TOP TIPS FROM FAMILY PRACTICE

Weight Loss, Dementia, Rhinosinusitis, Dietary Supplements, Firearm Safety

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WHY WEIGHT LOSS IS HARDER IN THE SETTING OF DIABETES[1]

Studies involving effective weight-loss medications that can be used to treat diabetes and obesity (e.g., tirzepatide or semaglutide) show that patients with type 2 diabetes (T2D) generally lose less weight than individuals without T2D. There are several possible explanations.

1. **Higher hyperinsulinemia increases weight gain risk.** Excess weight contributes to systemic insulin resistance leading to hyperinsulinemia, a hallmark of T2D. Hyperinsulinemia is thought to drive weight gain through the anabolic effects of insulin, promoting both visceral fat accumulation and ectopic fat deposition, which further exacerbates insulin resistance.
2. **Energy is conserved during weight loss.** Weight loss in the setting of diabetes may be limited by reduced glucosuria once glucose levels are controlled below the renal threshold (approximately 180 mg/dL).
3. **Certain anti-diabetic medications promote weight gain.** Commonly used drug classes such as sulfonylureas, insulin, and thiazolidinediones often contribute to weight gain. Examples include basal insulin therapy, basal-bolus insulin regimens, sulfonylureas, and pioglitazone.
4. **Calorie intake is increased due to fear of hypoglycemia.**
5. **During hypoglycemic events, appetite is stimulated, often leading to increased carbohydrate intake.**
6. **Physical activity is reduced due to comorbidities or complications.** Regular physical activity is a cornerstone of weight management and diabetes care.

However, comorbidities such as heart failure, renal disease, or pulmonary disorders, and microvascular complications such as neuropathy, peripheral artery disease, or diabetic foot, can limit a patient's ability to exercise consistently, reducing the effectiveness of lifestyle interventions.

PROTON PUMP INHIBITORS MAY BE LINKED TO DEMENTIA RISK[2]

Right now, an estimated 6.9 million seniors in the United States are living with Alzheimer's disease, the most common cause of dementia. Long-term use of anticholinergic drugs — commonly prescribed for conditions like depression, allergies, and bladder control — has been linked to a higher risk of cognitive decline. Conversely, some medications that help us manage cardiovascular health, such as blood pressure- and cholesterol-lowering drugs, may help reduce dementia risk by supporting brain health.

Proton pump inhibitors (PPIs) are another drug that some researchers believe could be linked to a heightened risk of dementia. Common PPIs include omeprazole (Prilosec®), esomeprazole (Nexium®), and lansoprazole (Prevacid®).

A large Danish study has found that among people who were diagnosed with dementia between the ages of 60 and 69, those who used PPIs had 36% higher relative risk compared to non-users. Longer durations of PPI use were associated with progressively higher dementia risk.

There have been other studies suggesting that PPIs could increase dementia risk. Additionally, PPI use was linked with an increased risk of migraine disorders, peripheral neuropathies (conditions affecting the nerves outside of the spinal cord or brain), and visual and auditory neurosensory abnormalities.

In addition to these neurological concerns, experts from Yale Medicine note that long-term use of PPIs has been linked to cardiovascular disease, chronic kidney disease, bone fractures, vitamin and mineral deficiencies, and more.

GUIDELINE UPDATED FOR MANAGEMENT OF ADULT RHINOSINUSITIS[3]

The American Academy of Otolaryngology-Head and Neck Surgery in August 2025 updated its recommendations for the diagnosis and management of adult

rhinosinusitis. New evidence from 14 guidelines, 194 systematic reviews, and 133 randomized controlled trials was considered. The guidelines emphasize patient education and counseling.

Watchful waiting as an initial management strategy should be considered for all patients with uncomplicated acute bacterial rhinosinusitis (ABRS), regardless of severity; in the previous iteration of this guideline, this recommendation was only to be applied to patients with mild illness.

Recommendations regarding antibiotic treatment of ABRS has also been clarified, such that the first-line antibiotic therapy for ABRS has been changed from amoxicillin alone to amoxicillin with or without clavulanate. In addition, aspirin-exacerbated respiratory disease has been added as a chronic condition for which we should consider modifying management of chronic rhinosinusitis (CRS). Three new key action statements are presented for managing CRS:

1. The guideline recommends against the use of biologics when patients do not have nasal polyps.
2. When patients do have nasal polyps, the guideline recommends that patients be educated about biologics.
3. The guideline recommends against antibiotic use for CRS if the only reason is the request of a third party, such as stipulation before surgery or imaging.

ABRS should be diagnosed when symptoms such as purulent nasal discharge with nasal obstruction, facial pain, or pressure last at least 10 days without improvement after the onset of upper respiratory symptoms; or when symptoms worsen within 10 days after initial improvement, a pattern known as "double worsening."

If antibiotic treatment is chosen, amoxicillin, with or without clavulanate, for five to seven days should be prescribed as the first-line therapy. If there is no improvement or if symptoms worsen after three to five days of appropriate antibiotic use, the clinician should reassess the diagnosis, rule out other conditions, and check for complications. If ABRS is still confirmed, the antibiotic should be changed.

THINGS TO KNOW BEFORE BUYING SUPPLEMENTS[4]

While some supplements do have a valuable role in certain circumstances, they are often misunderstood and frequently oversold.

1. **Start with food, not supplements.** If we can get a nutrient from your diet, that is almost always the better way. Whole foods offer much more than isolated nutrients. For example, oily fish, such as salmon, provides omega-3 fats as well as protein, vitamin D, selenium, and other beneficial compounds.

   That said, there are circumstances where supplements are necessary. For example, folic acid is

Choosing Wisely

Originally published in the Winter 2015 issue of JLGH *in conjunction with the American Board of Internal Medicine's now-complete Choosing Wisely campaign, this edited reprint is offered to remind physicians of the importance of talking with patients about what tests, treatments, and procedures are needed — and which ones are not.*

RECOMMENDATIONS FROM THE AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS

❶ **Avoid performing routine ultrasonography to screen for post-operative deep vein thrombosis in patients who undergo elective hip or knee arthroplasty.** Ultrasound is not effective for this purpose, and appropriate alternative screening tests do not exist.[6]

❷ **Don't use needle lavage to treat patients with symptomatic osteoarthritis of the knee for long-term relief.** It does not lead to measurable improvements in pain, function, 50-foot walking time, stiffness, or swelling. Comparisons between lateral and neutral heel wedges as well as between lateral wedged insoles alone and with a subtalar strapping led to the conclusion that there is limited evidence for the effectiveness of lateral heel wedges and related orthoses.

❸ **Don't use glucosamine or chondroitin to treat patients with symptomatic osteoarthritis of the knee.** Neither provides relief for this condition.[7]

❹ **Don't use lateral wedge insoles to treat patients with symptomatic medial compartment osteoarthritis of the knee.** Their use does not improve pain or functional outcomes.

recommended before and during pregnancy to reduce the risk of neural tube defects in the fetus; vitamin D is advised during winter months when sunlight is limited; and people following a vegan diet may need extra vitamin B_{12}.

2. **People may not realize they are taking too much.** It is far easier to take too much of a supplement than patients may realize. Too much vitamin D, for example, can lead to a buildup of calcium, which may damage the kidneys and heart, as well as weakening bones. High doses of vitamin A can cause liver damage, birth defects in pregnancy, and lead to decreased bone density. Even water-soluble vitamins can cause problems, with long-term overuse of vitamin B_6 being linked to nerve damage.
3. **Don't trust social media advice.** The Food Standards Agency is clear that supplements "are not medicinal products, and should not be expected to exert a pharmacological, immunological or metabolic action." The Advertising Standards Authority has rules about how health claims can be made, and these apply to social media as well as conventional sources. However, enforcement is difficult, especially with influencer marketing and affiliate schemes.
4. **The supplement industry is more about sales than science.** Some supplements are supported by evidence, but they tend to be the less eye-catching ones, such as iron or vitamin D. Many others are advertised with claims that stretch far beyond what the research shows and are often promoted by people with no formal training in nutrition or health care.
5. **Some supplements aren't safe for everyone.** St. John's Wort, sometimes used for low mood, can have dangerous side effects if taken alongside some antidepressants, birth control, and blood pressure medications. Vitamin K can interfere with blood thinners like warfarin. High-dose iron can cause digestive problems and affect how some antibiotics are absorbed.

Many supplements haven't been tested for safety in pregnancy. Others, like high-dose vitamin A, are known to be harmful in pregnancy and can pass through breast milk. If one is pregnant, breastfeeding, taking medication, or managing a health condition, they should speak to a pharmacist, family physician, or dietician before starting a new supplement.

JAMA IS WORKING TO REDUCE FIREARM VIOLENCE

The JAMA Network in late 2025 released "Toward a Safer World by 2040," a special report outlining practical solutions to reduce firearm violence in the United States.[5] The report is the result of discussions that began at a JAMA summit in early 2025.

The summit brought together leaders from medicine, public health, law, and community violence intervention, as well as owners of firearms, survivors of firearm violence, and a firearm historian. The group collaborated for six months to consider what a safer country looks like, what innovations and action steps are needed, the barriers that exist, and the most important next steps. They concluded:

> A safer world will require investing in the discovery, implementation, and scaling of solutions that reduce firearm harms and center on the people and communities most affected by firearm violence.

Specifically, the report's roadmap aims to achieve this vision by implementing five essential actions over the next five years:

1. Invest in community-based initiatives and address upstream drivers like housing, opportunity, and mistrust.
2. Advance technologies such as biometric "smart guns," passive detection systems, and safety tools driven by artificial intelligence, while strengthening oversight for firearms as consumer products.
3. Shift public and policymaker understanding about the preventability of firearm harms, reframing gun violence as a public health, social, and environmental issue.
4. Support coordinated action at federal, state, and local levels informed by scientific insight and advocacy.
5. Expand research on the effectiveness, scaling, and equity of interventions — from basic science to agent-based modeling and community impact assessment.

JAMA Summit Report
Firearm Violence

Toward a Safer World by 2040

The group also completed an extensive literature review on the subject of reducing firearm violence. Scan the QR code above to read the full report.

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Lancaster Medical Heritage Museum

In addition to his duties as a contributor and board member of JLGH, Dr. Peterson serves on the board of the Lancaster Medical Heritage Museum and is director of its Publications Section, which can be found on the museum's website. To access the section, visit lancastermedicalheritagemuseum.org, and click on "PUBLICATIONS" near the top of the page to find a table of contents of the hundreds of Lancaster medical history articles available.

The museum is located at 410 N. Lime St., Lancaster. Admission is free to LG Health employees with a badge and children under 3; $8:00 for all others. Visit the museum website for additional information and hours of operation.

The Poetry of Medicine

Her body is in ruin.

A city nearly uninhabitable.
Newark comes to mind.
But, to be fair,
Perhaps ancient Athens or Constantinople.

She stares out of dark blue eyes
Looks out from under somehow
Her expression clenched like her hands
Her knees polished spheres on wires
Backbone a sickle.

Her abdomen another smooth roundness
Breasts folds of flesh over boney ripples.
She tries to speak but her mouth is full of
eggs served an hour ago.
A touch on her shoulder produces only wider eyes
An upper denture falls across a capital O.

A stuffed bear sits on her table
Surveying all of this.
Its eyes are bright, its smile stitched.
Its paws velcro a card.
"Dear Mom," it reads, "Get well soon."

Dementia

It's seen as a curse
A loss of self itself
A Catastrophe
Emptiness.

It also tiptoes on a slight slope
Downward to be sure, but easy.
Gentle fog settling slowly sliding
Into forgetting.

Seeing the same birds at the feeder
as an hour earlier
Brings joy of a new discovery
While death
Slowly wraps its arms around from behind.

— Both poems submitted by S. Scott Paist, MD