



October 2026 **Nutrition News**

Dairy Foods Support Health Across the Lifespan, with Important Benefits for Healthy Aging

Lactoferrin Supports Cell Growth and Wound Healing

Lactoferrin-Based Nanocarriers May Improve Drug Delivery for Glioblastoma

Vegan Diet Reduced Muscle Mass and Protein Synthesis in Older Adults Unless Combined with Resistance Exercise

Nutritional Considerations Emerge as GLP-1 Therapies Reshape Obesity Management

[+ More](#)

Dairy Foods Support Health Across the Lifespan, with Important Benefits for Healthy Aging

A recent review highlights the role of dairy foods in supporting health from infancy through older adulthood. Owing to their complex food matrix, dairy products provide high-quality protein, essential fatty acids, vitamins, minerals, and bioactive compounds that influence nutrient absorption and a wide range of physiological functions.

In early life, dairy-derived components such as milk fat globule membrane (MFGM) have been associated with gastrointestinal development, immune support, and neurocognitive outcomes. During adolescence and adulthood, key dairy nutrients including calcium, vitamin D, and leucine-rich proteins contribute to bone development, muscle protein synthesis, and cardiometabolic health.

The review emphasizes the importance of dairy nutrition in older adults, as aging is associated with changes in digestive function, nutrient absorption, and gut microbiota composition that can increase the risk of conditions such as osteoporosis and sarcopenia. Dairy-based nutritional strategies, including optimized protein intake and the incorporation of bioactive ingredients and probiotics, may help address these age-related challenges.

Overall, the authors conclude that dairy foods provide a versatile nutritional framework for supporting health and healthy aging across the lifespan, with opportunities to tailor recommendations to the unique physiological needs of different life stages.

Hasegawa et al. Int J Food Properties, 29(1).



Lactoferrin Supports Cell Growth and Wound Healing



Lactoferrin (Lf), an iron-binding protein naturally found in milk and other bodily secretions, is known for its diverse biological activities, including immune support and antimicrobial effects. This study evaluated the biological activity of a highly purified commercial bovine lactoferrin preparation using a series of laboratory and cell-based assays.

Researchers found that lactoferrin was non-cytotoxic and promoted the growth of human skin cells (keratinocytes) in a concentration-dependent manner. In addition, lactoferrin enhanced wound closure in a cell culture model, with the greatest effects observed at lower concentrations. These findings suggest that lactoferrin may support cellular processes involved in tissue repair and regeneration.

However, under the conditions tested, lactoferrin did not demonstrate antimicrobial activity against *Staphylococcus aureus* or *Pseudomonas aeruginosa*. The authors noted that factors such as protein purity and concentration may influence the biological activity of lactoferrin and highlighted the need for further research to better understand its mechanisms of action and potential therapeutic applications.

[Azevedo et al. J Med Food. 2026 Nov;29\(11\):655-664.](#)

Lactoferrin-Based Nanocarriers May Improve Drug Delivery for Glioblastoma

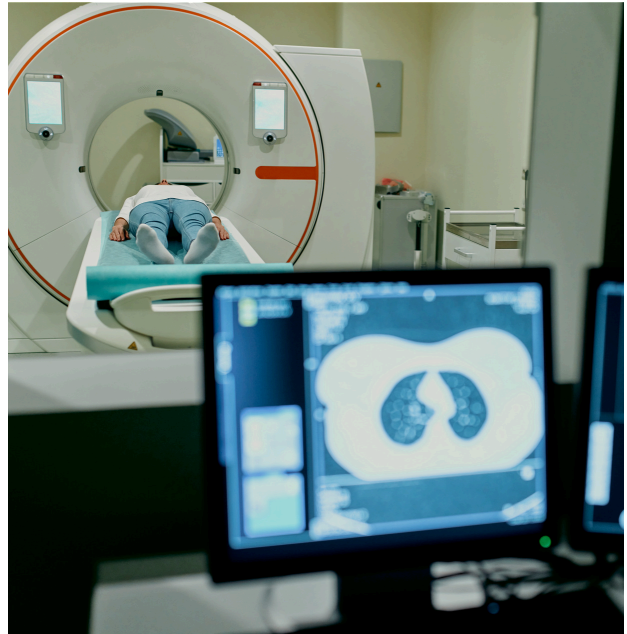
A recent review explored the use of lactoferrin (LF) in combination with nanotechnology as a potential approach for improving glioblastoma multiforme (GBM) treatment. The review examined studies investigating LF-based nanocarriers designed to enhance the delivery of therapeutic agents across the blood-brain barrier, a longstanding challenge in brain cancer treatment.

Lactoferrin is an iron-binding glycoprotein known for its antimicrobial, antioxidant, and antitumor properties. Researchers highlighted its interaction with receptors involved in transport across the blood-brain barrier, allowing for targeted uptake by glioblastoma cells. Incorporating lactoferrin into nanoparticle delivery systems was reported to improve drug solubility, prolong circulation time, and enhance the delivery of therapeutic compounds to tumor tissue.

Across the studies reviewed, LF-based nanocarriers demonstrated the ability to promote apoptosis, inhibit tumor growth, and enhance the effectiveness of radiotherapy in preclinical GBM models. These systems also showed the potential to improve treatment selectivity while reducing systemic toxicity.

The authors concluded that lactoferrin represents a promising component of targeted drug delivery systems for glioblastoma. While additional clinical research is needed, LF-based nanocarriers may offer a novel strategy for improving the delivery and effectiveness of therapies for this aggressive brain tumor.

[Abed et al. CNS Neurosci Ther. 2026 Sep;32\(9\):e71070](#)



Vegan Diet Reduced Muscle Mass and Protein Synthesis in Older Adults Unless Combined with Resistance Exercise

A 12-week randomized controlled trial examined the effects of a self-selected vegan diet, an omnivorous diet, and a vegan diet combined with resistance exercise in 72 healthy adults aged 65 years and older. Researchers assessed protein intake, muscle mass, muscle protein synthesis, and strength throughout the study.

Participants following the vegan diet significantly reduced their protein intake compared with baseline, while protein intake remained stable in the omnivorous group. The vegan diet group also experienced greater declines in thigh muscle volume, appendicular lean mass, and muscle protein synthesis rates compared with both the omnivorous group and the vegan diet plus resistance exercise group. Although muscle mass declined in both vegan groups, losses were smaller among participants who performed resistance exercise.

The authors concluded that a self-selected vegan diet reduced protein intake, skeletal muscle mass, and muscle protein synthesis in older adults. Incorporating resistance exercise helped mitigate the loss of muscle mass associated with the vegan diet.

[Domić et al. Am J Clin Nutr. 2026 Sep;124\(3\):101416](#)



Nutritional Considerations Emerge as GLP-1 Therapies Reshape Obesity Management

Glucagon-like peptide-1 (GLP-1) receptor agonists and dual GIP/GLP-1 receptor agonists have transformed obesity treatment by producing significant and sustained weight loss while improving metabolic health. As the use of these medications continues to grow, researchers are increasingly examining their impact on nutritional status beyond changes in body weight.

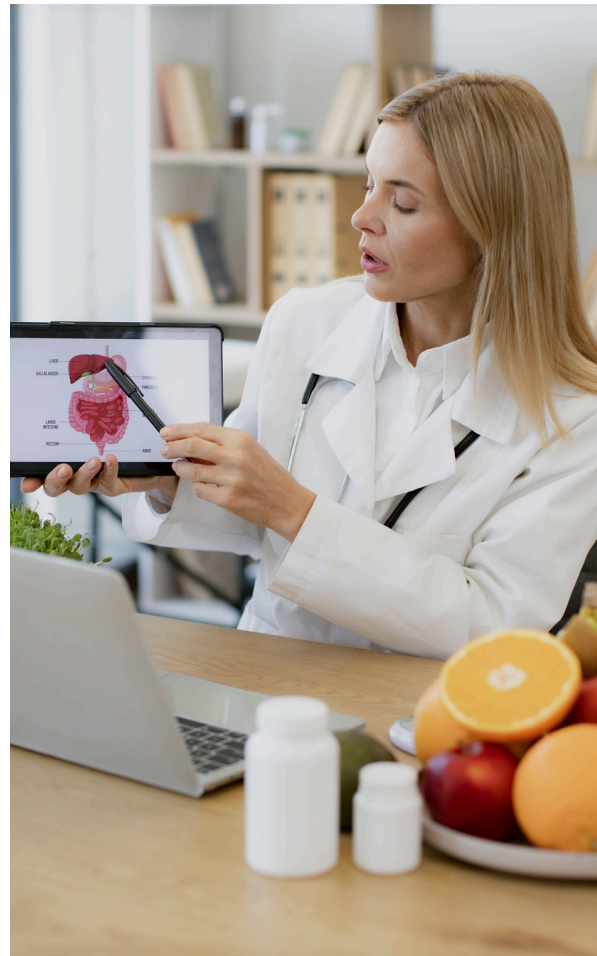
This review summarizes current evidence on how GLP-1-based therapies influence dietary intake, protein and micronutrient adequacy, body composition, and muscle health. While reduced appetite and lower energy intake contribute to the effectiveness of these medications, they may also affect overall diet quality and nutrient intake, particularly in individuals who are already nutritionally vulnerable.

The authors note that nutritional responses to GLP-1 therapy vary considerably among individuals and cannot be adequately assessed using body weight alone. A more comprehensive evaluation includes dietary intake, body composition, muscle function, physical performance, and individual clinical characteristics.

Particular attention is warranted for populations at greater nutritional risk, including older adults, individuals with sarcopenic obesity, those with a history of bariatric surgery, chronic gastrointestinal conditions, or persistent treatment-related gastrointestinal symptoms. In these groups, individualized nutritional assessment and monitoring may help identify potential concerns related to protein intake, micronutrient status, and muscle health.

The review concludes that a risk-based, personalized approach to nutritional care may be appropriate during GLP-1 treatment. Further research is needed to determine which nutritional interventions best support long-term health and patient-centered outcomes during obesity management.

[Sorić et al. Nutrients. 2026 Aug 23;18\(17\):2757.](#)



IN THE NEWS



Beyond Supplements: Expanding Probiotics into Everyday Foods & Beverages

Probiotics are moving beyond supplements and into everyday foods, beverages, and nutrition products. Actus will host a webinar on October 15th to explore emerging market opportunities, formulation challenges, and how spore-forming probiotics like BENESPORE® BV379 can support innovation across applications.

Move over, longevity: Healthspan is what we should be chasing

While life expectancy continues to rise, healthy life expectancy is declining, highlighting a growing gap between lifespan and healthspan and underscoring the need for greater investment in prevention, healthy lifestyles, and the social factors that support healthy aging.



Dairy industry adapting to extraordinary demand for whey protein

Record demand for whey protein ingredients has driven U.S. whey prices to historic highs and spurred major investments in cheese and whey processing capacity, particularly for WPC80 and WPI production.

This content is provided for informational and educational purposes only and does not constitute medical advice, diagnosis, or treatment. Readers should consult a qualified healthcare professional for individual guidance.

We support the World Health Organization's recommendation that breastfeeding is the optimal source of nutrition for infants. When breastfeeding is not possible or not sufficient, infant formula can provide an appropriate alternative.