Suppl):S75–S80.
- Bourdel-Marchasson I, Barateau M, et al. A multi-center trial of the effects of oral nutritional supplementation in critically ill older inpatients. *Groupe Aquitain Geriatrique d'Evaluation. Nutrition*. 2000 Jan;16(1):1–5.
- Brady M, Kinn S, et al. Preoperative fasting for adults to prevent perioperative complications. *Cochrane Database Syst Rev*. 2003; (4):CD004423.
- Braga M, Gianotti L. Preoperative immunonutrition: Cost-benefit analysis. *JPEN J Parenter Enteral Nutr*. 2005 Jan;29(1 Suppl):S57–S61.
- Braga M, Gianotti L, et al. Preoperative oral arginine and n-3 fatty acid supplementation improves the immunometabolic host response and outcome after colorectal resection for cancer. *Surgery*. 2002 Nov;132(5):805–14.
- Breslow RA, Hallfrisch J, et al. The importance of dietary protein in healing pressure ulcers. *J Am Geriatr Soc*. 1993 Apr;41(4):357–62.
- Calder PC. n-3 fatty acids, inflammation, and immunity: Relevance to postsurgical and critically ill patients. *Lipids*. 2004 Dec;39(12):1147–61.
- Canbaz S, Duran E, et al. The effects of intracoronary administration of vitamin E on myocardial ischemia-reperfusion injury during coronary artery surgery. *Thorac Cardiovasc Surg*. 2003 Apr;51(2):57–61.

- Cario E, Jung S, et al. Effects of exogenous zinc supplementation on intestinal epithelial repair in vitro. *Eur J Clin Invest.* 2000 May;30(5):419–28.
- Ceriello PA. Oxidative stress and diabetes-associated complications. *Endocr Pract.* 2006 Jan;12 Suppl:60–2.
- Chen da W, Wei Fei Z, et al. Role of enteral immunonutrition in patients with gastric carcinoma undergoing major surgery. *Asian J Surg.* 2005 Apr;28(2):121–4.
- Chen MA, Davidson TM. Scar management: Prevention and treatment strategies. *Curr Opin Otolaryngol Head Neck Surg.* 2005 Aug;13(4):242–7.
- Cheng AL, Hsu CH, et al. Phase I clinical trial of curcumin, a chemopreventive agent, in patients with high-risk or pre-malignant lesions. *Anticancer Res.* 2001 Jul;21(4B):2895–900.
- Collins CE, Kershaw J, et al. Effect of nutritional supplements on wound healing in home-nursed elderly: A randomized trial. *Nutrition.* 2005 Feb;21(2):147–55.
- De la Fuente M, Hernanz A, et al. The immune system in the oxidative stress conditions of aging and hypertension: Favorable effects of antioxidants and physical exercise. *Antioxid Redox Signal.* 2005 Sep;7(9–10):1356–66.
- de Luis DA, Izaola O, et al. A randomized clinical trial with oral immunonutrition (omega 3-enhanced formula vs. arginine-enhanced formula) in ambulatory head and neck cancer patients. *Ann Nutr Metab.* 2005 Mar;49(2):95–9.
- Delanian S, Depondt J, et al. Major healing of refractory mandible osteoradionecrosis after treatment combining pentoxifylline and tocopherol: A phase II trial. *Head Neck.* 2005 Feb;27(2):114–23.
- Desneves KJ, Todorovic BE, et al. Treatment with supplementary arginine, vitamin C and zinc in patients with pressure ulcers: A randomised controlled trial. *Clin Nutr.* 2005 Dec;24(6):979–87.
- DeWeese TL, Hruszkewycz AM, et al. Oxidative stress in chemoprevention trials. *Urology.* 2001 Apr;57(4 Suppl 1):137–40.
- Domini LM, De Felice MR, et al. Nutritional status and evolution of pressure sores in geriatric patients. *J Nutr Health Aging.* 2005 Nov;9(6):446–54.
- Ehrenpreis ED, Jani A, et al. A prospective, randomized, double-blind, placebo-controlled trial of retinol palmitate (vitamin A) for symptomatic chronic radiation proctopathy. *Dis Colon Rectum.* 2005 Jan;48(1):1–8.
- Ellis LM, Copeland EM, III, et al. Perioperative nutritional support. *Surg Clin North Am.* 1991 Jun;71(3):493–507.
- Fall PJ, Szerlip HM. Lactic acidosis: From sour milk to septic shock. *J Intensive Care Med.* 2005 Sep;20(5):255–71.
- Farreras N, Artigas V, et al. Effect of early postoperative enteral immunonutrition on wound healing in patients undergoing surgery for gastric cancer. *Clin Nutr.* 2005 Feb;24(1):55–65.
- Fearon KC, Luff R. The nutritional management of surgical patients: Enhanced recovery after surgery. *Proc Nutr Soc.* 2003 Nov;62(4):807–11.
- Frass OM, Buhling F, et al. Antioxidant and antiprotease status in peripheral blood and BAL fluid after cardiopulmonary bypass. *Chest.* 2001 Nov;120(5):1599–608.
- Frias SL, Lage Vazquez MA, et al. The effectiveness of oral nutritional supplementation in the healing of pressure ulcers. *J Wound Care.* 2004 Sep;13(8):319–22.
- Fukushima R, Inaba T, et al. [Perioperative nosocomial infection preventive measures]. *Nippon Geka Gakkai Zasshi.* 2004 Nov;105(11):696–701.
- Gajendrareddy PK, Sen CK, et al. Hyperbaric oxygen therapy ameliorates stress-impaired dermal wound healing. *Brain Behav Immun.* 2005 May;19(3):217–22.
- Gitto E, Romeo C, et al. Melatonin reduces oxidative stress in surgical neonates. *J Pediatr Surg.* 2004 Feb;39(2):184–9.

- Gopinath D, Ahmed MR, et al. Dermal wound healing processes with curcumin incorporated collagen films. *Biomaterials*. 2004 May;25(10):1911–7.
- Gottrup F. Oxygen in wound healing and infection. *World J Surg*. 2004 Mar;28(3):312–5.
- Grau CT, Rincon F, et al. [Nutritional support in burnt patients]. *Nutr Hosp*. 2005 Jun;20 Suppl 2:44–6.
- Green RJ, Clarke DE, et al. Techniques for evaluating fever in the ICU: A stepwise approach for detecting infectious and noninfectious causes. *J Crit Illn*. 1995 Jan;10(1):67–71.
- Grimble RF. Immunonutrition. *Curr Opin Gastroenterol*. 2005 Mar;21(2):216–22.
- Guo X, Kuzumi E, et al. Perioperative melatonin secretion in patients undergoing coronary artery bypass grafting. *Anesth Analg*. 2002 May;94(5):1085–91, table.
- Halpin LS, Speir AM, et al. Guided imagery in cardiac surgery. *Outcomes Manag*. 2002 Jul;6(3):132–7.
- Heller A, Koch T. [Immunonutrition with omega-3-fatty acids: Are new anti-inflammatory strategies in sight?]. *Zentralbl Chir*. 2000;125(2):123–36.
- Heller AR, Rossel T, et al. Omega-3 fatty acids improve liver and pancreas function in postoperative cancer patients. *Int J Cancer*. 2004 Sep 10;111(4):611–6.
- Holt PR, Katz S, et al. Curcumin therapy in inflammatory bowel disease: A pilot study. *Dig Dis Sci*. 2005 Nov;50(11):2191–3.
- Houwing RH, Rozendaal M, et al. A randomised, double-blind assessment of the effect of nutritional supplementation on the prevention of pressure ulcers in hip-fracture patients. *Clin Nutr*. 2003 Aug;22(4):401–5.
- Igarashi A, Yamaguchi M. Stimulatory effect of zinc acexamate administration on fracture healing of the femoral-diaphyseal tissues in rats. *Gen Pharmacol*. 1999 Apr;32(4):463–9.
- Iriyama K, Mori T, et al. Effect of serum zinc level on amount of collagen-hydroxyproline in the healing gut during total parenteral nutrition: An experimental study. *JPEN J Parenter Enteral Nutr*. 1982 Sep;6(5):416–20.
- Jagetia GC, Rajanikant GK. Effect of curcumin on radiation-impaired healing of excisional wounds in mice. *J Wound Care*. 2004 Mar;13(3):107–9.
- Jeejeebhoy F, Keith M, et al. Nutritional supplementation with MyoVive repletes essential cardiac myocyte nutrients and reduces left ventricular size in patients with left ventricular dysfunction. *Am Heart J*. 2002 Jun;143(6):1092–100.
- Johnson ME, Sill JC, et al. Effect of volatile anesthetics on hydrogen peroxide-induced injury in aortic and pulmonary arterial endothelial cells. *Anesthesiology*. 1996 Jan;84(1):103–16.
- Kaplan B, Gonul B, et al. Relationships between tensile strength, ascorbic acid, hydroxyproline, and zinc levels of rabbit full-thickness incision wound healing. *Surg Today*. 2004;34(9):747–51.
- Karkela J, Vakkuri O, et al. The influence of anaesthesia and surgery on the circadian rhythm of melatonin. *Acta Anaesthesiol Scand*. 2002 Jan;46(1):30–6.
- Kawahito K, Kobayashi E, et al. Enhanced responsiveness of circulatory neutrophils after cardiopulmonary bypass: Increased aggregability and superoxide producing capacity. *Artif Organs*. 2000 Jan;24(1):37–42.
- Keith M, Errett L. Myocardial metabolism and improved outcomes after high risk heart surgery. *Semin Cardiothorac Vasc Anesth*. 2005 Jun;9(2):167–71.
- Kemen M, Senkal M, et al. Early postoperative enteral nutrition with arginine-omega-3 fatty acids and ribonucleic acid-supplemented diet versus placebo in cancer patients: An immunologic evaluation of impact. *Crit Care Med*. 1995 Apr;23(4):652–9.
- Kendler BS. Supplemental conditionally essential nutrients in cardiovascular disease therapy. *J Cardiovasc Nurs*. 2006 Jan;21

Khanna S, Roy S, et al. Upregulation of oxidant-induced VEGF expression in cultured keratinocytes by a grape seed proanthocyanidin extract. *Free Radic Biol Med*. 2001 Jul 1;31(1):38–42.

Khanna S, Venojarvi M, et al. Dermal wound healing properties of redox-active grape seed proanthocyanidins. *Free Radic Biol Med*. 2002 Oct 15;33(8):1089–96.

Klek S, Kulig J, et al. The clinical value of parenteral immunonutrition in surgical patients. *Acta Chir Belg*. 2005 Apr;105(2):175–9.

Lambert SA. The effects of hypnosis/guided imagery on the postoperative course of children. *J Dev Behav Pediatr*. 1996 Oct;17(5):307–10.

Larsen JW, Hager WD, et al. Guidelines for the diagnosis, treatment and prevention of postoperative infections. *Infect Dis Obstet Gynecol*. 2003;11(1):65–70.

Lateef H, Aslam MN, et al. Pretreatment of diabetic rats with lipoic acid improves healing of subsequently-induced abrasion wounds. *Arch Dermatol Res*. 2005 Aug;297(2):75–83.

Leonard BE. The HPA and immune axes in stress: The involvement of the serotonergic system. *Eur Psychiatry*. 2005 Oct;20 Suppl 3:S302–6.

Lim Y, Levy M, et al. Dietary zinc alters early inflammatory responses during cutaneous wound healing in weanling CD-1 mice. *J Nutr*. 2004 Apr;134(4):811–6.

Luyten CR, van Overveld FJ, et al. Antioxidant defence during cardiopulmonary bypass surgery. *Eur J Cardiothorac Surg*. 2005 Apr;27(4):611–6.

Macchi MM, Bruce JN. Human pineal physiology and functional significance of melatonin. *Front Neuroendocrinol*. 2004 Sep;25(3-4):177–95.

MacKay D, Miller AL. Nutritional support for wound healing. *Altern Med Rev*. 2003 Nov;8(4):359–77.

Maheshwari RK, Singh AK, et al. Multiple biological activities of curcumin: A short review. *Life Sci*. 2006 Mar 27;78(18):2081–7.

Mangano DT. Aspirin and mortality from coronary bypass surgery. *N Engl J Med*. 2002 Oct 24;347(17):1309–17.

Mangiante G, Carluccio S, et al. [Perioperative enteral nutrition]. *Chir Ital*. 2005 May;57(3):293–9.

Matsuda A, Furukawa K, et al. Preoperative oral immune-enhancing nutritional supplementation corrects TH1/TH2 imbalance in patients undergoing elective surgery for colorectal cancer. *Dis Colon Rectum*. 2006 Apr;49(4):507–16.

Michalik L, Wahli W. Involvement of PPAR nuclear receptors in tissue injury and wound repair. *J Clin Invest*. 2006 Mar;116(3):598–606.

Miyazaki T, Kuwano H, et al. Correlation between serum melatonin circadian rhythm and intensive care unit psychosis after thoracic esophagectomy. *Surgery*. 2003 Jun;133(6):662–8.

Moskovitz DN, Kim YI. Does perioperative immunonutrition reduce postoperative complications in patients with gastrointestinal cancer undergoing operations? *Nutr Rev*. 2004 Nov;62(11):443–7.

Muth CM, Glenz Y, et al. Influence of an orally effective SOD on hyperbaric oxygen-related cell damage. *Free Radic Res*. 2004 Sep;38(9):927–32.

Nakamura K, Kariyazono H, et al. Influence of preoperative administration of omega-3 fatty acid-enriched supplement on inflammatory and immune responses in patients undergoing major surgery for cancer. *Nutrition*. 2005 Jun;21(6):639–49.

Norred CL. Minimizing preoperative anxiety with alternative caring-healing therapies. *AORN J*. 2000 Nov;72(5): 838–40, 842–3.

Patel AB, Sokolowski J, et al. Halothane potentiation of hydrogen peroxide-induced inhibition of surfactant synthesis: The role of

type II cell energy status. *Anesth Analg*. 2002 Apr;94(4):943–7, table.

Patel GK. The role of nutrition in the management of lower extremity wounds. *Int J Low Extrem Wounds*. 2005 Mar;4(1):12–22.

Patel V, Chivukula IV, et al. Oxygen: From the benefits of inducing VEGF expression to managing the risk of hyperbaric stress. *Antioxid Redox Signal*. 2005 Sep;7(9-10):1377–87.

Pechan I, Olejarova I, et al. Antioxidant status of patients after on-pump and off-pump coronary artery bypass grafting. *Bratisl Lek Listy*. 2004;105(2):45–50.

Peng X, You ZY, et al. [Effects of glutamine granules on protein metabolism in trauma patients]. *Zhonghua Wai Ke Za Zhi*. 2004 Apr 7;42(7):406–9.

Phan TT, See P, et al. Protective effects of curcumin against oxidative damage on skin cells in vitro: Its implication for wound healing. *J Trauma*. 2001 Nov;51(5):927–31.

Pile JC. Evaluating postoperative fever: A focused approach. *Cleve Clin J Med*. 2006 Mar;73 Suppl 1:S62–S66.

Potts MB, Koh SE, et al. Traumatic injury to the immature brain: Inflammation, oxidative injury, and iron-mediated damage as potential therapeutic targets. *NeuroRx*. 2006 Apr;3(2):143–53.

Pucak ML, Kaplin AI. Unkind cytokines: Current evidence for the potential role of cytokines in immune-mediated depression. *Int Rev Psychiatry*. 2005 Dec;17(6):477–83.

Rapkin DA, Straubing M, et al. Guided imagery, hypnosis and recovery from head and neck cancer surgery: An exploratory study. *Int J Clin Exp Hypn*. 1991 Oct;39(4):215–26.

Rosenfeldt F, Marasco S, et al. Coenzyme Q10 therapy before cardiac surgery improves mitochondrial function and in vitro contractility of myocardial tissue. *J Thorac Cardiovasc Surg*. 2005 Jan;129(1):25–32.

Rostan EF, DeBuys HV, et al. Evidence supporting zinc as an important antioxidant for skin. *Int J Dermatol*. 2002 Sep;41(9):606–11.

Samarkandi A, Naguib M, et al. Melatonin vs. midazolam premedication in children: A double-blind, placebo-controlled study. *Eur J Anaesthesiol*. 2005 Mar;22(3):189–96.

Sarisozen B, Durak K, et al. The effects of vitamins E and C on fracture healing in rats. *J Int Med Res*. 2002 May;30(3):309–13.

Sax HC. Immunonutrition and upper gastrointestinal surgery: What really matters. *Nutr Clin Pract*. 2005 Oct;20(5):540–3.

Schillinger D, Grumbach K, et al. Association of health literacy with diabetes outcomes. *JAMA*. 2002 Jul 24;288(4):475–82.

Schindler R, Berndt S, et al. Plasma vitamin E and A changes during cardiopulmonary bypass and in the postoperative course. *Langenbecks Arch Surg*. 2003 Jan;387(9-10):372–8.

Schmiesing CA, Brodsky JB. The preoperative anesthesia evaluation. *Thorac Surg Clin*. 2005 May;15(2):305–15.

Scholl D, Langkamp-Henken B. Nutrient recommendations for wound healing. *J Intraven Nurs*. 2001 Mar;24(2):124–32.

Schwartz JR, Marsh RG, et al. Zinc and skin health: Overview of physiology and pharmacology. *Dermatol Surg*. 2005 Jul;31(7 Pt 2):837–47.

Sen CK, Khanna S, et al. Oxygen, oxidants, and antioxidants in wound healing: An emerging paradigm. *Ann N Y Acad Sci*. 2002 May;957:239–49.

Shigeta H, Yasui A, et al. Postoperative delirium and melatonin levels in elderly patients. *Am J Surg*. 2001 Nov;182(5):449–54.

Sidhu GS, Mani H, et al. Curcumin enhances wound healing in streptozotocin induced diabetic rats and genetically diabetic mice. *Wound Repair Regen*. 1999 Sep;7(5):362–74.

- Sidhu GS, Singh AK, et al. Enhancement of wound healing by curcumin in animals. *Wound Repair Regen*. 1998 Mar;6(2):167-77.
- Singer P. Nutritional care to prevent and heal pressure ulcers. *Isr Med Assoc J*. 2002 Sep;4(9):713-6.
- Sivaci R, Kahraman A, et al. Cytotoxic effects of volatile anesthetics with free radicals undergoing laparoscopic surgery. *Clin Biochem*. 2006 Mar;39(3):293-8.
- Sole MJ, Jeejeebhoy KN. Conditioned nutritional requirements: Therapeutic relevance to heart failure. *Herz*. 2002 Mar;27(2):174-8.
- Spieß BD. Transfusion of blood products affects outcome in cardiac surgery. *Semin Cardiothorac Vasc Anesth*. 2004 Dec;8(4):267-81.
- Stark G. Functional consequences of oxidative membrane damage. *J Membr Biol*. 2005 May;205(1):1-16.
- Straub RH, Harle P. [Stress, hormones, and neuronal signals in the pathophysiology of rheumatoid arthritis: The negative impact on chronic inflammation]. *Med Klin (Munich)*. 2005 Dec 15;100(12):794-803.
- Thurston G, Baluk P, et al. Determinants of endothelial cell phenotype in venules. *Microcirculation*. 2000 Feb;7(1):67-80.
- Tsekos E, Reuter C, et al. Perioperative administration of parenteral fish oil supplements in a routine clinical setting improves patient outcome after major abdominal surgery. *Clin Nutr*. 2004 Jun;23(3):325-30.
- Turk C, Halici M, et al. Promotion of fracture healing by vitamin E in rats. *J Int Med Res*. 2004 Sep;32(5):507-12.
- Tusek D, Church JM, et al. Guided imagery as a coping strategy for perioperative patients. *AORN J*. 1997a Oct;66(4):644-9.
- Tusek DL, Church JM, et al. Guided imagery: A significant advance in the care of patients undergoing elective colorectal surgery. *Dis Colon Rectum*. 1997b Feb;40(2):172-8.
- Van den Berghe G, Wouters P, et al. Intensive insulin therapy in the critically ill patients. *N Engl J Med*. 2001 Nov 8;345(19):1359-67.
- Vucic N, Cala K, et al. [Therapy and prevention of deep venous thrombosis and pulmonary embolism in gynecology and obstetrics]. *Acta Med Croatica*. 2003;57(2):123-30.
- Waldron EE. Scientist or humanist: Two views of the military surgeon in literature. *J Medical Humanities*. 1985 Sep;6(2):64-73.
- Weisel JW. Fibrinogen and fibrin. *Adv Protein Chem*. 2005;70:247-99.
- Westerdahl E, Lindmark B, et al. Deep-breathing exercises reduce atelectasis and improve pulmonary function after coronary artery bypass surgery. *Chest*. 2005 Nov;128(5):3482-8.
- Williams MA, Cave CM, et al. Chemokine regulation of neutrophil function in surgical inflammation. *Arch Surg*. 1999 Dec;134(12):1360-6.
- Wolf MS, Gazmararian JA, et al. Health literacy and functional health status among older adults. *Arch Intern Med*. 2005 Sep 26;165(17):1946-52.
- Xia Z, Gu J, et al. Antioxidant therapy with *Salvia miltiorrhiza* decreases plasma endothelin-1 and thromboxane B2 after cardiopulmonary bypass in patients with congenital heart disease. *J Thorac Cardiovasc Surg*. 2003 Nov;126(5):1404-10.
- Yang T, Li Y, et al. Isoflurane aggravates the decrease of phosphatidylcholine synthesis in alveolar type II cells induced by hydrogen peroxide. *Drug Metabol Drug Interact*. 2001;18(3-4):243-9.
- Yilmaz C, Erdemli E, et al. The contribution of vitamin C to healing of experimental fractures. *Arch Orthop Trauma Surg*. 2001 Jul;121(7):426-8.
- Yuen DE, Stratford AF. Vitamin A activation of transforming growth factor-beta1 enhances porcine ileum wound healing in vitro. *Pediatr Res*. 2004 Jun;55(6):935-9.

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