

Wonder drugs with hidden dangers

■ Imagine being able to enjoy cholesterol-laden foods with a clear conscience—and clean arteries. To gorge on fat that isn't fattening. To booze it up with no fear of drunkenness. Or to build bulging biceps, using a shortcut that eliminates much of the usual sweat and toil.

Sound impossible? Not at all: Every one of these marvels is, in fact, within the reach of modern science. But lest you think paradise lost has been found, it is well to recall the cost to humanity when Eve bit into that big, juicy apple. Like the prophets of old, the scientists behind some modern "miracle" drugs warn that succumbing to temptation, even with the help of today's technology, can have unforeseen—and dangerous—consequences.

Consider the case of Lovastatin. Last week, the new drug received approval from the Food and Drug Administration as a treatment for high blood-cholesterol levels—a condition that leads to heart disease. Developed by Merck & Company, the chemical compound works by inhibiting an enzyme in the liver, where 70 percent of the body's cholesterol is manufactured. The drug's advent was hailed by doctors as almost certain to revolutionize the treatment of the 20 million Americans whose cholesterol levels put them at high risk of developing heart disease. Not only is the new drug the most effective yet discovered in inhibiting cholesterol production in the body but it also is easier for patients to take than previous anticholesterol drugs. It is to be available—by prescription only—in about two weeks.

Crutch for a bad habit?

But Lovastatin has its drawbacks. It's expensive: Treatments could cost \$3,000 a year for some patients. And it is so effective that some doctors fear that patients prone to heart disease may be tempted to rely on it excessively—and to abandon healthful eating habits in favor of bacon, hamburgers and other fatty staples of the American diet. "If they indulge an appetite for unhealthy foods, they could counteract some of the good effects of Lovastatin," says Dr. Conrad Blum, a specialist in metabolic diseases at Columbia Presbyterian Medical Center in New York City. "Or, alternatively, they may increase their risk for other diseases, such as colon cancer."

Sucrose polyester (SPE) is another innovative product that health officials

SCIENCE ■ Researchers warn that even "miracle" products can be badly misused by consumers who consider them cure-alls

fear could be misused. The brainchild of Procter & Gamble, this compound is the first fat that is entirely calorie-free. Yet despite its synthetic sound, it tastes totally natural. When 10 obese people were fed a diet high in SPE for 20 days, they lost an average of 8 pounds—and felt no craving for high-calorie foods in the bargain. The secret of SPE: Unlike ordinary fats, its molecular structure prevents absorption through the walls of the digestive system. Procter & Gamble is currently seeking FDA approval to include SPE in foods for diet-

blocks the action of alcohol by interfering with the same chemical messenger system in the brain that is affected by barbiturates and some tranquilizers. But while Ro15-4513 prevents intoxication of the brain, it leaves the liver and other organs vulnerable to alcohol's debilitating action.

Supply and demand

The drug's potential for misuse by problem drinkers has caused so much concern, in fact, that its inventors refuse to make it available even through doctors' prescriptions. "It would be irresponsible to market because people might be encouraged to go on dangerous drinking binges if they knew they could take a sober-up pill," explains chemist Willy Haefely at the company's headquarters in Basel, Switzerland.

If there's enough demand, however,



ILLUSTRATION BY HAROLD SMELCER—USN&WR

ers, a move that has Wall Street investors salivating.

So why not have your cake and eat it, too? For many, that may be just fine. "It will probably be a tremendous benefit for your garden-variety dieter," says Sonja Lange, manager of the Eating Disorders Program at the Washington (D.C.) Hospital Center. But, Lange warns, SPE "could be dangerous for the person who does not know when to call the diet quits." She is referring to the 2 million young women who are either anorexic or bulimic—that is, those slowly starving themselves to death by refusing to eat or those inducing vomiting after binges of eating. Lange fears that the new calorie-free fat "will feed the growing obsession to die for thinness."

The odds are that SPE, like Merck's Lovastatin, eventually will win the FDA's approval. But there are some other modern wonder drugs that may never be widely available except, perhaps, on the black market.

Four years ago, for instance, the pharmaceutical firm Hoffmann-La Roche developed a drug called Ro15-4513 that can instantly sober up the most bleary-eyed drunk. The drug

even responsible manufacturers sometimes can't keep drugs off the market. Muscle-building steroids are a case in point. Once used mainly by weight lifters, they have recently become a popular vanity drug among American teenage boys, with illegal sales—largely at high schools and colleges—that topped \$100 million last year. "It's the Charles Atlas syndrome," says Dr. Robert Voy, chief medical officer of the U.S. Olympic Committee. "Skinny kids are taking steroids to show off their big muscles." Long-term use, warns Voy, can lead to psychotic symptoms and even to premature death from liver tumors and coronary-artery disease.

No one would dispute that potent new compounds have an important place in medicine or that researchers should continue to seek cures and palliatives. What worries doctors is the tendency to view such substances as technological "fixes"—simple remedies that become addictions in their own right. The moral of this story is an old one: Moderation in all things—including miracles. ■

by Kathleen McAuliffe