DMS nutrition researcher Lisa Sutherland, Ph.D., led an analysis of 200 top movies; 69% had at least one food brand placement, with sweet (26%) and salty (21%) snacks most prevalent.

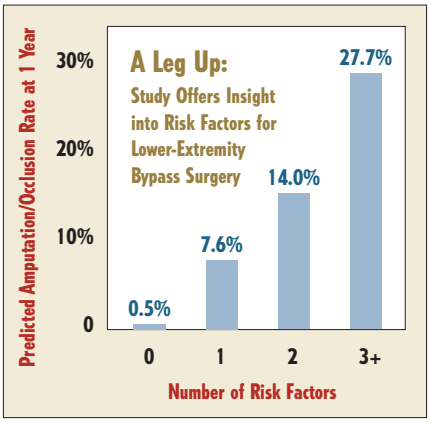
Study suggests when to bypass a bypass

Eight million Americans suffer from a condition called lower extremity peripheral arterial disease. The sickest of them are crippled by the narrowing of arteries in their legs. Bypass surgery, which uses grafts—vessels from elsewhere in the patient's body—to reroute blood, can be an effective treatment. But for some patients, postsurgery complications, such as a blocked graft, can lead to pain or even a leg or foot amputation. So surgeons would like to have a way to predict which patients are at highest risk of these unfortunate outcomes.

Traits: A recent study offers some guidelines. Led by DMS vascular surgeon Philip Goodney, M.D., the study pinpointed patient traits suggesting that surgery could lead to complications. "We tried to pick out the preoperative patient traits that might help us to predict, on an individual patient basis, what the likelihood of [a blockage or amputation] is," Goodney says.

Patients with several risk factors might consider alternatives.

Goodney and his colleagues reviewed 2,306 lower extremity bypass procedures performed at 11 hospitals in northern New England, including DHMC, from 2003 through 2007. The study, published in *Annals of Vascular Surgery*, found that in 277 of the cases, the graft became blocked within one year of the operation. Some of the graft occlusions led to amputation of the patient's foot or leg. Other patients didn't suffer blocked grafts but still required an amputation, usually because of complications such as a foot infection or wound. Overall, 143 amputations were performed within a year, most of them—83%—as a result of a clogged graft.



This graph shows some data from Goodney's study.

Proxy: The researchers identified eight risk factors. For example, patients who experienced occlusion or amputation tended to be less than 50 years old. Goodney believes this relative youth is a proxy for patients who were heavy smokers and had other medical problems. Other presurgery risk factors include being unable to walk independently, living in a nursing home, requiring dialysis, having critical limb ischemia (severe artery blockage), needing venovenostomy (a bypass that requires several veins sutured together), and needing surgery with a tarsal target (that is, connecting to very tiny arteries in the foot).

Goodney says patients flagged with several of these traits "might, unfortunately, consider alternatives other than bypass surgery." Current alternatives include angioplasty, which flattens plaque against artery walls. New therapies, now in clinical trials, seek to grow new blood vessels through genetic manipulation. Ongoing research is examining the effectiveness of these alternatives.

Awry: The researchers were surprised by how frequently bypass surgery—the "gold standard" for treating severe arterial disease—could go awry, says Goodney. The finding "will help surgeons choose their patients more effectively [and] allows us to compare risk-adjusted results across surgeons, so that we can find out who's doing things well, and then study . . . what it is that they do well." Rich Barlow

Of place and race

To better understand the interaction of race and place in cancer care, DMS researchers mined U.S. Census and Medicare data. Urban African Americans have better access to specialized cancer care than urban Caucasians and are 70% more likely to use National Cancer Institute-designated centers, they determined. But in rural locales, the opposite was true, with African Americans 58% less likely to go to an NCI-designated center. "Efforts to understand and redress racial disparities should take into account interacting demographic and residential influences," concluded the authors in the *Journal of Rural Health*.

Paging all nurses

In a study conducted in DHMC's 36-bed orthopaedic unit, researchers found they could significantly reduce the number of rescues and transfers to the ICU by continually monitoring patients' blood-oxygen levels. Nurses were automatically notified via pager when patients' oxygen saturation level dropped or heart rate was too fast or too slow. But, warned the authors in *Anesthesiology*, "a high frequency of alarms will desensitize staff, leading to delayed responses." So it is necessary to limit "the nuisance alarms generated by self-correcting changes or false readings," they observed.