

Heart & Health Reports™

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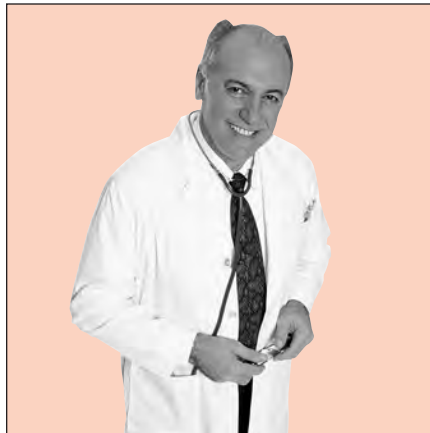
Vol 10/No 3

Electrical "squiggles" hold many secrets

EKG Excellence

NO comprehensive cardiac examination would be complete without performing an electrocardiogram. More than 100 years old, the electrocardiograph (EKG or ECG) remains the simplest, least expensive and most valuable tool in cardiology. But, if you have ever wondered what your doctor is looking at when you have your EKG, you are not alone. It is sometimes hard to believe that those funny little squiggles can tell your doctor anything at all. Rest assured, this bedside test contains a treasure of information about your heart and circulation.

The electrocardiograph was first developed in the later part of the 19th century and was the most sophisticated medical device of its time. Even so, the lasting success of the electrocardiogram as a clinical tool was by no means certain, because not all physicians of that era realized its utility. Only after a series of brilliant experiments and enhancements did the EKG reach its full potential as a diagnostic instrument.



Over 100 years old, the electrocardiogram is still one of medicine's most valuable tools.

The heart: An electrical muscle

The potential for living tissue to contain an electric current was recognized in antiquity. Aristotle observed that the electric ray, or tor-

pedo, incapacitated its prey with a shock from an organ located in its pectoral fin. Ancient Roman physicians used electrically charged sea creatures like the torpedo to treat the pain of acute gout. This phenomenon remained a curiosity of nature until 1787, when professor Luigi Galvani of the University of Bologna observed that the leg muscle of a frog would contract when stimulated by an electrostatic apparatus. A debate ensued as to whether the muscle would react only to an outside influence or whether the electricity was present in the muscle itself. Galvani believed the latter and eventually demonstrated that the stimulating electrical source originated within the living tissue. By the 1870's, experiments showed that the muscular pumping of the heart was also related to an intrinsic electrical

(turn to page 4)

Inside This Issue

- Lowering homocysteine fails again** 2
- Unwanted discoveries on CT scans** 3
- If you take Bystolic** 6
- Juice products buying guide** 7

Real people

A Digoxin Disorder

FAYE, age 88, was proud of her usual exceptional vigor and general good health. She delighted in her mile-long walk each morning and many hours spent tending her garden. Ten years ago, she had a temporary episode of atrial fibrillation, and was prescribed a daily dose of digoxin and an 81 mg aspirin. Other than that, she was rarely ill. Over the last few days, however, a stubborn gastrointestinal illness made her feel every one of her nearly nine decades.

She suffered with bouts of diar-

rhea, a low-grade temperature, and her muscles ached. She didn't have much appetite, but tried diligently to take her usual medicine with a little food. She didn't want to call her doctor on the holiday weekend, and tried a few doses of an over-the-counter anti-inflammatory medicine to relieve her muscle aches. The next morning, however, she knew something was seriously wrong. Faye was severely lightheaded, nauseous, and could barely get out of bed to

(turn to page 4)

Heart & Health Reports™

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The Untimely Death of Tim Russert

The sudden death of Tim Russert left us all stunned. To many, the loss of the longtime moderator of "Meet the Press" was especially disturbing. Perhaps it was because he was such a familiar and endearing figure. Perhaps it was because of his engaging, avuncular personality. Or perhaps it reminded us of our own mortality. The startling event was certainly hard to accept.

But how could this happen? Surely, modern medicine should have been able to prevent such an occurrence. After all, Mr. Russert was being followed by an internist and cardiologist and had ready access to all the latest technology. Was there some way to anticipate and avoid this catastrophe? Unfortunately, the answer is probably no.

The untimely death of Tim Russert illustrates well the limitations of modern medical science and the often unpredictable nature of human biology. By all accounts, Mr. Russert had been feeling well with no symptoms of chest pain or shortness of breath. A recent stress test was normal. He even used his treadmill the morning he collapsed. He did have coronary risk factors including hypertension, a mildly elevated fasting blood glucose, abdominal obesity, elevated triglycerides and a low HDL (good) cholesterol level.

These risk factors were being addressed. Mr. Russert took medicine to lower his blood pressure. A statin was prescribed that lowered his LDL (bad) cholesterol to an excellent level of 68 mg/dl. He had a hectic work schedule, but was trying to lower his risk with a program of diet and exercise.

What happened to Tim Russert was a random event. A pre-existing atherosclerotic plaque in a coronary artery suddenly ruptured, causing a blood clot to abruptly occlude the vessel. The immediate consequence was an unstable heart rhythm that led to his death.

Medical science currently has no means of specifically predicting and preventing this type of chance event. Much research is going on in an effort to identify and treat "vulnerable plaque," the kind that is likely to rupture and lead to complications. Since this plaque is usually in the wall of the artery and not obstructing blood flow, it may not be detected on stress testing. It may not have even been seen on coronary angiography. Moreover, neither angioplasty nor coronary bypass surgery is directed at this type of problem. These procedures are indicated mainly for controlling symptoms in obstructive coronary disease and are not effective in preventing sudden death. Identifying coronary calcification with a CT scan would not have changed management. Indeed, Mr. Russert had an abnormal coronary calcium score in 1998. This was of no clinical consequence until his fatal event.

Tim Russert was receiving appropriate, state-of-the-art therapy for coronary prevention: risk factor modification with diet, exercise, and medication for elevated cholesterol and high blood pressure. This is the best way to stabilize coronary plaques and prevent cardiac events. The decline in coronary deaths over the past 30 years is a testament to the effectiveness of these treatments; unfortunately prevention is never universal.

Tim Russert's death was shocking and tragic. It was neither the doctors' nor the patient's fault. The early stages of coronary disease are extremely common in the general population. It would serve us all well to address cardiac risk factors aggressively. Hopefully, as medical progress continues, we will gain a better understanding of the causes of sudden death, and more effective strategies for its prevention.♥

Arthur E. Fass, MD

Editor

Lowering homocysteine fails again

The use of folic acid along with B-6 and B-12 supplements has been widely recommended for the prevention of cardiovascular events. The thinking went as follows: Elevated homocysteine levels are associated with an increased risk of cardiac events. Folic acid and B vitamins can reduce homocysteine levels; therefore, the use of these supplements can reduce cardiac risk. While the logic seemed sound, the results of clinical trials to test this hypothesis have been disappointing. A newly published randomized trial casts further doubt on the proposition.

The study patients consisted of 5442 women healthcare professionals aged 42 or older. They either had known cardiovascular disease or

three or more coronary risk factors. One patient group received a combination pill containing 2.5 mg of folic acid, 50 mg of vitamin B-6, and 1 mg of vitamin B-12. The second group was given placebo. The patients were followed for an average of 7.3 years.

The treatment group achieved the expected reduction in homocysteine levels; average homocysteine level decreased by 18.5%. Compared to the placebo group, however, the patients receiving folic acid and B-vitamin supplements fared no better in terms of a composite end-point of heart attack, stroke, coronary revascularization procedures, or cardiovascular mortality. There was also no benefit for any individual cardiac complication taken separately.

Analysis: This study of female patients represents the largest trial to date of the potential cardiovascular benefits of folic acid and B-vita-

min supplementation in heart disease prevention. Another large study revealed no benefit for the supplements in men. The publication of these trials will likely mark the end of the general use of these agents in preventive cardiology. Once again, the importance of obtaining direct evidence to support a plausible hypothesis is illustrated. While elevated homocysteine is a proven risk factor for cardiovascular disease, its lowering by the methods tested is of no benefit. Perhaps the homocysteine level is a marker for an as yet unknown genetic condition, which is not directly addressed by the vitamin treatments.♥

— Arthur E. Fass, MD

Albert CM, et al. Effect of Folic Acid and B Vitamins on Risk of Cardiovascular Events and Total Mortality Among Women at High Risk for Cardiovascular Disease. JAMA 2008;299:2027-2036.

Incidental findings on cardiac CT scans: Unwanted discoveries?

Multidetector computed tomography (MDCT) is a form of CT scanning that has been widely used for the detection of subclinical coronary artery disease. The technique is a sensitive method for detecting coronary artery calcification, a sign of coronary atherosclerosis, which often precedes clinical symptoms. The procedure has engendered considerable controversy. While it may identify individuals at high risk of future coronary events, those individuals can usually be identified with the use of traditional risk factors such as high cholesterol, hypertension, and family history of premature coronary disease. Now, another confounding factor has come to light – the issue of “incidental” findings discovered during the

CT scan in nearby organs and tissues. A recent study attempted to quantify the extent of this problem.

The study group consisted of 459 healthy patients aged 60 to 69 years who had undergone MDCT. Incidental findings were found in 23%, for which the patients were advised to have clinical or radiological follow-up. The most common unanticipated discoveries were lung nodules. Other findings included lesions in the liver and abnormal lymph nodes.

Analysis: This study illustrates a most unusual problem – discovering abnormalities that we did not intend to find and did not necessarily want to know about. Most incidental findings are not serious and would never pose a health risk. However, they may cause great anxiety on the part of patient and physician, and often lead to a series of subsequent tests. Some of these tests themselves carry risk. For example,

a pulmonary nodule found as an incidental finding will always cause worry about an early lung cancer. This may eventually lead to a surgical procedure to ascertain the diagnosis, exposing the patient to the hazards of an invasive procedure. Most likely, the nodule will prove to be benign. Dealing with incidental findings, therefore, is no simple matter.

We have been dubious about the usefulness of CT scanning to detect coronary calcification. They generally do not alter our clinical management, and require a high dose of radiation. There is now another reason to do without these tests – avoiding unwanted information.♥

— Arthur E. Fass, MD

Burt JR, et al. Incidental Findings on Cardiac Multidetector Row Computed Tomography Among Healthy Older Adults. Arch Intern Med 2008;168:756-761

EKG . . . continued from page 1

impulse. Instruments of the time were too insensitive to further explain the phenomenon, but the search for an acceptable recording device for the heart's electrical current was on.

The electrocardiograph is born

Two men, Augustus Waller of London and William Einthoven of Leiden pioneered the way to the modern EKG. In 1887, Waller used an instrument called a capillary electrometer to make the first surface measurement of the heart's electrical activity that did not require opening the chest to expose the beating heart. He first termed the recording an "electrogram" and later, a "cardiogram."

By 1901, Einthoven improved on the technique with the development of a measuring device called a string galvanometer (named after Galvani). This instrument allowed him to amplify the electrical signal and record the tracing on a photographic plate. Einthoven published his research in German, introducing the term "elektrokardiogram." This launched a new field of medicine and set the stage for the now familiar abbreviation "EKG."

The first EKG machines did not resemble today's compact devices. Einthoven's recording apparatus weighed nearly 600 pounds, occupied two rooms, and took five people to operate. Part of Einthoven's genius was to recognize

the potential clinical utility of this massive machine. He connected his equipment by cable to make recordings from patients located at the Academic Hospital in Leiden, located over a mile away. Even his fellow scientist Waller did not appreciate the potential clinical application of the recordings stating, "I do not imagine that electrocardiography is likely to find any very extensive use in the hospital." It was not long before Einthoven proved Waller's prediction wrong, as electrocardiography soon became one of the most valuable diagnostic techniques in medicine.

Einthoven introduced the terminology for the deflections of his string galvanometer, naming the

Digoxin . . . continued from page 1

go to the bathroom. She sat on the edge of her bed and called 911.

The emergency team arrived within minutes and transported Faye to the emergency room where an EKG showed that her heart rate was dangerously low. She was dehydrated with a low blood pressure and her pulse was only 40 beats per minute. Soon the reason for her sudden deterioration became clear. "Your GI illness caused you to become dehydrated and interfered with your kidney function," the doctor said. "The digoxin accumulated in your blood to a toxic level and slowed your heart rate. We're going to give you fluids and reverse the effect of the medicine."

The doctor started an intravenous line and gave her a medicine that inactivated the digoxin in her blood stream. Within a few hours she was feeling much stronger. By the next morning, her heart rate, blood pressure and electrocardiogram had returned to normal. An added bonus was that her doctor decided she didn't need the digoxin anymore. She stayed

another day in the hospital to regain her strength and it wasn't long before she was ready to get back to her garden.

Cardiologist's comment:

Digoxin is a form of digitalis, a chemical derived from the foxglove plant. It has been used since the 18th century to treat congestive heart failure. Intravenous and oral forms of digitalis are also commonly used to control the rapid heart beats of patients with atrial fibrillation. Despite its use for more than 200 years, the best use of digoxin remains hotly debated. The primary concern has been balancing the benefit of this medication versus its potential toxicity. In addition, newer, better tolerated and efficacious medications have reduced digoxin to a secondary role for treating both heart failure and atrial fibrillation.

Digoxin works by modulating the relative concentration of sodium, potassium and calcium within the cardiac muscle cells. Ultimately, these changes have a positive influence on the pumping

action of the heart. Digoxin also affects the heart's electrical system, slowing electrical conduction from the upper chambers (atria) of the heart to the lower chambers (ventricles). This effect can be used to slow the rapid heart rate of atrial fibrillation. In patients with a normal rhythm, however, digoxin can cause a dangerously slow rhythm, an effect we saw in Faye.

Digoxin has a narrow therapeutic window, meaning that there is a delicate balance between benefit and risk. Doctors will often draw a blood digoxin level in patients who are prescribed this medication. However, a normal digoxin level in one person, may actually be poorly tolerated in another. This is particularly true in elderly patients. More than 200 years after its first clinical use, doctors are still learning how best to use this medicine.♥

— Franklin H. Zimmerman, MD

The stories reviewed in this section represent actual patients. Details have been modified to preserve anonymity.

— Editor

waves “P, Q, R, S, and T.” In his initial research paper published in 1906, he reported descriptions of complete heart block, left and right ventricular hypertrophy, premature complexes, and atrial fibrillation. Over time, other scientists refined electrocardiographic techniques, allowing for manufacture of a smaller recording apparatus. Einthoven’s pioneering accomplishments culminated in his receiving the Nobel Prize for medicine in 1924.

A treasure of information

The electrocardiogram today uses essentially the same terminology (PQRST) that Einthoven introduced more than a century ago. By analyzing the configuration of these waves and their relationship to each other, doctors can derive an extraordinary degree of information about the heart (see figure).

The EKG records the electrical stability of the heart rhythm and is remarkably accurate in predicting enlargement of the heart’s chambers.

The EKG can provide a clue for coronary disease, and in the acute setting, remains the most rapidly available indicator of a heart attack.

Minding your Ps and Qs

The **P wave** represents the electrical depolarization (discharge) of the atria, the upper chambers of the heart. The normal cardiac cycle starts with an electrical signal from special tissue located in the right atrium. As the electrical impulse spreads through the atria, the P wave is created. The size and configuration of the P wave can indicate

problems with the heart valves, such as mitral stenosis. Arrhythmias such as atrial fibrillation or flutter are readily seen on the electrocardiogram, even if the patient has no clinical symptoms.

The **QRS complex** represents the electrical activity of the ventricles, the main pumping chambers of the heart. Large Q waves are often present after a heart attack, which represent a loss of functional heart muscle. Sometimes a doctor will ask a surprised patient when they had their heart attack, after identifying characteristic Q waves on a routine EKG. In this instance, the heart attack caused no obvious symptoms, but left a clue behind on the EKG. Not every patient with a heart attack, however, will develop Q waves.

The size and configuration of the QRS complex also have important clinical implications. A large QRS is an indicator of an enlarged left or right ventricle. A prolonged QRS is often a result of a bundle branch block, which is an alteration of the heart’s normal electrical pathway. Many patients with bundle branch block have no clinical disease. In others however, a bundle branch block indicates a

weakened heart muscle or other serious cardiac illness.

The **ST segment and T wave** represent the repolarization or “recharging” of the ventricles. The configuration of these waves provides clinical clues to a variety of conditions including coronary disease, drug side effects and electrolyte balance such as potassium and calcium.

Heart block refers to an abnormal relationship between the P waves and QRS complex. Normally there is a one-to-one ratio

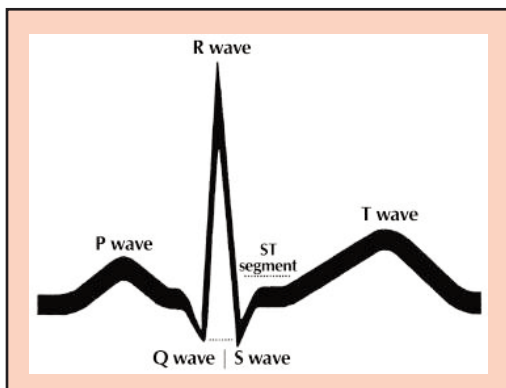
between the two, as the electrical impulse spreads from the atria, through the AV node, and into the ventricles. If the impulse is delayed or fails to conduct to the ventricles, various forms of heart block are described. Some forms of heart block, such as first degree, are clinically insignificant. Others are life threatening and require emergency treatment with a pacemaker.

Premature complexes refer to heart beats that occur early, or out of synchrony with the dominant heart rhythm. They can originate either in the atria or ventricles. These irregularities are extremely common and generally do not indicate significant cardiac disease. Some people, however, are extremely sensitive to these “extra beats” and feel the disturbance in the heart rhythm as a palpitation.

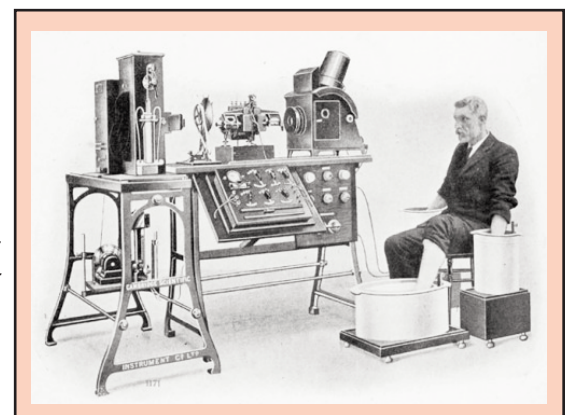
Cardiologist’s comment:

The practice of cardiology has seen extraordinary achievements. We now have imaging techniques that can visualize the most intricate of cardiac structures. Still, the electrocardiogram remains paramount for cardiac diagnosis. It is simple, inexpensive and available at the bedside within minutes. With all of today’s modern marvels in cardiology, there is no replacement for a careful history, a thorough physical examination and a well-interpreted electrocardiogram.♥

— Franklin H. Zimmerman, MD



The EKG is divided into a series of waves and segments, each of which have important clinical implications.



Early electrocardiographs were massive instruments, requiring the subject to be immersed in an electrolyte solution.

Bystolic

(Nebivolol)

What kind of medicine is Bystolic?

Bystolic is the newest member of the beta-blocker family. It is indicated for the treatment of hypertension.

How does it work?

Bystolic works by a unique mechanism. Like most beta blockers, Bystolic slows the pulse and decreases the force of cardiac contraction. It also has the important added property of dilating blood vessels by improving the function of the endothelium, their cellular lining. It is this last property, which seems to confer a very favorable side-effect profile. Patients taking Bystolic, for example, have lower rates of fatigue and erectile dysfunction compared to other beta-blockers.

How will this medicine help me?

Hypertension is an important risk factor for coronary artery disease, stroke, and kidney disease. By effectively lowering blood pressure these complications can be prevented.

How should I take this medicine?

The recommended starting dose is 5 mg daily with or without food. The dose can be increased at two-week intervals up to a maximum of 40 mg daily. In patients with kidney or liver disease, the starting dose should be limited to 2.5 mg daily and increased cautiously if necessary.

What size tablets are available?

Bystolic is available in 2.5 mg, 5 mg, and 10 mg tablets. The tablet is not scored, but may be split or crushed.

How long will it take to work?

Blood pressure lowering effects will be evident within hours of Bystolic administration. The full effect will be seen after two weeks of treatment.

What if I miss a dose?

Beta blockers should be taken as consistently as possible. If a dose is missed, take the missed tablet as soon as the omission is realized and resume the usual schedule the following day. Never try to "catch up" by taking an extra pill.

Do food or other drugs affect this medicine?

- Food does not affect absorption of Bystolic.
- Several other drugs can increase the blood levels of Bystolic including fluoxetine (*Prozac*), cimetidine (*Tagamet*), and sildenafil (*Viagra*). The dosage of Bystolic may therefore need to be reduced when given with these medications.
- Bystolic will slow the pulse and must be used with caution with other drugs that have this effect such as digoxin, diltiazem, and verapamil.

Who should use caution or not take this medicine?

You should not take this medicine if you have:

- A very slow resting heart rate or heart block.
- Acute, decompensated congestive heart failure.
- Severe, uncontrolled bronchospasm (wheezing).
- Pregnant women should discuss use of this medicine with their doctor.
- Nursing mothers should discuss use of this medicine with their doctors. There are no data to determine whether this drug appears in human breast milk. Beta blockers are generally avoided because of a potential adverse reaction in the nursing infant.
- Patients with diabetes must use caution because beta-blockers can mask the warning signs of low blood sugar.
- Patients with severe kidney disease (use caution). A lower dose may be required.
- Patients with moderate liver disease (use caution). A lower dose may be required.

How will I feel while taking this medicine?

Bystolic is better tolerated than other members of the beta blocker class. Treatment with Bystolic is infrequently associated with side effects such as headache, fatigue, dizziness, nausea, and edema (ankle swelling).

Are there serious side effects to watch for?

The following potential serious side effects should be reported promptly to your doctor:

- Severe lightheadedness or fainting, which may indicate an excessively slow heart rate.
- Shortness of breath, which may indicate worsening congestive heart failure, or bronchospasm (asthma).

How does the doctor monitor my progress?

Your doctor will periodically check your pulse, blood pressure and electrocardiogram. The doctor will evaluate your heart and lungs for signs of wheezing or congestion.

Do you have any special tips for me?

- Do not discontinue this medicine abruptly because your pulse and blood pressure may "rebound" dangerously. Always make sure you have enough pills.
- For more information on the Internet:
Visit: www.Bystolic.com.

Bystolic™ is a trademark of Forest Laboratories.

— Arthur E. Fass, MD

Jumpin' for Juice

As summer approaches, quenching our thirst with a cold, juicy beverage seems like an enticing idea. While we are bombarded with the message to eat more fruits and vegetables, we may find ourselves asking: Can we really fulfill these recommendations with juice alone? Well, not all fruit juices are created equal. Although juices are packed with some essential nutrients, the nutritional value varies depending on the type and brand. To be labeled “fruit juice” a beverage must contain 100% juice and is often fortified with essential vitamins and minerals. On the other hand, fruit drinks, juice drinks, juice cocktails, and punches may only have 5 to 10% fruit juice and contain mostly sugar and water.

The only nutritional claim for most popular juices is the inclusion of Vitamin C. Per serving, juices often deliver more Vitamin C than the fresh product because this nutrient is added to compensate for its loss in processing. While some apple juices claim no vitamin or mineral content at all, you'll find others like *Tree Top*, which provides 120 percent of an adult's daily recommended allowances (RDA) of vitamin C. By comparison, a fresh, unprocessed apple contains only 5 percent of vitamin C, but also 5 percent of potassium and 4 grams of fiber, plus pectin and enzymes. The skin of

fresh fruit is where we find the greatest nutritive values. It is in these membranes where the fiber and trace minerals exist, as well as the enzymes that give those foods their capabilities to fight disease and strengthen the immune system.

Although juices may be fortified with essential nutrients, they are often packed with calories and “free” sugars (added sugars and the concentrated sugars in fruit juice). The World Health Organization suggests limiting intake of free sugars to no more than 10% of daily calories. Therefore, in a daily diet containing 1,800 calories, your recommended intake from sugar is only 180 calories. That's not much when you consider an 8-ounce serving of most juices provide more than 100 calories from sugar.

Next time you find yourself parched, you may want to consider gulping down a tall glass of water while enjoying a ripe piece of fresh fruit. This way you'll quench your thirst without the added calories and gain the vitamins, minerals, fiber, and enzymes found in that delicious skin of the fruit.♥

— Emily Kratz, MS, RD

Ms. Kratz is an outpatient nutrition coordinator at Phelps Memorial Hospital in Sleepy Hollow, NY.

Supermarket Savvy

Juice Products Buying Guide

Variety (serving size = 8 oz)	Calories	Sugar (g)	Sodium (mg)	Potassium (mg)	% Vitamin C
<i>Dole Strawberry Kiwi Juice</i>	120	26	25	250	100
<i>Hawaiian Punch</i>	120	29	120	0	100
<i>Minute Maid, Orange Juice</i>	120	24	15	450	100
<i>Mott's Original 100% Apple Juice</i>	120	28	10	240	20
<i>Ocean Spray Light Cranberry Cocktail Juice</i>	40	10	75	65	100
<i>Ocean Spray, Ruby Red Grapefruit Juice</i>	120	65	30	30	100
<i>Ocean Spray White Cran-Peach</i>	120	31	50	30	100
<i>Sunny D, Tangy Style</i>	120	27	190	0	100
<i>Tree Top 100% Apple Juice from Concentrate</i>	120	26	25	280	120
<i>Tropicana Lemonade</i>	100	26	60	0	10
<i>Tropicana 100% Pure Orange Juice</i>	107	22	0	450	100
<i>V8 Splash Juice Drink, Mango Peach</i>	80	18	40	45	130
<i>Welch's 100% Grape Juice</i>	170	40	20	0	100

Q: "I have a small hole in my heart. Do I need to take antibiotics before going to the dentist?"
— Highland Park, IL

A: Probably not anymore! Recommendations from the American Heart Association were revised in 2007, eliminating the need to take antibiotics for the vast majority of individuals with cardiac disorders. This was a welcome change for doctors and patients alike.

The decision was based on an analysis of the risks and benefits of antibiotic prophylaxis for preventing bacterial endocarditis. Although

endocarditis is potentially very serious, the risk of acquiring this infection from a dental cleaning or other related procedure is extremely low. Indeed the daily blood stream exposure to bacteria from routine brushing and flossing far exceeds the bacteria introduced from a trip to the dentist. In addition, the efficacy of antibiotic prophylaxis for preventing an infection was called into question, because the original recommendations were based on science that was less than perfect.

There are still some individuals who need to take antibiotics before dental procedures and cleaning. These include patients who have

had artificial heart valve surgery and those with previous endocarditis. Patients who have had surgery for a congenital heart defect, including those with a "hole in the heart" need to take antibiotics, but only for the first six months after the procedure. After this time, the body heals over the foreign material and the risk of infection is reduced. If you have a small defect, talk to your doctor about revising your previous antibiotic recommendations.♥

— Franklin H. Zimmerman, MD

Q: "I haven't had atrial fibrillation for two years. Do I still have to take Coumadin?"
— Dayton, OH

A: That is always a decision based on judgment that needs to be discussed with your doctor. If you are maintaining normal sinus rhythm, it is conceivable that you may be able to be withdrawn from Coumadin

(warfarin) in favor of an aspirin. These agents are used to lower your risk of stroke.

On the other hand, you need to be able to recognize if you return to atrial fibrillation. Many people have heart palpitations that indicate that atrial fibrillation has recurred. But if the arrhythmia is "silent," you could be in atrial fibrillation and not know it, with the attendant risk of

stroke.

Factors that may increase your risk of stroke in the setting of atrial fibrillation include the presence of an enlarged left atrium on an echocardiogram, hypertension, age greater than 65, and mitral valve disease. If you have these, your doctor may recommend that you stay on Coumadin.♥

— Franklin H. Zimmerman, MD

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