

# Israel health news updates

## Dates protect against heart disease

› By ISRAEL21c Staff

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**I**sraeli researchers have discovered that eating dates daily can protect against atherosclerosis, a major cause of heart attacks and strokes.

Adding a handful of dates to your daily diet could improve your blood triglyceride levels without raising blood sugar levels according to new research by an Israeli scientist.

Professor Michael Aviram, a biochemist from the Technion-Israel Institute of Science, found that eating Hallawi dates daily for four weeks could improve the quality of lipids (fats) in the blood without raising sugar levels. In 1995, Aviram was the first to prove that consuming red wine reduces cholesterol oxidation and arteriosclerosis development.

Dates, which grow in sub-tropical and desert areas throughout North Africa, the Middle East, California and Australia are rich in natural sugars and vitamins A and B. They are

■ Full of natural sugars and vitamins, dates have also been found to improve blood triglyceride levels. Photo by iStockphoto.

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thought to be one of the world's oldest cultivated fruits and the date palm was often called the 'tree of life,' as every part of the tree can be utilized.

### Keeping your arteries clear

Aviram and his team carried out a test on 10 healthy subjects who ate 3.75 oz of Hallawi dates daily for four weeks. The results of the test, which were published online by the Journal of Agricultural and Food Chemistry, showed a 15 percent decrease in triglyceride (fats) levels and a 33% drop in the amount of oxidation of fats in the blood.

"Oxidation is central to the deposition of cholesterol into the artery wall," says Aviram of the Technion Faculty of Medicine and Rambam Medical Center. "Once it is deposited, it can cause blockage of the blood supply to the heart or brain, a phenomenon that causes heart attack or stroke."

According to Aviram, a patient's risk for heart and vascular disease is assessed not just by measuring the quantity of blood cholesterol levels, but also the quality. This quality begins to degrade when the cholesterol is oxidized into potentially harmful molecules.

Aviram has spent more than 20 years trying to find ways to prevent and break down the deposits of cholesterol in the arteries - arteriosclerosis - that cause strokes and heart disease, a major cause of death in the Western world. He has focused particularly on discovering natural antioxidants that can improve the quality of blood cholesterol levels.

### Red wine, onions and pomegranate

Following his groundbreaking study in the '90s when he discovered the health benefits of drinking red wine, in later studies he also confirmed the antioxidant benefits of licorice, onions, olive oil and pomegranates, proving that the juice of



the fruit contains a particularly powerful antioxidant that can help fight cholesterol and heart disease more effectively than the flavinoids in tomatoes and red wine.

Aviram is also developing a white wine that will have the same health benefits for the heart as red.

Dates contain high levels of sugar, and the researchers were surprised to discover that a diet rich in dates did not bring about an increase in blood sugar level. This could possibly make them suitable even for patients suffering from mild hyperglycemia (persistently high blood sugar levels), Aviram believes.

## Israeli company helps you get smart about your meds

› By ISRAEL21c Staff/ David Shamah

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**P**rescription drugs mixed inadvertently with over the counter medications can be a lethal cocktail hospitalizing hundreds of thousands of people every year. Now an Israel company has the solution.

Thousands of people die annually from the effects of drug on drug interaction (DDI) - with the elements of different medications people take interacting and combining in negative ways, so that, instead of helping, the meds become ingredients in a lethal cocktail. But now, there's a new system that has the potential to put an end to DDI complications - a new medication "smart card" developed by Israeli start up RX-DrugOn.

"This has been a long time coming, and I have no doubt many people will benefit from our innovation," company CEO Yaron Front tells ISRAEL21c. "If the card had been around a few years ago, I would have saved myself a trip to the hospital."

It was a case of bad DDI that inspired Front, a high-tech entrepreneur, to develop the DrugOnCard - and consumers, as well as pharmacists and pharmaceutical companies, stand to benefit.

**“ There was no one to blame; the doctor, the pharmacist, and the insurance company that provided a list of meds they would pay for were all just doing their job”**



■ Harmless prescription drug mixed with another harmless over the counter pill can create a deadly combination of drugs. Photo by iStockphoto.

Front ended up in hospital after he had a bad interaction between a prescription drug he was taking and an over the counter drug. "There was no one to blame; the doctor, the pharmacist, and the insurance company that provided a list of meds they would pay for were all just doing their job," says Front. "I was sure that what had happened to me had happened to many others as well."

Here's how the DrugOnCard system works: Consumers get the smart card from their pharmacists, and present it each time they buy drugs - both prescription and over the counter.

The same card can be used at any pharmacy where a DrugOnCard reader is installed, so if a consumer buys different meds at different pharmacies, the information gets recorded on the card. It comes pre-installed with (and updated on a regular basis) a database that lists problematic DDIs, based on the drugs the consumer had purchased; if a bad combo is discovered, the system alerts the pharmacist, who can suggest an alternative medication.

### The only system offering DDI information

The card - along with a printout of the meds an individual is taking - can be carried in the wallet, so the data is available



to medical personnel if the person carrying the DrugOnCard is unable to communicate, whether or not a hospital or medical facility has a DrugOnCard reader.

Believe it or not, says Front, this is the first - and so far only - system that provides comprehensive DDI information for individuals.

“Because of privacy issues, there is no coordinating database between medical care providers and pharmacists, with each other or with others in their field. Many patients have prescriptions from more than one doctor, and buy their meds from different pharmacies. DrugOnCard provides the only current solution to the problem of DDIs,” Front says.

While the card contains a great deal of personal information, Front says that there is no chance the data can be misused - because DrugOnCard contains no information that could identify its carrier.

“All it has is the carrier’s med use history,” says Front. “That information is useful to the pharmacist, or to a big pharma company, only in the aggregate, allowing them to determine what products people are using. But since the only information that gets recorded are the purchases a cardholder makes, without any other identifying data, there’s no chance the information could be used in a problematic way. And if the card is lost or stolen, it won’t do the finder any good without a DrugOnCard cardreader,” Front says.

“The only way to identify a specific user is when he or she hands the card to the druggist or doctor personally.”

### A medical safety net

While the card provides consumers with a med “safety net,” ensuring they don’t fall victim to misdiagnosed meds, DrugOnCard has something for pharmacists, as well as for pharmaceutical companies, helping them see what items and products consumers are buying.

“The system allows pharmacists to parse statistics on inventory and item popularity, making it easier for them to control inventory,” says Front.

Drug companies will also benefit, he adds. “Pharmaceutical companies will be able to better control their advertising budgets with DrugOnCard, because they’ll be able to target consumers who would be interested in their product.”

The pharmaceutical industry spends over \$5 billion a year on drug ads annually, in North America alone; they’re the ones buying most of the glossy full-page ads in the national magazines, hoping to attract the attention of the

readers who need their product.

“With DrugOnCard, pharma companies can run specials with pharmacies, offering discounts to users whose cards indicate they use a competing product, for example. With the cost of drugs so high today, many consumers are happy to discuss an alternative product with their doctor, and DrugOnCard allows the makers of those alternative products to reach out directly to consumers,” says Front.

No privacy issues are involved, he asserts. “It’s like when users get a pop-up when they surf to an internet site; anyone who surfs to the site gets the offer. In the same way, everyone taking medication X gets an offer for medication Y automatically.”

### Pilot program underway in the US

It’s only in the United States and New Zealand that pharma companies can advertise prescription drugs, but the DrugOnCard system could be used anywhere, since it’s more like an opt-in loyalty card program than an advertising mechanism.

Front sees a big future for DrugOnCard, in the wake of the medical industry reforms being touted by President

Barack Obama. “Among the things Obama has been calling for is a conversion to medical electronic records, and that’s exactly what DrugOnCard is for meds. The application could be easily converted to record other kinds of information as well.

And we’ve already resolved the thorniest problem - that of privacy,” says Front.

Rx-DrugOn is a privately held company founded in Kiryat Motzkin in 2008. Along with Front, the company’s top personnel include individuals from the pharmaceutical and medical professions.

The first DrugOnCard readers were installed in a pilot program in the US last January, and the program, which now includes several dozen pharmacies, is going well. The company is actively seeking partners in the medical and pharmaceutical industry, as well as investors, Front says.

“Adverse drug-drug interactions are responsible for over 100,000 hospitalizations annually in the US,” he says. “RxDrugOn offers consumers relevant and useful information about the medications they are taking.”

“That information is useful to the pharmacist, or to a big pharma company, only in the aggregate, allowing them to determine what products people are using”