HEALTH

I Hear America Grinding

Dentists diagnose an epidemic of teeth-gnashing, and patients spring for \$1 billion in mouth guards

BY JOHN SEDGWICK

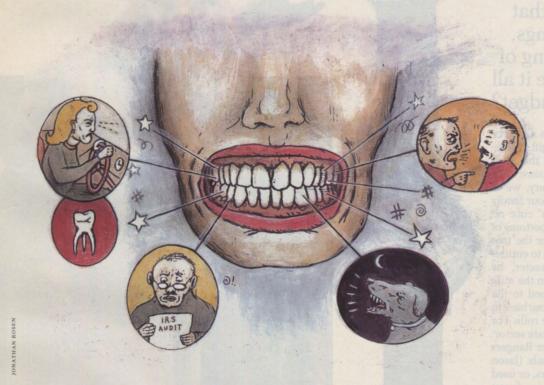
UDY MCCLOSKY, 33, IS A MILD-MANnered Boston-based office manager with one bad habit: she grinds her teeth at night. "My fiancé says I sound like I'm chattering," she says. She grinds all the harder when she is under stress, and that seems almost constant now, what with worries about her mortgage, her recent engagement, her job and a horrid spate of construction that has extended her a growth industry for dentists. Noshir Mehta, a professor at the Pain Center at the Tufts University School of Dental Medicine, says that almost everybody grinds their teeth sometimes, but as much as 20 percent of the population now grind their teeth destructively. Earlier this year an article in the Journal of the American Dental Association reported that dentists are prescribing about 3.6 million protective nightguards a year. Figuring the average cost of a front teeth can be worn down nearly to the gum line. Other teeth are cracked, or they are snapped off entirely, or they get a hairline fracture that feels like a toothache but is impossible for a dentist to see. All the grinding and clenching can cause migrainelike headaches and nagging muscle soreness as well, and it is a major contributor to more severe tempromandibular joint (TMJ) disorders, like a total lockup of the jaw.

Why should humans be so self-destructive? In the '50s, dentists believed that teeth-grinding-or bruxism, as they term it-was related to an ill-fitting bite. Recently some researchers have speculated that bruxism may be a form of sleep disorder, since it is often accompanied by leg-twitching at the beginning and end of REM sleep. Still, most investigators are convinced that the tensions of daily life lie at the root of it; they group teeth-grinding with ulcers and heart disease as stress-related disorders.

> John Rugh, a psychologist at the University of Texas, once wired up the jaws of dental students and discovered that they were most likely to brux after arguments and before tests. But time pressure is the big thing, he says: "People have too much stuff to do, and not enough time to do it in." Mehta recommends taking time to review the day's events before bed. "That way you do your worrying before you lie down." Unless, of course, you're so worried you can't get to sleep-but that's a different malady.

> There are those who question whether the current bruxism craze isn't simply the '90s version of the TMJ diagnosis that peaked in the '70s-a catchall disorder that once kept dentists busy. In all but the most extreme cases, there is no physical evidence of worn teeth. For the rest, the patients have to rely on the dentist's verdict, since they are asleep at the time they're supposedly grinding away.

"The only way most people know they are bruxing is because their dentists tell them they are," says Columbia University psychologist and epidemiologist Karen Raphael. "But how do the dentists know? This is a subject wide open for further investigation." Raphael has applied for funding for a large-scale epidemiological study that may decide whether the country is indeed suffering a teeth-grinding epidemic. For now, however, she is wearing a nightguard herself. And millions of other Americans will continue to dutifully insert their nightguards before venturing off to sleep, where they can dream of less stressful lives.



hourlong commute. "I have to pack a lot into a day," she says. "It seems I eat every meal standing up." The tension has done a number on her teeth. In the last six months, she has cracked four molars and spent \$2,000 getting them fixed. Now, before she goes to bed each night, she puts on a dental device called a "nightguard," which keeps her from grinding her teeth to dust.

As life becomes increasingly pressurepacked, McClosky is one of a growing number of Americans who are taking out their troubles on their teeth. The gnashing of teeth has been a human activity at least since Biblical times, and now it's become

nightguard at \$275 (although it can go much higher), the article asserted that Americans are purchasing a staggering \$1 billion worth of these molar savers annually.

Teeth-grinding may sound like a joke, but it can be a major pain. With no food to absorb the impact, and no consciousness to exert control, nocturnal teeth-grinding is powerful enough to crack a walnut: at 250 pounds per square inch, the pressure is 10 times the force registered during normal chewing, according to Mehta. It also impacts the teeth at odd angles, making it especially destructive; and it can last all night. The results can be horrifying. Some