Drink and be healthy.

100% all-natural pomegranate juice. The delicious, refreshing antioxidant superpower.

- More naturally occurring antioxidant power than any other drink, including red wine, blueberry juice, cranberry juice, orange juice and green tea.

- Antioxidants guard your body against harmful free radicals that can cause heart disease, premature aging, Alzheimer’s disease, even cancer.

**Most Powerful Antioxidant***

<table>
<thead>
<tr>
<th>Juice Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Wine</td>
<td>71%</td>
</tr>
<tr>
<td>Blueberry</td>
<td>46%</td>
</tr>
<tr>
<td>Cranberry</td>
<td>33%</td>
</tr>
<tr>
<td>POM Wonderful</td>
<td>20%</td>
</tr>
<tr>
<td>Orange Juice</td>
<td>12%</td>
</tr>
<tr>
<td>Green Tea</td>
<td>10%</td>
</tr>
</tbody>
</table>

- Medical studies have shown that drinking 8oz. of POM Wonderful pomegranate juice daily minimizes factors that lead to atherosclerosis (plaque buildup in the arteries), a major cause of heart disease.

In the refrigerated produce section of your grocer.

www.pomwonderful.com

*Chart compares ability of various juices to eliminate harmful free radicals; units are % of free radicals eliminated.

Source: Amston, MA. Technicon Faculty of Medicine. Date on file.
POMEGRANATE JUICE.

STUDIES SHOW THAT 10 OUT OF 10 PEOPLE DON’T WANT TO DIE

It’s not easy being alive in today’s polluted, stressed out world. Here’s a tip: with more naturally occurring antioxidant power than any other drink, a glass of POM Wonderful® Pomegranate Juice a day might be just what the doctor ordered.

Fighting Free Radicals

Let’s start with the problem: free radicals...unstable little molecules that can accelerate aging, lead to heart disease and stroke, and have even been implicated in cancer. Where do they come from? Everywhere. Free radicals are formed by exposure to air pollution, alcohol, pesticides, sunlight, tobacco smoke, drugs, even fried foods. Of course, when you’re very young, your body’s self-repair mechanism can neutralize the activity of many free radicals. But by the time you’re in your twenties, those mechanisms just don’t work as well. That’s where antioxidants come in. They neutralize free radicals, helping to prevent the cell and tissue damage that leads to disease. Which brings us back to POM Wonderful Pomegranate Juice.

Not All Antioxidants are Equal

Since our bodies don’t produce enough antioxidants to do the job on their own, we need a little outside help. POM Wonderful Pomegranate Juice, with a higher
level of antioxidants than any other drink, is a real Antioxidant Superpower."

**Our Research: Heartening**

We've been working with a number of top scientists, including a Nobel Laureate, for 6 years now and our seven published, peer-reviewed papers reveal heartening results. Here's the story: Free radicals are the culprits that turn LDL — or "bad" cholesterol — into that sticky stuff that becomes the plaque that clogs your arteries. Our scientific research shows that pomegranate juice is 8 times better than green tea at preventing formation of oxidized (sticky) LDL. And a clinical pilot study shows that an 8 oz. glass of POM Wonderful 100% Pomegranate Juice, consumed daily, reduces plaque in the arteries up to 30%.²

**The Heart Stopping Truth**

Remember: heart disease is America's number one killer. For women as well as men, 98% of heart attacks are due to atherosclerosis, or too much plaque in the arteries. That same plaque increases your chance of stroke. One final scary statistic: half of patients who have a severe heart attack have normal cholesterol levels. In other words, we're all at risk.

**Just a Glass a Day**

To keep your heart healthy: exercise regularly. Eat a healthy diet. And drink 8 ounces of POM Wonderful Pomegranate Juice. Make every day a good day to be alive.


For more medical research on the Antioxidant Superpower, visit pomwonderful.com

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**POM Wonderful Pomegranate Juice**

*is the Antioxidant Superpower:* Drink a glass a day!
A recently published medical study involving POM Wonderful 100% Pomegranate Juice followed 46 men previously treated for prostate cancer either with surgery or radiation.

After drinking eight ounces of POM Wonderful 100% Pomegranate Juice daily for at least two years, these men experienced significantly slower PSA doubling times. PSA (Prostate-Specific Antigen) is a biomarker that indicates the presence of prostate cancer. "PSA doubling time" is a measure of how long it takes for PSA levels to double. A longer doubling time may indicate slower progression of the disease.

At the beginning of the study, PSA levels doubled on average every 15 months. By the end of the study, doubling time had slowed to 54 months – nearly a four-fold improvement.

This is a big increase. I was surprised when I saw such an improvement in PSA numbers," said Dr. Allan Pantuck, lead author of the UCLA Study.

In addition, in-vitro testing using blood serum from the patients who drank pomegranate juice showed a 17% increase in prostate cancer cell death and a 12% decrease in cancer cell growth.

One important note: All patients drank the same POM Wonderful 100% Pomegranate Juice which is available in your supermarket produce section.

Prostate Cancer is the most commonly diagnosed cancer in men in the United States. After lung cancer, it's the second leading cause of cancer death in men. However, emerging science suggests that diet and lifestyle may be able to significantly improve prostate health.

The Research Continues. Results from this study were so promising that many of the original patients continued to drink pomegranate juice daily, and their PSA doubling times remained suppressed. Three more clinical studies are now underway to further investigate the effects of POM on prostate health.

Learn why POM Wonderful is the only pomegranate juice you can trust. (See inside back cover of this wrap.)

pomwonderful.com
The proof is in the POM

100% Authentic
POM is the only brand guaranteed to contain 100% real pomegranate juice. We wish other brands were as honest. In fact, according to recent independent tests, nine out of ten so-called “pomegranate” juices were found to have added sugar, colorants and other low-grade fruit juices.

Tree to Bottle
POM is the only brand that controls its juice from tree to bottle, batch to batch, year to year. We only grow “Wonderful” variety pomegranates, renowned for their superior antioxidants and delicious taste. And every 16 oz bottle contains the juice of five whole pomegranates.

The Antioxidant Superpower
With uniquely high levels of powerful antioxidants, POM Wonderful 100% Pomegranate Juice has demonstrated superior ability to neutralize harmful free radicals and to inhibit excess inflammation.

Backed by Science
Only POM is backed by $25 million in medical research conducted at the world’s leading universities. Clinical studies have documented the benefits of drinking POM Wonderful 100% Pomegranate Juice, including improved cardiovascular and prostate health.

More Antioxidants
Sip for sip, POM Wonderful 100% Pomegranate Juice has more polyphenol antioxidants than red wine, green tea and other juices.
The Antioxidant Superpower.

What's it like to have a personal superhero? Find out by drinking delicious and refreshing POM Wonderful® 100% Pomegranate Juice. It has more naturally occurring antioxidants than other drinks. Antioxidants fight free radicals, villainous little molecules that may cause premature aging, heart disease, stroke, Alzheimer's... even cancer. All you need is eight ounces to save the day. Every day.

The Antioxidant Superpower: 100% Pure Pomegranate Juice.

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TIME

Drink to prostate health.
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Ingredients:
pomegranates,
$25 million in medical research.

What goes into our POM Wonderful bottle goes into you—100% authentic Wonderful variety pomegranate juice, your daily dose of free-radical-fighting antioxidants, $25 million in published medical research and proven health benefits. Nothing else. That means no cheap filler juices. No sweeteners. And no added colorants. So read the label. And drink to your health. Trust in POM.
A recently published pilot study involving POM Wonderful 100% Pomegranate Juice followed 46 men previously treated for prostate cancer either with surgery or radiation.

After drinking eight ounces of POM Wonderful 100% Pomegranate Juice daily for at least two years, these men experienced significantly slower average PSA doubling times. PSA (Prostate-Specific Antigen) is a biomarker that indicates the presence of prostate cancer. PSA doubling time is a measure of how long it takes for PSA levels to double. A longer doubling time may indicate slower progression of the disease.

At the beginning of the study, PSA levels doubled on average every 7.5 months. By the end of the study, doubling time had slowed to 2.4 months—a nearly four-fold improvement. "This is a big increase. I was surprised when I saw such an improvement in PSA numbers," said Dr. Allan Partin, lead author of the UCLA Study.

One important note: All of the patients drank the same POM Wonderful 100% Pomegranate Juice which is available in your supermarket produce section.

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Backed by Science
Only POM products are backed by $32 million in medical research conducted at the world’s leading universities, primarily in the areas of cardiovascular, prostate and erectile function.

More Antioxidants
Sip for sip. POM Wonderful 100% Pomegranate Juice has more polyphenol antioxidants than red wine, green tea and other juices.
Lucky I have super HEALTH POWERS!

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At the beginning of the study, PSA levels doubled on average every 15 months. By the end of the study, doubling time had slowed to 54 months—nearly a four-fold improvement. "This is a big increase. I was surprised when I saw such an improvement in PSA numbers," said Dr. Allan Pantuck, lead author of the UCLA Study.

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The Research Continues. Results from this study were so promising that many of the original patients continued to drink pomegranate juice daily, and their PSA doubling times remained suppressed. Three more clinical studies are now underway to further investigate the effects of POM on prostate health.

Learn why POM Wonderful is the only pomegranate juice you can trust. (See inside back cover of this wrap.)

pomwonderful.com

* Pantuck et al., Phase I study of pomegranate juice for men with rising prostate specific antigen following surgery or radiation for prostate cancer. Clinical Cancer Research. 2009

Visit pomwonderful.com/health/research to review this and other prohibited guides.
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pomwonderful.com
Risk your health in this economy?

NEVER!

In a time of financial distress, one to-source here has devoted itself to maintaining the world’s health. POM Wonderful!" One of the POM products backed by $32 million in medical research, the Antioxidant Superpower will defend you with the full force of its 100% pure pomegranate juice. And you will survive.

pomwonderful.com

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The Research Continues: Results from this study were so promising that many of the original patients continued to drink pomegranate juice daily, and their PSA doubling times remained suppressed. Three more clinical studies are now underway to further investigate the effects of POM on prostate health.

Learn why POM Wonderful is the only pomegranate juice you can trust. (See internal code with reference)

pomwonderful.com

*Results of clinical trials of prostate cancer patients have not yet been confirmed by independent third parties in relation to prostate cancer. (Clinical trial result: 2008)
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pomwonderful.com

CONFIDENTIAL-FTC Docket NO. 9344

RESP023823

CX0380_0003
Lucky I have super HEALTH POWERS!

The Antioxidant Superpower.
Will POM Wonderful's 100% purity be enough to help save your health? Does its lack of added sugar, colorants and cheap filler juices make it superior to its competitors? Can POM products' $32 million in medical research truly make a difference in the current state of your health? Do superheroes wear tights?

*Visit pomwonderful.com/health/research to review published studies.*

CONFIDENTIAL-FTC Docket NO. 9344

The Antioxidant Superpower
Always use protection.
Emerging science suggests that antioxidants are critically important to maintaining good health because they protect you from free radicals, which can damage your body. Taking one POMx pill a day will help protect you from free radicals and keep you at your healthy best.

Is that POMx in your pocket?
Our POMx pills are made from the same pomegranates we use to make our POM Wonderful 100% Pomegranate Juice, on which each of the following medical studies was conducted.

In a preliminary study on erectile function, men who consumed POM Juice reported a 50% greater likelihood of improved erections as compared to placebo. “As a powerful antioxidant, enhancing the actions of nitric oxide in vascular endothelial cells, POM has potential in the management of ED... further studies are warranted.” International Journal of Impotence Research, ’02, 1,3

An initial UCLA study on our juice found hopeful results for prostate health, reporting “statistically significant prolongation of PSA doubling times.” Clinical Cancer Research, ’06, 3,4

A preliminary study on our juice showed promising results for heart health. “Stress-induced ischemia (restricted blood flow to the heart) decreased in the pomegranate group.” American Journal of Cardiology, ’05, 5,6

Try POMx Pills FREE FOR ONE MONTH when you sign up for POMx Monthly delivery.* (cancel anytime)

Order Now: 888-766-7455 or pompills.com/adv Use discount code: ADV30

*SIGN-UP FOR POMx MONTHLY, AND WE’LL SEND YOUR FIRST BOTTLE FREE! AFTER THAT, YOU’LL CONTINUE TO RECEIVE MONTHLY SHIPMENTS FOR $19.95 WITH COMPLIMENTARY SHIPPING. Other expires 6/30/06 and applies only to the purchase price for the first bottle of POMx Monthly. Following months will be $29.95 per bottle. One discount per customer. Cannot be combined with other offers. No substitutions. Transfer rights or cash equivalent. We reserve the right to modify or discontinue this promotion. Change the price product or change the shipping charge at any time. Valid only at pompills.com or 1-888-766-7455. Not valid on POMx Trial or other POM Products. Credit or debit card required.

* pompills.com/research **These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease. 3 95% of men with mild/moderate erectile dysfunction drank two 8oz pomegranate juice daily for one month. 4 95% of men with mild/moderate erectile dysfunction drank four 8oz pomegranate juice daily for one month. 5 95% of men with coronary heart disease and myocardial ischemia drink two 8oz pomegranate juice daily for three months. ©2000 POM Wonderful LLC. All rights reserved. POM Wonderful, POMx and Antioxidant Superpill are trademarks of POM Wonderful LLC. ©2000
Always use protection.
Emerging science suggests that antioxidants are critically important to maintaining good health because they protect you from free radicals, which can damage your body. Taking one POMx pill a day will help protect you from free radicals and keep you at your healthy best.

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Try POMx Monthly FREE for ONE MONTH We'll even pay for the shipping.*

Order Now: 888-766-7455 or pompills.com/ga Use discount code: GA30

SIGN UP FOR POMx MONTHLY AND WE'LL SEND YOUR FIRST BOTTLE FREE. AFTER THAT, YOU'LL CONTINUE TO RECEIVE MONTHLY SHIPMENTS FOR $9.95, WITH COMPLIMENTARY SHIPPING. Offer expires June 30, 2010, and applies only to the purchase price for the first bottle of POMx Monthly. Following months will be $9.95 per bottle. One discount per customer. Cannot be combined with other offers. No substitutions, transfer rights or cash equivalent. We reserve the right to modify or discontinue this promotion, change the product price or change the shipping charge at any time. Valid only at pompills.com/ga or 888-766-7455. Not valid on POMx Trial or other POM products. Credit or cash card required.

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease. Use only with mild/moderate erectile dysfunction due to 100% pomegranate juice daily for one month. A placebo-controlled study of POM Wonderful 100% pomegranate juice daily for two years. A 2% patient with coronary heart disease and myocardial ischemia drank 100% pomegranate juice daily for three months, 2009 POM Wonderful LLC. All rights reserved. POM Wonderful, POMx and antioxidant Superpill are trademarks of PomWonder LLC. PR-12-09-001

VMS-0000323

CX0355_0001
Antioxidant Superpill™

The most concentrated source of pomegranate antioxidants available.

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1.888.POM.PILL (1.888.766.7455)
pompills.com

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Exhibit I, Page 1
POMX™ is a highly concentrated, incredibly powerful blend of all-natural polyphenol antioxidants made from the very same pomegranates in POM Wonderful 100% Pomegranate Juice. In fact, our method of harnessing astonishing levels of antioxidants is so extraordinary, it’s patent-pending.

The power of POM. Now in one little pill™
All of the antioxidant power of an 8oz glass of POM Wonderful 100% Pomegranate Juice is now available in the convenience of a single calorie-free pill. Take one daily.

Each bottle contains a one-month supply of 30 pills.
Our antioxidants make other antioxidants feel inferior.

Why take an antioxidant supplement?
Let's start with the problem: free radicals. Emerging science tells us these unstable molecules aggressively destroy healthy cells in your body and may be linked to everything from the wrinkles we get as we age to more serious health threats like cancer and heart disease. In fact, scientists have already linked free radicals to as many as 60 different types of diseases.

Fighting free radicals.
Where do free radicals come from? Everywhere. They’re formed by exposure to alcohol, sunlight, tobacco smoke, air pollution, pesticides and even fried foods. That’s where antioxidants come in. Science tells us that pomegranate antioxidants neutralize free radicals, helping to prevent the damage that can lead to disease. In the fight against free radicals, POMx is the Antioxidant Superpill.¹

Not all antioxidants are equal.
POMx is made from pomegranates only—nothing else. When other supplements add non-pomegranate ingredients or even other antioxidants, they can disrupt the balance of molecules that nature intended the pomegranate to have. The polyphenol antioxidants in POMx are as natural and unadulterated as those in our fresh, California-grown POM Wonderful Pomegranates.

¹ Made from the same California pomegranates in POM Wonderful 100% Pomegranate Juice.
"Findings from a small study suggest that pomegranate juice may one day prove an effective weapon against prostate cancer."


**Prostate health.**
Prostate cancer is the most commonly diagnosed cancer among men in the United States and the second-leading cause of cancer death in men after lung cancer.

**Time pill.**
Stable levels of prostate-specific antigens (or PSA levels) are critical for men with prostate cancer. Patients with quick PSA doubling times are more likely to die from their cancer. According to a UCLA study of 46 men age 65 to 70 with advanced prostate cancer, drinking an 8oz glass of POM Wonderful 100% Pomegranate Juice every day slowed their PSA doubling time by nearly 350%. 83% of those who participated in the study showed a significant decrease in their cancer regrowth rate.

"The most abundant and most active ingredients in pomegranate juice are also found in POMx. Basic studies indicate that POMx and POM Wonderful Pomegranate Juice may have the same effects on prostate health."

David Heber, MD, PhD, Professor of Medicine and Director, UCLA Center for Human Nutrition

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

―American Cancer Society Health Newsletter, UCLA Health, April 2011; pompills.com/research

One small pill for mankind.
New studies are under way to further investigate the possibilities of POM Wonderful pomegranate antioxidants and their potential ability to slow the rise of PSA levels in patients with prostate cancer.

To learn more, visit pompills.com/research

Exhibit I, Page 4
"POM Wonderful Pomegranate Juice has been proven to promote cardiovascular health, and we believe that POMx may have the same health benefits."

Dr. Michael Aviram, Lipid Research Laboratory, Technion Faculty of Medicine, Haifa, Israel

Heart health.

In two groundbreaking preliminary studies, patients who drank POM Wonderful 100% Pomegranate Juice experienced impressive cardiovascular results. A pilot study at the Rambam Medical Center in Israel included 18 patients with atherosclerosis (clogged arteries). After a year, arterial plaque decreased 30% for those patients who consumed 8oz of POM Wonderful 100% Pomegranate Juice daily.1

An additional study at the University of California, San Francisco included 45 patients with impaired blood flow to the heart. Patients who consumed 8oz of POM Wonderful 100% Pomegranate Juice daily for three months experienced a 17% improvement in blood flow.2 Initial studies on POMx share similar promise for heart health, and our research continues.

The POMx Difference

Ultra-Potent:
- 1000mg of natural pomegranate polyphenol extract in every pill
- More antioxidants than any other pomegranate supplement
- One POMx pill = the antioxidant power of 8oz of POM Wonderful 100% Pomegranate Juice
- Your daily antioxidants in a single pill
- A full spectrum of pomegranate polyphenol antioxidants

Natural:
- Made from pomegranates and nothing else

Science, Not Fiction:
- Made from the only pomegranates backed by $20 million in medical research and the POM Wonderful brand
- Promotes heart and prostate health
- Guards your body against free radicals3
- Proven to be easily absorbed4
- Clinically tested on adults5

To access the original published studies mentioned, visit pompills.com/research.
POMx Heart Newsletter
Pills and Liquid
Monthly
2nd Continuity Shipment
Summer '07 - Spring '08

POM YOUR PARTNER IN
PROMOTING LIFELONG HEALTH

VOLUME 1, ISSUE 1: FOR YOUR HEART

What's New in the Lab
by Dr. Mark Dreher

Mark Dreher, PhD
Chief Science Officer
POMWonderful, LLC

Hi, I'm Dr. Mark Dreher, Chief Science Officer at POM, and your guide to continuing new research on the benefits of POMx and POM Wonderful pomegranates as they relate to your health. Welcome to Your First Issue of the POMx Newsletter! There's more to come, so please stay tuned in the coming months for....

Future newsletters will contain content derived from these questions and reader feedback. We look forward to hearing from you!

Enjoy Your Life With a Healthy Heart

According to the American Heart Association (AHA), at least 58.8 million Americans suffer from some form of heart disease. Maintaining a healthy heart by reducing your risk for cardiovascular disease should be at the core of every lifelong
What’s New in the Lab
by Dr. Mark Dreher

Hi, I’m Dr. Mark Dreher, Chief Science Officer at POM, and your guide to continuing new research on the benefits of POMx and POM Wonderful pomegranates as they relate to your health. Welcome to Your First Issue of the POMx Newsletter! There’s more to come, so please stay tuned in the coming months for:

• POM Wonderful’s latest research
• Health tips
• Pomegranate facts
• New product information

There’s a strong pipeline of research supporting initial findings that POM Wonderful 100% Pomegranate Juice and its counterpart, POMx, are successfully fulfilling their promise for promoting heart health. We are committed to continually testing our products, not only prior to market release but at every step in their evolution. Various patient studies across a wide variety of health concerns are in the works, and we look forward to sharing the results of this research with you.

At POM Wonderful, we aim to be your partner in the promotion of good health that lasts a lifetime. It is our commitment to you and our mission as a company. If you have any questions and/or concerns please send them directly to me at: chiefscienceofficer@pomwonderful.com

Future newsletters will contain content derived from these questions and reader feedback. We look forward to hearing from you.

Enjoy Your Life With a Healthy Heart

According to the American Heart Association (AHA), at least 58.8 million Americans suffer from some form of heart disease. Maintaining a healthy heart by reducing your risk for cardiovascular disease should be at the core of every lifelong wellness plan. A nutrient-rich diet and active lifestyle are the best weapons you have for combating heart disease and enhancing your vitality at any age.

The AHA recommends eating plenty of fruits and vegetables loaded with the vitamins, minerals and fiber your body requires, without the extra calories it doesn’t need. But even though you may be eating enough of the right foods, your body still may not be getting all the nutrients it needs to keep your heart truly healthy.

ANTIOXIDANTS: YOUR ALLY IN FIGHTING HEART DISEASE

In order to keep your body in tip-top shape and your heart beating to the rhythm of all you wish to do in life, you need help in the prevention of cell and tissue damage that can lead to disease.

Science tells us that antioxidants neutralize the free radicals that can aggressively destroy healthy cells in your body. But not all antioxidants are equal – some are better at neutralizing free radicals than others. And because your body may not always produce enough of the antioxidants required to neutralize all the free radicals that can lead to cell damage, we have developed POMx to harness and deliver the most potent antioxidants around.

THE FREE RADICAL FIGHTER

Pomegranates contain polyphenols – powerful antioxidants that are important as part of a balanced diet. Published research has shown that the unique polyphenol antioxidants (please turn to back)
Healthy Heart (from frown) to POMx and POM Wonderful 100%
Pomegranate Juice are superior fighters in the battle against free radicals. Each dose of POMx contains the same amount of antioxidant polyphenols found in 8oz of POM Wonderful 100%

The antioxidants in POMx are supported by $20 million in initial scientific research

Pomegranate Juice, and POMx is the most concentrated source of pomegranate polyphenol antioxidants available.

POM Wonderful is committed to understanding the effects of POM Wonderful Pomegranate Juice on cardiovascular health. To date, our scientists have found that pomegranate juice may help counteract factors leading to arterial plaque build-up, as well as inhibit a number of factors associated with heart disease.

NEW RESEARCH OFFERS FURTHER PROOF OF THE HEART-HEALTH BENEFITS OF POM WONDERFUL JUICE

30% DECREASE IN ARTERIAL PLAQUE
After one year of a pilot study conducted at the Technion Institute in Israel involving 19 patients with atherosclerosis (plugged arteries),

In his 2006 POMx study, Dr. Michael Aviram, one of the world's pre-eminent cardiovascular researchers from the Technion Institute in Israel, remarked that "POMx is as potent an antioxidant as pomegranate juice and just like pomegranate juice, POMx may promote cardiovascular health."

those patients who consumed 8oz of POM Wonderful 100%
Pomegranate Juice daily saw a 30% decrease in arterial plaque.

17% IMPROVED BLOOD FLOW
A recent study at the University of California, San Francisco (UCSF) included 45 patients with impaired blood flow to the heart. Patients who consumed 8oz of POM Wonderful 100% Pomegranate Juice daily for three months experienced 17% improved blood flow. Those who drank a placebo experienced an 18% decline.

PROMOTES HEALTHY BLOOD VESSELS
An in vitro study at the University of California, Los Angeles (UCLA) showed that pomegranate juice uniquely possesses enough antioxidant activity to protect nitric oxide (an important biochemical that helps maintain healthy blood vessels for proper blood flow) against oxidative destruction thereby enhancing its biological activity. In other words, pomegranate juice by protecting nitric oxide promotes healthy blood flow.

THE POWER OF POMx
The antioxidants in POMx are supported by $20 million in initial scientific research from leading universities and so far we've uncovered encouraging results.

POMx supplements your diet without adding calories, allowing you to more easily maintain a healthy weight while still getting the necessary antioxidants.

Due to this promising information, our studies on POMx and heart health continue. It is our mission to deliver the latest information on our research to you in this newsletter as soon as studies are completed. At POM Wonderful we are committed to learning all we can about the health benefits of this miraculous fruit and sharing them with you.

NEXT ISSUE: BREAST HEALTH
One out of every six men will get prostate cancer, but only one out of 30 will die from the disease. In our newsletter next month, we will discuss preventative measures all men need to know to manage their prostate health.

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POM WONDERRFUL

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Prostate Cancer Affects 1 Out of Every 6 Men

Prostate cancer is the second leading cause of cancer-related death in men in the United States according to the National Cancer Institute. Prostate cancer incidence rates rose dramatically in the late 1980’s with improved detection and diagnosis through widespread use of prostate-specific antigen (PSA) testing.

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Chief Science Officer
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(continued on back)
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Since the early 1990's, prostate cancer incidence and deaths have been declining, but the American Cancer Society estimates that there will still be about 218,890 new cases of prostate cancer and 27,050 deaths in the United States in 2007.

According to the American Cancer Society, some of the risk factors for prostate cancer include:

Age - Growing older raises a man's risk of prostate cancer. About two of every three prostate cancers are found in men over the age of 65.

Family History - Men with close family members (father or brother) who have had prostate cancer are more likely to get it themselves, especially if their relatives were young when they got the disease.

Diet - One risk factor that can be changed is diet. The National Cancer Institute's research suggests that obesity and weight gain is linked to increased prostate cancer mortality.

Men who eat a lot of red meat or high-fat dairy products seem to have a greater chance of getting prostate cancer. These men also tend to eat fewer fruits and vegetables. Doctors are not sure which of these factors causes the risk to go up but the best advice is to consume daily the equivalent of five or more servings of fruits and vegetables.

What's New in the Lab
by Dr. Mark Dreher

Mark Dreher, PhD
Chief Science Officer
POMWondrous, LLC

Research studies like the ones discussed in this newsletter and conducted by UCLA (my alma mater) serve to validate the many reasons I am proud to be affiliated with POM Wondrous and POMx.

POM Wondrous 100% Pomegranate Juice and POMx are backed by a $25 million dollar investment in world-class scientific research. This includes ten clinical studies published in top peer-reviewed medical journals that document the pomegranate's antioxidant health benefits such as heart and prostate health.

Working at POM Wondrous gives me the unique opportunity to truly make a difference in the world. That's what gets me up every morning! I get to work with renowned scientists, including a Nobel laureate, at leading universities around the world. In fact, studies funded by POM represent the vast majority of human medical research ever conducted on pomegranates. No other company that I know of is as dedicated as POM in pursuing the truth and keeping our customers informed.

At POM Wondrous, we aim to be your partner in the promotion of good health that lasts a lifetime. It is our commitment to you, our mission as a company.
Prostate Cancer (from front):
more servings of vegetables and fruits rich in antioxidants and to eat less red meat and high-fat foods.

EARLY DETECTION SEEN AS KEY TO INCREASING SURVIVAL RATES
The prostate-specific antigen (PSA) test and rectal exam can be used to detect the presence of prostate cancer when no symptoms are present. They may help catch the disease at an early stage when treatment is more effective.

During a PSA test, a small amount of blood is drawn and the level of PSA (a protein produced by the prostate) is measured to determine the level of risk. When prostate cancer is found and treated, the PSA test may also measure the potential for the cancer to return.

* "Please talk to your doctor for more specific prostate cancer information.

NEW POMEGRANATE RESEARCH OFFERS HOM TO PROSTATE CANCER PATIENTS
A preliminary UCLA medical study involving POM Wonderful 100% Pomegranate Juice revealed promising news. 46 men who had been treated for prostate cancer with surgery or radiation were given 8oz of POM Wonderful 100% Pomegranate Juice to drink daily. A patients with prostate cancer showed a prolongation of PSA doubling time, coupled with corresponding lab effects on reduced prostate cancer as well as reduced oxidized stress.

The majority of the patients experienced a significantly extended PSA doubling time. Doubling time is an indicator of prostate cancer progression - extended doubling time may indicate slower disease progression.

Before the study, the mean doubling time was 15 months. After drinking 8oz of pomegranate juice daily for two years, the mean PSA doubling time increased to 34 months. Testing on patient blood serum showed a 12% decrease in cancer cell proliferation and a 17% increase in cancer cell death (apoptosis).

In another study, in vitro laboratory testing at UCLA showed that POMx significantly decreased human prostate cancer cell growth and increased cancer cell death.

Based on the promising results of these preliminary studies, two additional studies are underway to more fully investigate the potential of POMx to extend PSA doubling time.

According to Dr. David Heber, Director of UCLA's Center for Human Nutrition, "The most abundant and most active ingredients in pomegranate juice are also found in POMx.

Basic studies in our laboratory so far indicate that POMx and pomegranate juice may have the same effects."

SEND US YOUR QUESTIONS AND COMMENTS
We encourage you to participate in our commitment to a lifetime of good health by sending your questions and/or concerns to pomegranateoffice@pomwells.com

Future newsletters will contain content derived from these questions and reader feedback. We look forward to hearing from you!

NEXT ISSUE: POMEGRANATE SUPPLEMENT COMPARISONS
How does POMx compare with other pomegranate supplements for antioxidant potency?

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Health Benefits

POM Wonderful 100% Pomegranate Juice is the only pomegranate juice backed by $25 million in medical research. Actually, we are the only pomegranate juice backed by any medical research at all.

There has been a lot of talk lately about the role of pomegranates in promoting heart health, prostate health, and proper erectile function. But while these results are promising, keep in mind that all of the research has been done on POM Wonderful 100% Pomegranate Juice. Our juice comes from a unique pomegranate variety (the Wonderful), which is grown in a unique location (California), and which is juiced with proprietary technology (ours). No other pomegranate juice can claim these distinctions, and no other brand has been clinically tested.

So what are the medical results on POM Wonderful 100% Pomegranate Juice?

Cardiovascular

A 2005 study published in the American Journal of Cardiology showed improved blood flow to the heart in patients drinking 8 oz. daily of POM Wonderful 100% Pomegranate Juice for 3 months. Researchers studied a total of 45 patients with coronary heart disease who had reduced blood flow to the heart. Patients drinking POM Wonderful 100% Pomegranate Juice experienced a 17% improvement in blood flow, compared to a 18% worsening in patients drinking a placebo...Read more

One pilot study on 19 patients with atherosclerosis (clogged arteries) at the Technion Institute in Israel demonstrated a reduction in arterial plaque growth. After one year, arterial plaque decreased 30% for those patients who consumed 8 oz of POM Wonderful 100% Pomegranate Juice daily, compared to a 9% worsening for patients who drank a placebo...Read more.

Prostate Health

A preliminary UCLA medical study, published by The American Association for Cancer Research, found hopeful results for prostate health. The study followed 46 men previously treated for prostate cancer either with surgery or radiation. After drinking 8 oz POM Wonderful 100% Pomegranate Juice daily for two years, these men experienced significantly slower PSA doubling times - from 15 months at the beginning of the study to 54 months at the end. PSA is a biomarker for prostate cancer, and slower PSA doubling time may indicate slower disease progression.
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Erectile Function

- A pilot study released in the International Journal of Impotence Research in 2007 examined 61 male subjects with mild to moderate erectile dysfunction. Compared to participants taking a placebo, those men drinking 8 oz of POM Wonderful 100% Pomegranate Juice daily for four weeks were 50% more likely to experience improved erections.

Antioxidant Superpower

- Numerous independent laboratory tests have shown that POM Wonderful 100% Pomegranate Juice has superior antioxidant content, ounce-for-ounce, compared to other juices and beverages...Read more
Heart Health - Emerging Science

What does current research say about heart health? Let’s start with some facts – heart disease is one of the leading killers in America for women as well as men. \( \text{Atherosclerosis} \), or too much \text{plaque} \ in the arteries, is a leading factor in heart attacks.

Where does this plaque come from? The problem starts in your arteries. Emerging science suggests that free radicals may be the culprits that can oxidize \text{LDL} \, “bad” \text{cholesterol} \, turning it into the plaque that clogs up arteries. \( \text{Initial Laboratory research suggests that antioxidants may help minimize the oxidation of LDL cholesterol.} \)

To learn more about the preliminary research that examines pomegranate juice consumption and cardiovascular health, click on the links below:

- \text{Effects of Pomegranate Juice Consumption on Myocardial Perfusion in Patients With Coronary Heart Disease} \n  \text{The American Journal of Cardiology, 2005}

- \text{Pomegranate Juice Consumption for 3 Years by Patients with Carotid Artery Stenosis Reduces Common Carotid Intima-Media Thickness, Blood Pressure and LDL Oxidation} \n  \text{- Clinical Nutrition, 2004}

- \text{Pomegranate Juice Consumption Inhibits Serum Angiotensin Converting Enzyme Activity and Reduces Systolic Blood Pressure} \n  \text{- Atherosclerosis, 2001}
Effects of Pomegranate Juice Consumption on Myocardial Perfusion in Patients With Coronary Heart Disease

Michael D. Sumner, PhD, Melanie Elliott-Eller, RN, MSN, Gerdi Weidner, PhD, Jennifer J. Daubenmier, PhD, Mailine H. Chew, MD, Ruth Marlin, MD, Caren J. Raisin, RN, and Dean Ornish, MD

Pomegranate juice contains antioxidants such as soluble polyphenols, tannins, and anthocyanins and may have antiatherosclerotic properties. However, no study has investigated the effects of pomegranate juice on patients who have ischemic coronary heart disease (CHD). We investigated whether daily consumption of pomegranate juice for 3 months would affect myocardial perfusion in 45 patients who had CHD and myocardial ischemia in a randomized, placebo-controlled, double-blind study. Patients were randomly assigned into 1 of 2 groups: a pomegranate juice group (240 ml/day) or a placebo group that drank a beverage of similar caloric content, amount, flavor, and color. Participants underwent electrocardiographic-gated myocardial perfusion single-photon emission computed tomographic technetium-99m tetrofosmin scintigraphy at rest and during stress at baseline and 3 months. Visual scoring of images using standardized segmentation and nomenclature (17 segments, scale 0 to 4) was performed by a blinded independent nuclear cardiologist. To assess the amount of inducible ischemia, the summed difference score (SDS) was calculated by subtracting the summed score at rest from the summed stress score. The experimental and control groups showed similar levels of stress-induced ischemia (SDS) at baseline (p > 0.05). After 3 months, the extent of stress-induced ischemia decreased in the pomegranate group (SDS = 0.8 ± 2.7) but increased in the control group (SDS = 1.2 ± 3.1, p < 0.05). This benefit was observed without changes in cardiac medications, blood sugar, hemoglobin A1c, weight, or blood pressure in either group. In conclusion, daily consumption of pomegranate juice may improve stress-induced myocardial ischemia in patients who have CHD. © 2005 Elsevier Inc. All rights reserved. (Am J Cardiol 2005;96:810–814)

Pomegranate juice may have antiatherosclerotic properties in mice and humans. It contains antioxidants such as sol-
Pomegranate Juice Consumption for 3 Years by Patients with Carotid Artery Stenosis Reduces Common Carotid Intima-Media Thickness, Blood Pressure and LDL Oxidation


This randomized controlled pilot study of 19 patients (ages 65-75) is the first to show that pomegranate juice may reduce the amount of plaque in the arteries of patients with heavy plaque buildup (severe carotid artery stenosis) as well as substantially benefiting several important blood parameters. Ten patients consumed 8 oz. a day of POM Wonderful pomegranate juice for 1 year. Nine patients who did not consume pomegranate juice served as controls. The intima-media thickness (IMT) of the carotid artery wall was measured and blood samples were taken at the beginning of the study and at 3, 6, 9 and 12 months. After 1 year, those patients who did not consume pomegranate juice showed a 9% increase in IMT, while those consuming juice showed a decrease in IMT of up to 30%. Furthermore, for those drinking pomegranate juice, systolic (but not diastolic) blood pressure was reduced by 21%, total antioxidant status of the blood increased by 33%, LDL oxidation decreased by 20%, antibodies to oxidized LDL decreased by 19% and serum paraoxonase 1 (PON1) increased by 63%. Major blood biochemical markers were not affected, including levels of LDL and HDL cholesterol. Benefits were maintained in five patients who continued drinking pomegranate juice for 2 additional years, with further improvements in serum lipid peroxidation.
Reduced Plaque

-30%

Pomegranate Juice Consumption Inhibits Serum Angiotensin Converting Enzyme Activity and Reduces Systolic Blood Pressure


This pilot study demonstrates that pomegranate juice lowers blood pressure in patients with hypertension. Ten patients, ranging in age from 52 to 77, with an average blood pressure of over 155/76/8 mm Hg drank 6 oz. (1.5 mmol total polyphenols equivalent) of POM Wonderful pomegranate juice each day for 2 weeks. This resulted in a 5% decrease in systolic blood pressure. ACE (angiotensin converting enzyme), which helps lower blood pressure, prevent heart disease and reduce the risk of stroke, was also decreased by 36%. Patients were already on ACE inhibitors or calcium channel blockers.
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Cancer - Emerging Science

Not a single condition, but the name attached to more than a 100 different diseases, cancer is characterized by the uncontrolled growth and spread of abnormal cells.

Emerging science has shown that diets rich in fruits and vegetables that contain antioxidants, along with regular exercise, might slow or help prevent the development of cancer. Two great sources of antioxidants are POM Wonderful Pomegranate Juice and POM Tea.

Clinical Cancer Research
POM Glossary

ACE - ACE stands for angiotensin-converting enzyme. By splitting proteins, these enzymes convert angiotensin I into angiotensin II, a substance that increases salt and water in the body and leads to high blood pressure, a real no-no. ACE inhibitors make blood vessels relax, helping to lower blood pressure and allowing more oxygen-rich blood to reach the heart. Research shows POM Wonderful reduced ACE by 36% in ten elderly patients with high blood pressure after drinking an 8 oz. glass a day for only 2 weeks and also lowered their systolic blood pressure by 5%. 11

Anthocyanins - Naturally occurring polyphenolic compounds give many fruits, vegetables and plants their bright colors. Originally derived from two Greek words meaning plant and blue, anthocyanins are what make eggplants purple and pomegranates red. Many of the antioxidant characteristics in plants are due largely to anthocyanins. In fact, the darker, more deeply red and blue fruits usually have higher values of antioxidants; the rich, red pomegranate is absolutely loaded. 1

Atherosclerosis - Often called hardening of the arteries, atherosclerosis starts when oxidized cholesterol and other substances build up in the inner lining of an artery. The build-up is called plaque. Damage occurs when the plaque reduces the blood’s flow or when the plaque ruptures and causes blood clots. When a blood vessel that feeds the heart is blocked, it can cause a heart attack. If it blocks a vessel feeding the brain, it can cause a stroke. Naturally, the less plaque, the better. And that’s where POM Wonderful comes in. A pilot study of 19 elderly patients with atherosclerosis showed that an 8 oz. glass a day can reduce plaque build-up in the arteries by up to 30%. 12

Antioxidants - Antioxidants are scavengers that may neutralize free radicals before they get a chance to harm you. They get their name from their ability to inhibit oxidation. There are lots of different substances we call antioxidants, including many vitamins and minerals. Of course, not all antioxidants are created equal, and some of the most powerful, polyphenol antioxidants are found in great abundance in POM Wonderful Pomegranate Juice. Which is why we call POM Wonderful Pomegranate Juice, “The Antioxidant Superpower!”. 12

Carotid IMT - A stroke occurs when an adequate flow of blood to the brain is disrupted. The most common cause of this disruption is a narrowing or blockage of the carotid artery caused by the accumulation of plaque in the artery walls. 8 The carotid arteries are the main blood supply to the brain. The intima-media thickness (IMT) of the carotid arteries is a common way to measure how much plaque is lining the artery walls. The less, of course, the better.

Ellagic Acid - A naturally occurring phenolic compound phytochemical found in many fruits and vegetables, with levels much higher in berries and pomegranates than in apples, pears or walnuts.

Free Radicals - free radicals are atoms or molecules in your body with an unpaired electron-masking them highly unstable. Because electrons normally come in pairs, the free radicals collide with other molecules in an attempt to steal an electron, and may start a chain reaction, damaging your DNA and cells. Emerging science suggests this free radical damage may be linked to disease. 9 Free radical scavengers, or antioxidants, bind with the free radicals before they can do their damage. This brings us back to POM Wonderful Pomegranate Juice. The polyphenol antioxidants in POM Wonderful have been shown through emerging science to function as potent free radical scavengers. 9
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Nitric Oxide - Produced by several different kinds of cells and present in all humans and most animals, nitric oxide functions as a signaling molecule that tells the body to make blood vessels relax and widen. Nitric oxide controls our blood pressure, giving us more blood when we're exercising and reducing the flow of blood when we're at rest. Since heart attacks happen when the blood can't flow through the blood vessels to the heart, we of course want to encourage lots of nitric oxide in our body. It can help by relaxing the blood vessels, allowing them to open and increasing blood flow.

Oxidation - When those unstable free radicals "borrow" an electron from a normal cell in your body, the process is called oxidation. It's the same process as when metal rusts, or a cut apple turns brown. Yuck! Free radicals cause oxidation inside your body which is why you want plenty of antioxidants or compounds that inhibit chemical reactions with oxygen. You know, like POM Wonderful Pomegranate Juice.

Phytochemicals - Phytochemicals is simply a word that means "plant chemicals." Once, researchers attributed the health promoting effects of plants to their numerous vitamins, minerals and fibers. More recently, however, researchers have discovered that the many other chemical compounds in plants also provide benefits to humans when consumed. Phytochemicals provide plants with protection from the environmental challenges they face, such as ultraviolet light. When we consume plants rich in phytochemicals, they seem to protect us as well. Some researchers estimate that up to 40,000 different phytochemicals will someday be fully catalogued and understood. Polyphenols are a class of phytochemicals that are particularly rich in antioxidants and plentiful in POM Wonderful Pomegranate Juice.

Plaque - Atherosclerosis occurs when fat, cholesterol and other substances accumulate in the walls of the arteries and form plaque. Eventually, plaque can erode the walls of the artery, diminish its elasticity and interfere with blood flow. Plaques can also rupture, causing debris to head downstream within the artery. What we're talking about is a common cause for heart attack and stroke. Naturally, the less plaque, the better. And that's where POM Wonderful comes in. A pilot study of 19 elderly patients with atherosclerosis showed that an 8 oz. glass a day can reduce plaque build-up in the arteries by up to 30%.

Polyphenols - Polyphenols are a class of phytochemicals found in plants and there may be at least 10,000 unique polyphenols in the world. Polyphenols literally means "many phenols". A phenol is a kind of molecule, a carbon-based chemical structure, and many of them bound together form a polyphenol. Among the most potent of the antioxidants, polyphenols, like tannins, particularly punicalagin and anthocyanins, are really plentiful in pomegranate juice, which is why POM Wonderful is so good for you.

Punicalagin - A hydrolyzable tannin, punicalagin is found almost exclusively in pomegranates. This highly unique and potent polyphenol antioxidant breaks down to ellagic acid.

Systolic/Diastolic Blood Pressure - The systolic measurement is the first, or top number in a blood pressure reading. It's the pressure of blood against your artery walls when the heart has just finished pumping or contracting. The diastolic measurement is the second, or bottom number in a blood pressure reading. It's the pressure of blood against your artery walls when your heart is relaxed and filling with blood. When the numbers are at 140/90 or higher, you have high blood pressure. That means that your heart and arteries work harder and you're in more danger of suffering from a stroke or heart attack.

Tannins - Tannins are plant polyphenols that add color and a slightly tart taste to pomegranates and many other vegetables and plants. The word tannin comes from the Celtic word for Oak and refers to the source of tannins used to convert animal skins into leather. In folk medicine, tannins were used to treat burns and as an astringent. While there are tannins in some teas and in red wine, tannins are truly abundant in POM Wonderful Pomegranate Juice, which account for the juice's incredible antioxidant properties.
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**Oxidation** - When those unstable free radicals "borrow" an electron from a normal cell in your body, the process is called oxidation. It's the same process as when metal rusts, or a cut apple turns brown. Yuck. Free radicals cause oxidation inside your body which is why you want plenty of antioxidants...or compounds that inhibit chemical reactions with oxygen. You know, like POM Wonderful Pomegranate Juice.

**Phytochemicals** - Phytochemicals is simply a word that means "plant chemicals." Once, researchers attributed the health promoting affects of plants to their numerous vitamins, minerals and fibers. More recently, however, researchers have discovered that the many other chemical compounds in plants also provide benefits to humans when consumed. Phytochemicals provide plants with protection from the environmental challenges they face, such as ultraviolet light. When we consume plants rich in phytochemicals, they seem to protect us as well. Some researchers estimate that up to 40,000 different phytochemicals will someday be fully catalogued and understood. **Polyphenols** are a class of phytochemicals that are particularly rich in antioxidants and plentiful in POM Wonderful Pomegranate Juice.

**Plaque** - Atherosclerosis occurs when fat, cholesterol and other substances accumulate in the walls of the arteries and form plaque. Eventually, plaque can erode the walls of the artery, diminish its elasticity and interfere with blood flow. Plaques can also rupture, causing debris to head downstream within the artery. What we’re talking about is a common cause for heart attack and stroke. Naturally, the less plaque, the better. And that’s where POM Wonderful comes in. A pilot study of 16 elderly patients with atherosclerosis showed that an 8 oz. glass a day can reduce plaque buildup in the arteries by up to 30%.

**Polyphenols** - Polyphenols are a class of phytochemicals found in plants and there may be at least 10,000 unique polyphenols in the world! Polyphenols literally means "many phenols". A phenol is a kind of molecule, a carbon-based chemical structure, and many of them bound together form a polyphenol. Among the most potent of the antioxidants, polyphenols, like **tannins**, particularly punicalagin and anthocyanin, are really plentiful in pomegranate juice, which is why POM Wonderful is so good for you.

**Punicalagin** - A hydrolyzable tannin, punicalagin is found almost exclusively in pomegranates. This highly unique and potent **polyphenol** antioxidant breaks down to **ellagic acid**.

**Systolic/Diastolic Blood Pressure** - The systolic measurement is the first, or top number in a blood pressure reading. It’s the pressure of blood against your artery walls when the heart has just finished pumping or contracting. The diastolic measurement is the second, or bottom number in a blood pressure reading. It’s the pressure of blood against your artery walls when your heart is relaxed and filling with blood. When the numbers are at 140/90 or higher, you have high blood pressure. That means that your heart and arteries work harder and you’re in more danger of suffering from a stroke or heart attack.

**Tannins** - Tannins are plant **polyphenols** that add color and a slightly tart taste to pomegranates and many other vegetables and plants. The word tannin comes from the Celtic word for Oak and refers to the source of tannins used to convert animal skins into leather. In folk medicine, tannins were used to treat burns and as an astringent. While there are tannins in some teas and in red wine, tannins are truly abundant in POM Wonderful Pomegranate Juice, which account for the juice’s incredible antioxidant properties.
your artery wall increases. This can cause high blood pressure.

Nitric Oxide - Produced by several different kinds of cells and present in all humans and most animals, nitric oxide functions as a signaling molecule that tells the body to make blood vessels relax and widen. Nitric oxide controls our blood pressure, giving us more blood when we’re exercising and reducing the flow of blood when we’re at rest. Since heart attacks happen when the blood can’t flow through the blood vessels to the heart, we of course want to encourage lots of nitric oxide in our body. It can help by relaxing the blood vessels, allowing them to open and increasing blood flow. 16

Oxidation - When those unstable free radicals “borrow” an electron from a normal cell in your body, the process is called oxidation. It’s the same process as when metal rusts, or a cut up apple turns brown. Yuck. Free radicals cause oxidation inside your body which is why you want plenty of antioxidants or compounds that inhibit chemical reactions with oxygen. You know, like POM Wonderful Pomegranate Juice. 2

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Research Study Synopses

Published studies are on POM Wonderful 100% Pomegranate Juice and POMx Polyphenol Extract. Patients received a minimum of 8 ounces of POM Wonderful 100% Pomegranate Juice or 850mg total pomegranate polyphenols per day.

Cardiovascular

ATHEROSCLEROSIS:

- A randomized, placebo-controlled, double-blind clinical trial followed 289 subjects at moderate risk for coronary heart disease. These subjects consumed 8 ounces per day of either POM Wonderful 100% Pomegranate Juice or a placebo beverage. After 18 months, there was no reduction in the progression of intima-media thickness of the carotid artery (CIMT) in the group as a whole. However, further analysis revealed an indication that the rate of CIMT progression slowed in nearly one third of patients, those with elevated cardiovascular disease risk factors. Read the Study.

In a pilot study of 16 subjects with carotid artery stenosis (above bulbous), patients...
PSA doubling time is an indicator of prostate cancer progression.

**Diabetes - Type II**

- A pilot study followed 10 subjects with non-insulin dependent diabetes mellitus who consumed POM Wonderful 100% Pomegranate Juice daily over a 3-month period. These patients showed no negative effects on diabetic parameters. Additionally, a significant reduction in serum TBARS and lipid peroxidase (biomarkers of oxidative stress) were observed. Read the study.

- In a clinical study of 30 subjects with type II diabetes mellitus, patients consumed either POM Wonderful 100% Pomegranate Juice for four weeks, or POMx pomegranate polyphenol extract for 6 weeks. These patients showed no negative effects on diabetic parameters, and also experienced stabilization of the PON 1 enzyme and reduced serum oxidative stress. Read the study.

**Erectile Function**

- A randomized, placebo-controlled crossover pilot study of 55 men with mild to moderate erectile dysfunction evaluated the efficacy of consuming POM Wonderful variety pomegranate juice versus placebo. After consuming POM daily for 4 weeks, the men reported 50% greater likelihood of experiencing improved erections as compared to placebo. Read the study.

**Drug Interactions / Safety**

- In a study of 15 healthy volunteers, 8 ounces of pomegranate juice did not inhibit the activity of CYP-3A, a critical enzyme involved in metabolizing drugs. Read the study.

- After daily consumption of 8 ounces of pomegranate juice for one week, postmenopausal women did not experience increased serum estradiol or FSH levels.
Cardiovascular

**Atherosclerosis:**
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- In a pilot study of 19 subjects with carotid artery stenosis (plaque buildup), patients who consumed 8 ounces of POM Wonderful 100% Pomegranate Juice daily for a one-year period experienced a 30% reduction in intima-media thickness of the carotid artery vs. a 7% increase for the placebo group. Read the study.
- In 13 healthy male volunteers who drank POM Wonderful 100% Pomegranate Juice for 2 weeks, the amount of LDL cholesterol oxidation decreased by 20% and antioxidant activity in the blood increased by 9%. Read the study.

**Blood Flow / Pressure:**
- In 45 subjects with ischemic coronary heart disease (reduced blood supply to the heart), coronary blood flow increased by 17% in the group consuming 8 ounces of pomegranate juice over a three-month period vs. 18% decrease in placebo group. Read the study.
- In a pilot study of 10 subjects with hypertension, reduction in ACE (angiotensin converting enzyme) activity and a slight decrease in systolic blood pressure was experienced after consuming POM Wonderful 100% Pomegranate Juice daily for two weeks. Read the study.

**Prostate Cancer**
- In a clinical study involving 46 men with rising PSA after prostate cancer treatment (surgery or radiation) who consumed 8 ounces of POM Wonderful 100% Pomegranate Juice daily over two years, PSA doubling time increased from 15 to 54 months (p <0.001). A longer term (6-year) continued evaluation of active sub-group patients showed a further increase in PSA doubling time to 88 months. Read the study. * PSA doubling time is an indicator of prostate cancer progression.

**Diabetes - Type II**
- In a randomized clinical trial evaluating 200 Type II diabetics, those consuming 8 ounces of POM Wonderful 100% Pomegranate Juice with their morning meal for 8 weeks experienced a significant decline in fasting blood sugars. Read the study.
• In 45 subjects with ischemic coronary heart disease (reduced blood supply to the heart), coronary blood flow increased by 17% in the group consuming 8 ounces of pomegranate juice over a three-month period vs. 18% decrease in placebo group. Read the study.
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Diabetes - Type II

• A pilot study followed 10 subjects with non-insulin dependent diabetes mellitus who consumed POM Wonderful 100% Pomegranate Juice daily over a 3-month period. These patients showed no negative effects on diabetic parameters. Additionally, a significant reduction in serum TRAPS and lipid peroxidase (biomarkers of oxidative stress) were observed. Read the study. • In a clinical study of 50 subjects with type II diabetes mellitus, patients consumed either POM Wonderful 100% Pomegranate Juice for four weeks, or POMx pomegranate polyphenol extract for 6 weeks. These patients showed no negative effects on diabetic parameters, and also experienced stabilization of the PON 1 enzyme and reduced serum oxidative stress. Read the study.

Erectile Function

• A randomized, placebo-controlled crossover pilot study of 35 men with mild to moderate erectile dysfunction evaluated the efficacy of consuming POM Wonderful variety pomegranate juice versus placebo. After consuming POM daily for 4 weeks, the men reported 50% greater likelihood of experiencing improved erections as compared to placebo. Read the study.

Drug Interactions / Safety

• In a study of 15 healthy volunteers, 8 ounces of pomegranate juice did not inhibit the activity of CYP-3A4, a critical enzyme involved in metabolic drug. Read the...
POM's Published Studies

- Effects of Consumption of Pomegranate Juice on Carotid Intima-Media Thickness in Men and Women at Moderate Risk for Coronary Heart Disease
  American Journal of Cardiology, 2009,
  by M.H. Davidson et al.

- Absence of Pomegranate Ellagitannins in the Majority of Commercial Pomegranate Extracts: Implications for Standardization and Quality Control
  Journal of Agricultural and Food Chemistry, 2009
  by Yanjun Zhang, David Wang, Ru-Po Lee, Susanne M. Henning, and David Heber

- Consumption of hydrolyzable tannins-rich pomegranate extract suppresses inflammation and joint damage in rheumatoid arthritis
  Nutrition, 2008
  by T.M. Haqqi, et al.

- Protective effect of pomegranate-derived products on UVE-mediated damage in human reconstituted skin
  Experimental Dermatology, 2009
  by H. Mukhtar, et al.

- Inhibition of UAP-mediated Oxidative Stress and Markers of Photosensitization in Immortalized HaCaT Keratinocytes by Pomegranate Polyphenol Extract POMx:
  Photochemistry and Photobiology, 2007
  by H. Mukhtar, et al.

- Pomegranate's Ancient Roots to Modern Medicine, Pomegranates: Ancient Roots to Modern Medicine
Different fruits and vegetables contain different types of antioxidants (e.g., vitamin E, vitamin C, beta Carotene, Lycopene, as well as polyphenols such as tannins, anthocyanins, flavonoids and phenolic acids). Although they all share the same name (Antioxidants), they are very different in structure and functions, and they interact with different types of free radicals that induce oxidative stress in the human body. Pomegranates contain several antioxidant molecules, mainly ellagitannin polyphenols (such as punicalagin), and their derivatives and metabolites that can protect against all types of oxidants, not just against only one. The combination of the multiple types of pomegranate polyphenols makes their antioxidant activity better than other antioxidants by having a much wider spectrum of action against several types (and not only one type) of free radicals.

Thus, pomegranates are superior to other antioxidants in protecting LDL (“the bad cholesterol”) from oxidation (Aviram, Am Clin Nutr, 2000), and as a result, it inhibits atherosclerosis development, even in humans (Aviram, Clin Nutr, 2004), as well as its consequent cardiovascular events better than any other nutritional antioxidant. Pomegranate antioxidants are not free, but are attached to the pomegranate sugar molecules, and hence pomegranates are beneficial even in diabetic patients (Aviram, Atherosclerosis, 2006).

Furthermore, pomegranate antioxidants are unique in their ability to increase the activity of the HDL (“the good cholesterol”) - associated paraoxonase 1 (Aviram, J A F C, 2008), which breaks down harmful oxidized lipids in the atherosclerotic plaque.

Finally, the unique antioxidants in pomegranates beneficially affect two additional important atherosclerotic processes by decreasing blood pressure (Aviram, At Atherosclerosis, 2001), and by attenuating blood clotting (Aviram, A J C N, 2000).

Professor Michael Aviram, DSc
Head, Lipid Research Laboratory. Technion Faculty of Medicine
Director, Department of Laboratory Medicine
Antioxidant Superpill™
The power of POM. Now in a single pill.

All the antioxidant power of an 8oz glass of POM Wonderful 100% Pomegranate Juice, in the convenience of a calorie-free capsule. Learn more.

BUY NOW

POMx is the most potent natural antioxidant available. Learn more.
Take it daily. Feel it forever.™

One POMx Pill — the antioxidant power of an 8oz glass of POM Wonderful 100% Pomegranate Juice

POMx is a highly concentrated, incredibly powerful blend of all-natural polyphenol antioxidants made from the very same pomegranates in POM Wonderful 100% Pomegranate Juice. In fact, our method of harnessing astonishing levels of antioxidants is so extraordinary, it's patent-pending.

Ingredients: 100% California-Grown Wonderful Variety Pomegranates

Research has shown that the naturally occurring polyphenol antioxidants in pomegranates have extraordinary health benefits. So POMx is created using only 100% pomegranate antioxidants and nothing else. The result is 100% pure polyphenols with no unnatural levels of synthetic or natural compounds. The way nature intended antioxidants to be.

POM in a Pill™

All of the antioxidant power of POM Wonderful 100% Pomegranate Juice is now available in a supplement. So you can still get your daily antioxidants from an 8oz glass of juice, or now the convenience of a calorie-free pill.

Antioxidant Superpill.™

fact 1 More concentrated polyphenol antioxidants than any other 100% pomegranate supplement

fact 2 The antioxidant power of an 8 oz. glass of juice, in a calorie-free pill

fact 3 An astounding 1000mg of natural pomegranate polyphenol extract in every capsule

fact 4 Made from the same California pomegranates in 100% POM Wonderful Pomegranate Juice

The Most Concentrated Source of Pomegranate
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The Most Concentrated Source of Pomegranate Antioxidants Available.

**Ultra Potent**
- 1000mg of natural pomegranate polyphenol extract in every capsule
- More polyphenol antioxidants than any other pomegranate supplement
- A full spectrum of pomegranate polyphenols

**100% Pomegranate Antioxidants — Just Like Nature Intended**
- All-natural — contains only pomegranates and nothing else
- No sugar, artificial colors, preservatives or additives
- Calorie-free, Vegan, Kosher®

**Science, Not Fiction**
- Made from the only pomegranates backed by $32 million in medical research and the POM Wonderful brand
- Clinically tested
- Proven to be easily absorbed
- Guards your body against free radicals
- Promotes prostate and heart health
POM Wonderful 100% Pomegranate Juice

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POMx or POM Wonderful 100% Pomegranate Juice?

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Ultra Potent

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- Because POMx is ultra potent, it has a naturally bitter taste.

100% Pomegranate Antioxidants — Just Like Nature Intended

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Science Not Fiction

- Made from the only pomegranates backed by $32 million in medical research and the POM Wonderful brand
- Clinically tested
- Quarts your body against free radicals
- Promotes prostate and heart health
Why take an antioxidant supplement?

Let's start with the problem: free radicals. Emerging science tells us these unstable molecules aggressively destroy healthy cells in our bodies and may be linked to everything from the wrinkles we get as we age to more serious health threats like cancer and heart disease. In fact, scientists have already linked free radicals to as many as 60 different types of diseases.

Fighting Free Radicals

Where do free radicals come from? Everywhere. They're formed by exposure to alcohol, sunlight, tobacco smoke, air pollution, pesticides and even fried foods. That's where antioxidants come in. Science tells us that the pomegranate antioxidants neutralize free radicals, helping to prevent the cell and tissue damage that can lead to disease. But not all antioxidants are equal — some are better at neutralizing free radicals than others. Which brings us back to POMx.

POMx: The Antioxidant Superpill

It's enough to make other antioxidants feel inferior: in the fight against free radicals, POMx is the Antioxidant Superpill. POMx fights free radicals with more concentrated pomegranate antioxidants than any other 100% pomegranate supplement. In fact, our method of harnessing astonishing levels of polyphenol antioxidants is so revolutionary — it's patent-pending.

POMx is made from the only pomegranates with $25 million in medical research behind them, and backed by the POM Wonderful brand. A single capsule or teaspoon of POMx gives you all the antioxidant power of an 8oz. glass of POM Wonderful 100% Pomegranate Juice — the very same juice that in a preliminary UCLA medical study showed hopeful results for men with prostate cancer. Learn more.
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Learn more: POMx is simply one of the most concentrated, all-natural sources of pomegranate polyphenol antioxidants available.
Not for the Faint of Heart

POMx Liquid: The most concentrated source of pomegranate antioxidants available.

Take your antioxidants into your own hands. The Antioxidant Superpower™ is now available in a single teaspoon. POMx Liquid is a highly concentrated, incredibly powerful blend of all-natural polyphenol antioxidants made from the very same pomegranates in POM Wonderful 100% Pomegranate Juice. Our method of harnessing astonishing levels of antioxidants is so extraordinary, it’s patent-pending.

Ingredients: 100% California-Grown Wonderful Variety Pomegranates

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Health Benefits

Research
The antioxidants in POMx are supported by $25 million in initial scientific research from leading universities, and so far we’ve uncovered encouraging results. Learn more

Antioxidant Benefits
Recent scientific research suggests that free radicals aggressively destroy healthy cells in your body, contributing to disease. The good news? Emerging science tells us that Pomegranate antioxidants help guard your body against free radicals. Learn more

Heart Health
We have researched the effects of pomegranate juice on cardiovascular health for almost 10 years, and findings suggest that pomegranate juice may help counteract factors leading to arterial plaque build-up, as well as inhibit a number of factors associated with heart disease. Initial pre-clinical tests have shown that POMx has equivalent cardiovascular benefits to POM Wonderful Juice, and additional studies are now going on. Learn more

Prostate Health
A preliminary UCLA medical study on POM Wonderful 100% Pomegranate Juice showed hopeful results for men with prostate cancer who drank an 8oz glass of pomegranate juice daily. And every POMx capsule provides the antioxidant power of an 8oz glass of POM Wonderful 100% Pomegranate Juice. Learn more
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Medical Research

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Prestate Health
A preliminary UCLA medical study on POM Wonderful 100% Pomegranate Juice showed hopeful results for men with prostate cancer who drank an 8oz glass of pomegranate juice daily. And every POMx capsule provides the antioxidant power of an 8oz glass of POM Wonderful 100% Pomegranate Juice. Learn more.
Health Benefits

Research
The antioxidants in POMx are supported by over $250 million in initial scientific research from leading universities, and so far we've uncovered encouraging results. Learn more

Antioxidant Benefits
Recent scientific research suggests that free radicals aggressively destroy healthy cells in your body, contributing to disease. The good news? Emerging science tells us that antioxidants help guard your body against free radicals. Learn more

Heart Health
We have researched the effects of pomegranate juice on cardiovascular health for almost 10 years, and findings suggest that pomegranate juice may help counteract factors leading to arterial plaque build-up, as well as inhibit a number of factors associated with heart disease. Initial preclinical tests have shown that POMx has equivalent cardiovascular benefits to POM Wonderful Juice, and additional studies are now going on. Learn more

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The Heart of The Matter

Amaze your cardiologist. Take POMx

POMx is made from the only pomegranates supported by $25 million of initial scientific research from leading universities. The very same pomegranates in POM Wonderful 100% Pomegranate Juice that showed encouraging results in initial cardiovascular health studies.

Let’s start with some facts: atherosclerosis (or too much plaque in the arteries) is a leading cause of heart disease. Emerging science suggests that free radicals may be the culprits that can oxidize LDL (also known as “bad” cholesterol) – turning it into plaque that clogs up arteries. And science also tells us that pomegranate antioxidants neutralize free radicals.

Promising results from studies on POM Wonderful Juice.

One pilot study on 19 patients with atherosclerosis (clogged arteries) at the Technion Institute in Israel demonstrated a reduction in arterial plaque growth. After one year, arterial plaque decreased 30% for those patients who consumed 8oz of POM Wonderful 100% Pomegranate Juice daily, compared to a 9% worsening for patients who drank a placebo.

A recently published study at the University of California, San Francisco (UCSF) included 45 patients with impaired blood flow to the heart. Patients who consumed 8oz of POM Wonderful 100% Pomegranate Juice daily for 3 months experienced a 17% improved blood flow, those who drank a placebo experienced a 18% decline.

POMx and heart health.

Initial research on POMx also shows promise for promoting heart health. In his 2006 POMx study, Dr. Michael Aviram, one of the world’s preeminent cardiovascular researchers, remarked that “POMx is as potent an antioxidant as pomegranate juice and just like pomegranate juice, POMx may promote cardiovascular health.” Research on POMx continues to further explore its potential cardiovascular benefits.

Order POM Pills Now!
The Heart of The Matter

Arrest your cardiologist. Take POMx

POMx is made from the only pomegranates supported by $22 million of initial scientific research from leading universities. They are the same pomegranates in POM Wonderful 100% Pomegranate Juice that showed encouraging results in initial cardiovascular health studies.

Let’s start with some facts: atherosclerosis (or too much plaque in the arteries) is a leading cause of heart disease. Emerging science suggests that free radicals may be the culprits that can oxidize LDL (also known as “bad” cholesterol) – turning it into plaque that clogs up arteries. And science also tells us that pomegranate antioxidants neutralize free radicals.

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POMx is the most potent natural antioxidant available. 
Learn more

POMx: The Antioxidant Superpill™

It’s enough to make other antioxidants feel inferior in the fight against free radicals. POMx is the Antioxidant Superpill. POMx fights free radicals with more concentrated pomegranate antioxidants than any other 100% pomegranate supplement. In fact, our method of harnessing astonishing levels of polyphenol antioxidants is so revolutionary — it’s patent-pending.

POMx is made from the only pomegranates with $25 million in medical research behind them, and backed by the POM Wonderful brand. A single capsule or teaspoon of POMx gives you all the antioxidant power of an 8oz. glass of POM Wonderful 100% Pomegranate Juice — the very same juice that in a preliminary UCLA medical study showed hopeful results for men with prostate cancer. Learn more. POMx is simply one of the most concentrated, all-natural sources of pomegranate polyphenol antioxidants available.

Not all antioxidants are equal.

There are antioxidants...and then there are POMx antioxidants. Unlike some pomegranate supplements, POMx is never “spiked” with any ingredients, but is made from pomegranates only. When other pomegranate supplements add natural or synthetic ingredients like ellagic acid or punicalagins, it can actually disrupt the natural balance of molecules that nature intended.

The polyphenol antioxidants in POMx are as natural and unadulterated as the antioxidants in our fresh California-grown POM Wonderful pomegranates. Of course, you'd have to eat more than a few pomegranates to equal the antioxidants in a single POMx capsule.
Research

For centuries, the pomegranate has been valued as a symbol of health. Could the legends have some basis in fact? In 1998, research began in an effort to uncover the truth.

A number of top scientists in their fields, including a Nobel Laureate, are researching areas including cardiovascular disease, prostate cancer, antioxidant activity and other important conditions. To date, multiple pilot, peer-reviewed studies have been completed and published, while a number of others are still in progress.

To learn more about the studies, please click on any of the following areas of research:

Cardiovascular Studies

- Pomegranate juice helps promote healthy coronary endothelial cells by enhancing nitric oxide.
  de Nigris F, et al.
  Nitric Oxide, 2005

- Pomegranate juice protects nitric oxide against oxidative destruction and enhances the biological actions of nitric oxide.
  Ignarro LJ, et al.
  Nitric Oxide, 2005

- Pomegranate juice improves myocardial perfusion in coronary heart patients.
  Summer, MD, et al.
  American Journal of Cardiology, 2005

- Pomegranate juice pilot research suggest anti-atherosclerosis benefits.
  Aviram, M, et al.
  Clinical Nutrition, 2004

- Pomegranate juice helps promote normal systolic blood pressure.
  Aviram, M and Domfield, L
  Atherosclerosis, 2001

Cancer Studies

- Pomegranate juice delays PSA doubling time in humans.
  Pansky II, et al.
Clinical Nutrition, 2004

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Atherosclerosis, 2001

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Clinical Cancer Research, 2000

Pomegranate polyphenols have anti-inflammatory effects on colon cancer cells.
Adams, LS, et al.
Journal of Agricultural and Food Chemistry, 2005

Pomegranate juice shows superior anti-cancer bioactivity when compared to its purified compounds.
Seeram, N, et al.
Journal of Nutritional Biochemistry, 2005

Chemical Composition Studies

Composition of pomegranate polyphenols.
Reed, JD, et al.
Phytochemistry, 2005

Pomegranate juice is rich in potent polyphenol antioxidants.
Gil, M, et al.
Journal of Agricultural and Food Chemistry, 2000

Specific POM components are potent antioxidants and bioactive.
Reddy, NK, et al.

Diabetes Studies

Pomegranate juice has antioxidant benefits for people with type 2 diabetes.
Rosenblat, M, et al.
Atherosclerosis, 2006

Pomegranate juice stimulates unique antioxidant function relevant to diabetes.
Rosenblat, M, et al.
Atherosclerosis, 2006

Bioavailability Studies

Pomegranate juice polyphenols are bioavailable up to 48 hours.
Seeram NP, et al.
Journal of Nutrition, 2006

Pomegranate juice polyphenols are bioavailable.
Seeram, N, et al.
Clinica Chimica Acta, 2004
Clinical Cancer Research, 2006

*Pomegranate polyphenols have anti-inflammatory effects on colon cancer cells.*
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Journal of Agricultural and Food Chemistry, 2006

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Cancer Studies

Pomegranate juice delays PSA doubling time in humans.

The antioxidants in POMx are supported by $32 million in initial scientific research.
Effects of Pomegranate Juice Consumption on Myocardial Perfusion in Patients With Coronary Heart Disease

Michael D. Sumner, PhD^a, Melanie Elliott-Eller, RN, MSN^a, Gerdi Weidner, PhD^a, Jennifer J. Daubenmier, PhD^a, Mailine H. Chew, MD^a, Ruth Marlin, MD^a, Caren J. Raisin, RN^a, and Dean Ornish, MD^a,b,c,2

Pomegranate juice contains antioxidants such as soluble polyphenols, tannins, and anthocyanins and may have antiatherosclerotic properties. However, no study has investigated the effects of pomegranate juice on patients who have ischemic coronary heart disease (CHD). We investigated whether daily consumption of pomegranate juice for 3 months would affect myocardial perfusion in 45 patients who had CHD and myocardial ischemia in a randomized, placebo-controlled, double-blind study. Patients were randomly assigned into 1 of 2 groups: a pomegranate juice group (40 ml/day) or a placebo group that drank a beverage of similar calorie content, amount, flavor, and color. Participants underwent electrocardiographic-gated myocardial perfusion single-photon emission computed tomographic technetium-99m tetrofosmin scintigraphy at rest and during stress at baseline and 3 months. Visual scoring of images was used to determine the distribution of ischemia. The extent of ischemia was assessed using the summed difference score (SDS), which was calculated by subtracting the ischemic area from the non-ischemic area. The experimental and control groups showed similar levels of stress-induced ischemia (SDS) at baseline (p > 0.05). After 3 months, the extent of stress-induced ischemia decreased in the pomegranate group (SDS = 0.8 ± 2.7) but increased in the control group (SDS = 1.2 ± 3.1, p < 0.05). This was observed without changes in cardiac medications, blood sugar, hemoglobin A1c, weight, or blood pressure in either group. In conclusion, daily consumption of pomegranate juice may improve stress-induced myocardial ischemia in patients who have CHD. © 2005 Elsevier Inc. All rights reserved.

Cancer Studies

Pomegranate juice delays PSA doubling time in humans

Parti et al. 2008

References
Cancer Therapy: Clinical

Phase II Study of Pomegranate Juice for Men with Rising Prostate-Specific Antigen following Surgery or Radiation for Prostate Cancer

Allan J. Piantoni,1 John T. Layton,1 Mary Zemorocrad,1 William S. Anson,2 Jerry Hong,2
R. James Barrat,3 Nanci D. Herbst,4 Harvey I. Letter,5 Heera Wang,6 Robert Wastell7
David Heber,6 Michael Kream,6 Louis Ignarro,6 and Aris Bellugno3

Abstract

Purpose: Phytochemicals in plants may have cancer preventive benefits through antioxidation and via gene-regulatory interactions. We sought to determine the effects of pomegranate juice (a major source of antioxidants) consumption on prostate-specific antigen (PSA) progression in men with rising PSA following primary therapy.

Experimental Design: A phase III, Simon two-stage clinical trial for men with rising PSA after surgery or radiotherapy was conducted. Eligible patients had detectable PSA 30 ng/mL and Gleason score of 7. Patients were treated with 8 ounces of pomegranate juice daily (Wonderpome, 970 mg total phenolic gallic acid equivalents) until disease progression. Clinical endpoints included safety and effect on serum PSA, serum-induced proliferation and apoptosis of UCAI cells, serum lipid peroxidation, and serum nitric oxide levels.

Results: The study was closed after efficacy criteria were met. There were no serious adverse events reported and the treatment was well tolerated. Mean PSA doubling time significantly increased with treatment from a mean of 16 months at baseline to 54 months posttreatment (P<0.001). In vitro assays comparing pretreatment and posttreatment patient serum on the growth of D800 showed a 12% decrease in cell proliferation and a 17% increase in apoptosis (P = 0.004 and 0.0004, respectively) and a 23% increase in serum nitric oxide (P = 0.0086). and significant (P<0.002) reductions in oxidative state and sensitivity to oxidation of serum lipids after versus before pomegranate juice consumption.

Conclusions: We report the first clinical trial of pomegranate juice in patients with prostate cancer. The statistically significant prolongation of PSA doubling time, coupled with corresponding laboratory effects on prostate cancer in vitro cell proliferation and apoptosis as well as oxidative stress, warrant further testing in a placebo-controlled study.

At present, the prostate is currently the most common malignancy in men in the United States comprising 39% of all cancers. This year an estimated 242,050 men will be newly diagnosed with prostate cancer (1). There has been a trend toward improved survival in patients with cancer over the last several years. Prostate cancer 5-year survival rates have increased from 67% for the period of 1974 to 1976 to 92% for the period of 1989 to 1995 (2). However, prostate cancer remains the second most common cause of cancer death in men in the United States, accounting for 19% of all cancer deaths. This year an estimated 32,730 men will die of prostate cancer (1).

Primary management of prostate cancer for the majority of patients consists of radical surgical or radiation therapy. Although this is adequate for permanent disease control in many patients, a significant number of patients remain and ultimately develop metastatic disease. Radical prostatectomy is currently the most commonly used therapy for curative intent (3). However, approximately one third of prostate cancer patients with clinically confined cancer that are treated with radical prostatectomy will develop biochemical recurrence (4). This has led to the development of strategies to target prostate cancer for clinically localized prostate cancer and demonstrates that 15% of patients had biochemical recurrence. Therefore, prostate cancer patients with biochemical recurrence developed distant metastases with only 15 years of total follow-up, median time to development of metastases was 8 years from the time of initial prostate-specific antigen (PSA)
Health Benefits

Research
The antioxidants in POMx are supported by $25 million in initial scientific research from leading universities, and so far we've uncovered encouraging results.

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Recent scientific research suggests that free radicals aggressively destroy healthy cells in your body, contributing to disease. The good news? Emerging science tells us that pomegranate antioxidants help guard your body against free radicals.

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A preliminary UCLA medical study on POM Wonderful 100% Pomegranate Juice showed hopeful results for men with prostate cancer who drank an 8oz glass of pomegranate juice daily. And every POMx capsule provides the antioxidant power of an 8oz glass of POM Wonderful 100% Pomegranate Juice.
Pomegranates and Prostate Health

Prostate Health
Prostate cancer is the most commonly diagnosed cancer among men in the United States, and the second leading cause of cancer death in men, after lung cancer. However, emerging science suggests that diet, lifestyle and dietary supplements may improve prostate health.

Promising News
A preliminary UCLA medical study involving POM Wonderful 100% Pomegranate Juice revealed promising news. Men who had been treated surgically or with radiation for prostate cancer were given 8oz of POM Wonderful 100% Pomegranate Juice. A majority of the 46 men participating in the study experienced a significantly extended PSA doubling time.

PSA (prostate-specific antigen) is a marker that is thought to be associated with the progression of prostate cancer; a slower PSA doubling time may reflect slower progression of the disease.

Before the study of pomegranate juice, the average PSA doubling time for the participants was 15 months. After drinking 8oz of juice daily, the average PSA doubling time increased to 54 months. That's a 350% increase. Learn more.

According to Dr. David Heber, Director of UCLA's Center for Human Nutrition, "The most abundant and most active ingredients in Pomegranate Juice are also found in PMX. Basic studies in our laboratory so far indicate that PMX and Pomegranate Juice have the same effect on prostate health."

A new study is underway to more fully investigate the potential of PMX to extend PSA doubling time.
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A new study is underway to more fully investigate the potential of POMx to extend PSA doubling time.
FAQs

Pomegranates and Health

Why are pomegranates and pomegranate juice so healthy?

What are the health benefits of pomegranates, pomegranate juice and POMx?

Heart Disease: How does drinking pomegranate juice help the fight against cardiovascular disease?

Prostate Cancer: There has been promising news on the benefits of pomegranate juice in the fight against prostate cancer. Is this really true?

Erectile Dysfunction: Can pomegranate juice benefit men with erectile dysfunction?

Do pomegranate supplements supply the same health benefits as drinking pomegranate juice?

Is it true that POM Wonderful has spent $25 million researching the health benefits of pomegranates, pomegranate juice and pomegranate supplements?

POMx Product Questions

What is POMx?

What are POMx Pills?

What is POMx Liquid?

Is POMx safe?

FDA Review: Is it true that the FDA gave POMx a favorable review? And what does that mean?

What is POMx made of?

What is a pomegranate?

Is it true that there is nothing in POMx besides pomegranates?

Your label lists other ingredients besides pomegranate extract. What are these?

What makes POMx better than other pomegranate supplements?

Why should I beware of pomegranate supplements that are standardized to 40% ellagic acid?

How long does it take for my system to get benefits of POMx?

Antioxidant Questions

What are antioxidants? And why should I take them?

What's special about the antioxidants in POMx and POM Wonderful Juice?

Product Usage Questions

Dosage: How much POMx should I take?

Are POMx Pills difficult to swallow?

What does POMx liquid taste like?

Should I feel anything when I take POMx?

Side Effects: Does POMx have any potential side effects?

Health issues: Can I take POMx if I suffer from any health issues or disease?
Heart Disease: How does drinking pomegranate juice help the fight against cardiovascular disease?

Improved Cardiac Blood Flow. A recently published human study at the University of California San Francisco (UCSF) included 45 patients with impaired blood flow to the heart. Patients who consumed 8oz of POM Wonderful 100% Pomegranate Juice daily for 3 months experienced 17% improved blood flow, whereas those who drank a placebo experienced an 18% decline.

Decrease in Arterial Plaque. Another published human study included 19 patients with atherosclerosis (clogged arteries) at the world-renowned Technion Institute in Israel. After one year, arterial plaque decreased 30% for those patients who consumed 8oz of POM Wonderful 100% Pomegranate Juice daily, compared to a 9% worsening of arterial plaque buildup for patients who drank a placebo.

Initial pre-clinical tests have shown that POMx has equivalent cardiovascular benefits as POM Wonderful 100% Pomegranate Juice, and human studies are now ongoing. According to Dr. Michael Aviram, one of the world’s preeminent cardiovascular researchers,“The results of our pre-clinical studies showed that POMx is as potent an antioxidant as pomegranate juice, and just like pomegranate juice may promote cardiovascular health.”

Prostate Cancer: Has there been promising news on the benefits of pomegranate juice in the fight against prostate cancer. Is this really true?

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Erectile Dysfunction: Can pomegranate juice benefit men with erectile dysfunction?

Initial results linking POM Wonderful 100% Pomegranate Juice and erectile performance are promising. In a soon-to-be-published clinical study on men with erectile dysfunction, the group who consumed 8oz of POM Juice daily experienced better erectile performance than the group who drank a placebo.

Do pomegranate supplements supply the same health benefits as drinking pomegranate juice?

Is it true that POM Wonderful has spent $25 million researching the health benefits of pomegranates, pomegranate juice, and pomegranate supplements?

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What is a pomegranate?
Is it true that there is nothing in POM besides pomegranates?
Product Usage Questions

Dosage: How much POMx should I take?

Pills: Take one pill daily, preferably with 8 oz. of water and food.

Liquid: Take one teaspoon daily, you may mix the liquid in a beverage or with food.

Whether you choose pills or liquid, it is important to remember that to reap POMx’s full health benefits, you must take it every day.

At this time, there is no government Recommended Daily Intake or Daily Value established for pomegranate or polyphenol antioxidants. However, much of the preliminary medical research on the associated health benefits was done with a daily serving of 8 oz. of POM Wonderful 100% Pomegranate Juice. Since one POMx pill and one teaspoon of POMx liquid provide the antioxidant power of 8 oz. of POM Wonderful 100% Pomegranate Juice, our recommended daily serving is one pill or teaspoon.

Are POMx Pills difficult to swallow?
POMx Pills are actually easy-to-swallow capsules, but if you have any difficulty swallowing them, we will gladly replace your capsules with POMx liquid for no additional charge.

What does POMx liquid taste like?
POMx liquid is quite bitter. We recommend that you mix it in a non-dairy beverage or food.

Should I feel anything when I take POMx?

Side Effects: Does POMx have any potential side effects?

Health issues: Can I take POMx if I suffer from any health issues or disease?
Pregnant or Breastfeeding: Should I take POMx if I’m pregnant or breastfeeding?

Children: Can my child take POMx?

Do POMx pills and liquid need to be refrigerated?

How long will POMx last?

What is the nutritional content of POMx liquid?

How many calories do POMx Pills have?

Is POMx Gluten-free?

Is POMx Vegetarian / Vegan?

Is POMx Kosher?

POM Wonderful Questions

Who is POM Wonderful and what other products do they offer?

Where can I purchase POM Wonderful Juice, Tea or Fresh Pomegranates?

Ordering POMx

How much does POMx cost?

What is the benefit of signing up for POMx Monthly?

How does POMx Monthly work?

Will I be charged sales tax?

When will you charge me?

Can I use my debit card?

Can I pay by check?

Which credit cards do you accept?

How much is shipping?

Is the change on this month’s order going back to me?
The truth about our pomegranates.

The proof is in the POM.
POM is the only pomegranate juice you can trust for real pomegranate health benefits and superior taste. There are many imitators, but only one POM.

100% Authentic.
POM is the only brand guaranteed to contain 100% authentic pomegranate juice. Unfortunately, not all brands are as honest. According to recent tests conducted by three independent labs, nine out of ten so-called “pomegranate juices” had added sugar, colorants and other low-grade fruit juices. Why is this? Two reasons: [1] because there is currently a worldwide shortage of pomegranate juice; and [2] because pomegranate juice is very expensive to produce. By using non-pomegranate ingredients, unscrupulous exporters to the U.S. make their “pomegranate juice” cheaper and more readily available. As a result, what’s missing are the unique antioxidants that make pomegranate juice so healthy. Read more.

Read the label.
Beware of filler juices! Other companies try to sell you “100% juice” with the word “Pomegranate” next to pretty pictures of pomegranate fruit. These companies want you to believe their products contain all the health benefits of real pomegranate juice. Don’t be fooled. These products are loaded with highly processed filler juices like white grape, apple and pear, all of which are little better than sugar water when it comes to antioxidant benefits. Read more.

Backed by science.
POM is the only pomegranate juice backed by $25 million in medical research. To date, numerous published clinical studies have documented the benefits of drinking pomegranate juice, benefits that include improved heart and prostate health and better erectile function. All of these studies featured patients who drank POM Wonderful 100% Pomegranate Juice, not any other brands. Since POM is totally different from other pomegranate juices (see below), that means ours is the only one you can trust to deliver genuine pomegranate health benefits. Read more.

Tree to bottle.
POM is the only brand that controls its pomegranate juice from tree to bottle. We grow the fruit in our own orchards, hand-pick the pomegranates when perfectly ripe, squeeze them in our
Backed by science.

POM is the only pomegranate juice backed by $25 million in medical research. Actually, we are the only pomegranate juice backed by any medical research at all.

There has been a lot of talk lately about the role of pomegranates in promoting heart health, prostate health, and proper erectile function. But while these results are promising, keep in mind that all of the research has been done on POM Wonderful 100% Pomegranate Juice. Our juice comes from a unique pomegranate variety (the Wonderful), which is grown in a unique location (California), and which is juiced with proprietary technology (ours!). No other pomegranate juice can claim these distinctions, and no other brand has been clinically tested.

So what are the medical results on POM Wonderful 100% Pomegranate Juice?

Heart Health
- A 2005 study published in the American Journal of Cardiology showed improved blood flow to the heart in patients drinking 8 oz. daily of POM Wonderful 100% Pomegranate Juice for 3 months... Read more
- Researchers studied a total of 45 patients with coronary heart disease who had reduced blood flow to the heart.
  - Patients drinking POM Wonderful 100% Pomegranate Juice experienced a 17% improvement in blood flow, compared to a 18% worsening in patients drinking a placebo.

Prostate Health
- An initial UCLA medical study, published by The American Association for Cancer Research, found hopeful results for prostate health.
  - The study tested 45 men with recurrent prostate cancer who drank 8 oz. of POM Wonderful 100% Pomegranate Juice daily for two years. Post-prostate surgery PSA doubling time increased from 15 to 54 months. PSA is a protein marker for prostate cancer, and slower PSA doubling time indicates slower disease progression.

Erectile Dysfunction
- A pilot study released in the International Journal of Impotence Research in 2007 examined 61 male subjects with mild to moderate erectile dysfunction. Compared to participants taking a placebo, those men drinking 8 oz. of POM Wonderful
Heart Health - Emerging Science

What does current research say about heart health? Let's start with some facts: heart disease is one of the leading killers in America for women as well as men. Atherosclerosis, or too much plaque in the arteries, is a leading factor in heart attacks.

Where does this plaque come from? The problem starts in your arteries. Emerging science suggests that free radicals may be the culprits that can oxidize LDL - "bad" cholesterol, turning it into the plaque that clogs up arteries. Initial laboratory research suggests that antioxidants may help minimize the oxidation of LDL cholesterol.

To learn more about the preliminary research that examines pomegranate juice consumption and cardiovascular health, click on the links below:

Effects of Pomegranate Juice Consumption on Myocardial Perfusion in Patients With Coronary Heart Disease
The American Journal of Cardiology, 2005

Pomegranate Juice Consumption for 3 Years by Patients with Carotid Artery Stenosis Reduces Common Carotid Intima-Media Thickness, Blood Pressure, and LDL Oxidation
Clinical Nutrition, 2004

Pomegranate Juice Consumption Inhibits Serum Angiotensin Converting Enzyme Activity and Reduced Cytotoxic Blood Pressure
Atherosclerosis, 2001
CONSUMER DEMAND FOR POM WONDERFUL’S REFRIGERATED ALL-NATURAL POMEGRANATE JUICE GROWS AS THE HEALTH BENEFITS OF POMEGRANATE JUICE BECOME RECOGNIZED.

Scientific support indicates that drinking pomegranate juice provides the body with an active source of antioxidants and shows promise against cardiovascular disease.

LOS ANGELES (January 9 - 2003) - POM Wonderful®, the first company to sell a refrigerated super-premium pomegranate juice, today released information from published medical research regarding the important health benefits associated with its pomegranate juice. It was announced that the antioxidant activity of POM Wonderful pomegranate juice exceeds that of other popular beverages known for their antioxidant properties including red wine, cranberry juice, blueberry juice, orange juice, white wine, red grape juice, white grape juice, apple juice, and grapefruit juice. The antioxidant activity of pomegranate juice is high due to the polyphenols it contains. Polyphenols are powerful, natural antioxidants. Antioxidants may be useful in counteracting premature aging, Alzheimer’s, and cancer.

The research shows that the antioxidants found in pomegranate juice may also be more important than previously thought in promoting optimum cardiovascular health. Medical research shows that daily consumption of just 1.5 mmol of polyphenols from pomegranate juice (the equivalent of an 8 fl oz serving of POM Wonderful pomegranate juice) confers heart health benefits by lessening factors that contribute to atherosclerosis (plaque in the arteries). According to the American Heart Association, cardiovascular diseases rank as America’s No. 1 killer. In addition, 61.8 million Americans have some form of cardiovascular disease such as diseases of the heart, high blood pressure, and hardening of the arteries.

General Antioxidant Effects
Free radicals are produced as a result of normal metabolic processes, pollution and chemicals in the foods we eat. They attack and damage molecules in the body so that their function is altered. One molecule that is particularly susceptible to attack is LDL (low-density
lipoprotein) cholesterol. Once attacked and damaged, LDL is said to be oxidized. LDL oxidation is a key factor in the formation of plaque in the arteries, also called atherosclerosis. One of the best ways to defend against the damaging effects of free radicals is to consume foods and beverages that are rich in antioxidants.

Two studies have shown the superior potency of pomegranate antioxidants compared to other popular beverages. In the first study, which used four well-established tests of antioxidant activity, pomegranate juice squeezed from the Wonderful variety of pomegranates had twice the antioxidant activity of both red wine and green tea. Furthermore, pomegranate juice was shown to contain antioxidant compounds not present in either of the other beverages. In a second study, ten beverages known for their antioxidant capacity were tested for their total polyphenol content and their ability to prevent the oxidation of LDL cholesterol (a factor in atherosclerosis). Beverages tested included pomegranate juice (from the Wonderful variety), red wine, apple juice, orange juice, white wine, red grape juice, white grape juice, cranberry juice, blueberry juice, and grapefruit juice. Pomegranate juice surpassed all the other juices in total polyphenol content. It was also the best inhibitor of LDL oxidation.

Effects on Heart Health

The heart is one of the most susceptible of all the organs to premature aging and free radical oxidative stress. Though vulnerable to the effects of oxidative stress, the heart is also receptive to the benefits of antioxidants. New research is showing that antioxidants can play a highly beneficial role in reducing one of the major risk factors in heart disease: atherosclerosis (plaque in the arteries). The progression of atherosclerosis depends on several steps including the oxidation of LDL cholesterol, the uptake of oxidized cholesterol into macrophage cells, clumping of LDL molecules together, and the adhesion of LDL molecules to the inner walls of the blood vessel. In one human study, drinking pomegranate juice containing 1.5 mmol of polyphenols daily for two weeks lowered the susceptibility of LDL cholesterol to oxidation, clumping and adhesion. Furthermore, it increased blood levels of an enzyme, paraxonase, which protects against oxidation. An additional human study showed that consuming pomegranate juice reduces another enzyme: ACE (angiotensin converting enzyme). Inhibition of ACE lessens the progression of atherosclerosis and it is this enzyme that is targeted by blood pressure medications. Pomegranate juice inhibited ACE by 36% after two weeks of juice consumption. It also caused a 5% decrease in systolic blood pressure, and high blood pressure is a known risk factor for atherosclerosis.

Studies in mice have revealed additional exciting results. When mice predisposed to
atherosclerosis were given pomegranate juice for 11-14 weeks, the level of LDL oxidation and the uptake of LDL cholesterol into macrophage cells was reduced. Remarkably, the production of atherosclerotic lesions and foam cells (indicators of advanced atherosclerosis) was also reduced by almost half compared to controls. A subsequent study showed that pomegranate juice could actually reduce the size of existing atherosclerotic lesions after two months of pomegranate juice consumption, in effect, reversing atherosclerosis.

About POM Wonderful

POM Wonderful, a subsidiary of Roll International Corporation, cultivates the Wonderful variety of pomegranates in orchards located in the sunny San Joaquin Valley, southwest of Kettleman City, in Central California. The Wonderful variety of pomegranate is renowned for its exquisite sweet flavor, beautiful color, and bountiful juice. In addition to selling fresh pomegranates throughout the United States, POM Wonderful has also created a unique, healthy, refreshing super-premium pomegranate juice that is now on sale in the refrigerated produce section of over 900 grocery stores and supermarkets in Southern California, including Von's, Ralph's, Stater Brothers, Bristol Farms, and Gelson's. POM Wonderful uses the juice from its fresh pomegranates to make its juice. Pomegranate juice can be enjoyed as a beverage, a drink mixer and in recipes. Each 8 fl oz serving of pomegranate juice contains the juice from approximately two pomegranates. POM Wonderful's pomegranate juice is currently available in four flavors: Pure POM, POM Mango, POM Tangerine and POM Blueberry and two sizes - 15.2 fl oz and 24 fl oz. The 15.2 fl oz size retails for approximately $3.49, and the 24 fl oz size retails for approximately $5.79. POM Wonderful pomegranates and POM Wonderful pomegranate juice products promise consistent quality and superb taste. Only fruit and juice that meet the company's strict quality standards appear in store produce sections. POM Wonderful prides itself on the quality of its farming operation, the sensitivity with which the fruit is hand picked and carried to its sorting and modern juicing facilities, and ultimately delivered to your table. POM Wonderful's mission is to educate consumers about the splendor and versatility of this luscious fruit, as well as its refreshing taste and health benefits. To learn more, visit www.pomwonderful.com.

POM Wonderful is a registered trademark of POM Wonderful LLC.

Citations


4Sinatra ST, DeMarco J. Free radicals, oxidative stress, oxidized low density lipoprotein
(LDL), and the heart: antioxidants and other strategies to limit cardiovascular damage. Conn Med 1995 Oct;59 (10):579-88.


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Pomegranate Juice May Affect the Progression of Coronary Heart Disease

LOS ANGELES—(BUSINESS WIRE)—Sept. 16, 2005—Men and women with coronary heart disease who drink one glass of pomegranate juice daily may improve blood flow to their heart, according to a new study.

This research is the first randomized, double-blind, placebo-controlled trial showing that pomegranate juice may affect the progression of coronary heart disease, which is the #1 cause of death in the U.S. and in most of the world. Promising results from this research will be published in the September 16th issue of the American Journal of Cardiology, one of the leading peer-reviewed cardiology journals (www.ajconline.org).

Researchers from the non-profit Preventive Medicine Research Institute, University of California, San Francisco, and California Pacific Medical Center studied patients with coronary heart disease who had reduced blood flow to the heart. These 45 patients were randomly assigned into one of two groups: one group who drank a glass of pomegranate juice each day (240 ml/day, which is approximately 8.5 oz/day) or to a placebo group, who drank a beverage of similar caloric content, amount, flavor and color.

After only three months, blood flow to the heart improved approximately 17% in the pomegranate juice group but worsened approximately 18% in the comparison group (i.e., a 35% relative between-group difference). These differences were statistically significant. This benefit was observed without changes in cardiac medications or revascularization in either group. Also, there were no negative
effects on lipids, blood glucose, hemoglobin A1c, body weight or blood pressure.

Pomegranate juice is rich in polyphenols and other naturally-occurring antioxidants. It demonstrates high capability in scavenging free radicals and inhibiting low-density lipoprotein oxidation in vitro and in vivo. Other studies have shown that pomegranate juice has a number of important health benefits.

"Although the sample in this study was relatively small, the strength of the design and the significant improvements in blood flow to the heart observed after only three months suggest that pomegranate juice may have important clinical benefits in those with coronary heart disease," said senior author, Dean Ornish, M.D., who is founder of the Preventive Medicine Research Institute and clinical professor of medicine at UCSF. "Also, it may help to prevent it."

Pomegranate juice from POM Wonderful was used in this study.

About POM Wonderful

POM Wonderful is the largest producer of California Wonderful pomegranates, and the company exclusively grows and sells this variety. POM Wonderful's pomegranates are grown in Central California, in the sunny San Joaquin Valley. Known for its exquisite sweet flavor, health benefits, large size and plentiful juice, the Wonderful variety is popular with consumers throughout the country. POM Wonderful's pomegranates promise consistent quality. POM Wonderful prides itself on the quality of its farming operation, the sensitivity with which the fruit is hand picked and carried to their sorting and modern juicing facilities, and ultimately delivered to your table. Only fruit that meets the company's strict quality standards appears in store produce sections.

The company also juices its fresh pomegranates to make its delicious, all-natural, POM Wonderful pomegranate juice. POM Wonderful pomegranate juice is available year-round at retail and is found in the refrigerated section of supermarkets and grocery stores nationwide. POM Wonderful pomegranate juice is available in five flavors: POM 100% Pomegranate, POM Cherry, POM Blueberry, POM Tangerine and POM Mango. Each flavor of POM Wonderful pomegranate juice is all-natural, preservative-free and has no added sugar.

POM Wonderful's mission is to educate consumers about the pomegranate's splendor and versatility as well as its refreshing taste and health benefits. To learn more, visit http://www.pomwonderful.com.

POM Wonderful is a registered trademark of POM Wonderful LLC.

Note to Editors: Interviews with Dr. Dean Ornish, Senior Author, are available upon request.

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POM Wonderful® announced today that it has developed a concentrated form of pomegranate antioxidants known as POMx. POMx, already being noted by medical researchers as an important natural ingredient, is so concentrated that only a small amount is needed to obtain an optimal level of daily antioxidants. For consumers who are not seeking additional calories and sugars, this is an important product benefit. POMx comes from the same Wonderful variety of pomegranates that are used to make POM Wonderful’s healthy pomegranate juices. It also has a similar biochemical profile to pomegranate juice since both contain a diverse range of phytochemicals, of which polyphenols make up a large proportion. POMx is currently an active ingredient in POM Tea (http://pomtea.com), a refreshing, healthy, ready-to-drink iced tea that is available in retail stores nationally.

According to Michael Aviram, DSc, Professor of Biochemistry and Head Lipid Research Laboratory, Technion Faculty of Medicine and Rambam Medical Center, Haifa, Israel, who was at the forefront of the initial research on pomegranates, the research on POMx looks very promising. In 2006, Aviram led a study on POMx which was recently published (Journal of Agriculture and Food Chemistry, 2006 54:1928-1935). Commenting on this research, Professor Aviram remarks, “The results showed that POMx is as potent an antioxidant as pomegranate juice and just like pomegranate juice may protect against cardiovascular as well as other diseases.”
The POMx research comes as the benefits derived from the Wonderful variety of pomegranate are, once again, being noted by the worldwide medical community. Recently, the American Association for Cancer Research published research that indicates that a daily pomegranate regimen has a positive effect for men with prostate cancer. Specifically, drinking 8 ounces of POM Wonderful pomegranate juice daily prolonged post-prostate surgery PSA doubling time from 15 to 54 months (Clinical Cancer Research, July 1, 2006). PSA is a protein marker for prostate cancer and the faster PSA levels increase in the blood of men after treatment, the greater their potential for dying of prostate cancer.

David Heber, MD, PhD, Professor of Medicine and Director, UCLA Center for Human Nutrition, provided additional commentary on POMx as it relates to prostate cancer. "Basic studies indicate that the effects of POMx and POM Wonderful pomegranate juice on prostate cancer are the same. The most abundant and most active ingredients in pomegranate juice are also found in POMx."

The Wonderful variety of pomegranate is a type of pomegranate rather than a brand. Just as there are different varieties of apples, oranges and grapes, there are several different varieties of pomegranates grown in the United States and in other countries. POM Wonderful's products only use extractions from the Wonderful variety of pomegranate. Of the many published peer-reviewed medical papers that speak to the health benefits of the pomegranate, most were conducted using juice or pomegranate extract from this variety of pomegranate.

About POM Wonderful

POM Wonderful is the largest grower of the Wonderful variety of pomegranate. The company exclusively grows and sells this variety because of its exquisite sweet flavor, health benefits, large size and plentiful juice. POM Wonderful's pomegranates are grown in Central California, in the sunny San Joaquin Valley. Fresh pomegranates are in season from October through January and November is National Pomegranate Month. In addition to selling the fresh fruit, the company also juices its fresh pomegranates to make POM Wonderful pomegranate juice and POMx. To learn more, visit http://www.pomwonderful.com.

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POM Wonderful 100% Pomegranate Juice May Improve Mild to Moderate Cases of Erectile Dysfunction, Study Finds

Research shows 8 ounces a day of POM Wonderful 100% Pomegranate Juice may help the management of erectile dysfunction

LOS ANGELES (June 27 - 2007) – According to a pilot study released in the *International Journal of Impotence Research* (http://www.nature.com/ijir), POM Wonderful 100% Pomegranate Juice was found to have beneficial effects on erectile dysfunction (ED), a disorder that affects 1 in 10 men worldwide and 10 to 30 million men in the United States alone.\(^1\) \(^2\) ED can be caused by several factors, including arterial plaque, high blood pressure, heart disease, diabetes, nerve damage, endocrine imbalance or depression. Ultimately, ED is a condition that affects the blood flow to the penis during sexual stimulation.

This randomized, placebo-controlled, double-blind, crossover pilot study examined the efficacy of pomegranate juice versus placebo in improving erections in 61 male subjects. To qualify, participants had to experience mild to moderate ED for at least 3 months; be in a stable, monogamous relationship with a consenting female partner; and be willing to attempt sexual intercourse on at least one occasion per week during each study period.

Mild ED is defined as the mildly decreased ability to get and keep an erection, while moderate ED is the moderately decreased ability to get and keep an erection. The majority of men with ED have moderate ED.

For the first four weeks of the study, the subjects were assigned to drink either 8 oz. of POM Wonderful Pomegranate Juice or 8 oz. of placebo beverage daily with their evening
meal or shortly after. After a two-week washout period during which the subjects did not consume any study beverage nor utilize any ED treatment, they were assigned to drink 8 oz. of the opposite study beverage every evening for another four weeks. At the end of the each four week period, efficacy was assessed using the International Index of Erectile Function (IIEF) and Global Assessment Questionnaires (GAQ). The IIEF is a validated questionnaire that has been demonstrated to correlate with ED intensity. The GAQ elicits the patient’s self-evaluation of the study beverages’ effect on erectile activity.

Forty seven percent of the subjects reported that their erections improved with POM Wonderful Pomegranate Juice, while only 32% reported improved erections with the placebo (p=0.058). These results compare favorably to a recent 24-week study using a PDE5 inhibitor (such as Cialis), in which roughly 73% of subjects reported a benefit from the PDE5 inhibitor and 26% reported a “placebo effect” (i.e. experiencing improvement while on the placebo).³

Although the study did not achieve overall statistical significance, the authors conclude that additional studies with more patients and longer treatment periods may in fact reach statistical significance. The strong directional results of this pilot study are encouraging because almost half of the test subjects experienced a benefit simply by adding pomegranate juice to their daily diet, without the use of ED drugs.

Researchers believe that the results might be due to the potent antioxidant content of pomegranate juice, which can prevent free radical molecules from disrupting proper circulatory function. In several previously published medical studies, pomegranate juice has been shown to enhance blood flow and to slow or reverse arterial plaque growth.⁴,⁵,⁶ Because an erection requires significant blood flow, these potent pomegranate antioxidants may provide benefit by mitigating arterial plaque and promoting blood vessel dilation.

According to study co-author Harin Padma-Nathan, MD, FACS, FRCS, Clinical Professor of Urology at the Keck School of Medicine, University of Southern California, “These findings are very encouraging as they suggest there is a non-invasive, non-drug way to potentially alleviate this quality of life issue that affects so many men. For men with ED, it is important to
maintain a healthy diet and exercise. Drinking pomegranate juice daily could be an important addition to the diet in the management of this condition.”

About POM Wonderful

POM Wonderful is the largest producer of California Wonderful pomegranates and the company exclusively grows and sells this variety. POM Wonderful’s pomegranates grow in central California, in the sunny San Joaquin Valley. Fresh pomegranates are in season from October through January and November is National Pomegranate Month.

The company also uses its fresh pomegranates to make its delicious, all-natural, POM Wonderful Pomegranate Juice and POMx, a highly-concentrated blend of all-natural polyphenol antioxidants harnessed from the pomegranate by a patent-pending process. POMx is found exclusively in POM Tea, POMx Pills and POMx Liquid.

POM Wonderful Pomegranate Juice and POM Tea are available year-round at retail and are found in the refrigerated section of supermarkets nationwide. POMx Pills and POMx liquid are available at http://www.pompills.com. To learn more, visit http://www.pomwonderful.com.

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References


Floss your arteries. Daily.

Clogged arteries lead to heart trouble. It's that simple. That's where we come in. Delicious POM Wonderful Pomegranate Juice has more naturally occurring antioxidants than any other drink. These antioxidants fight free radicals—molecules that are the cause of sticky, artery clogging plaque. Just eight ounces a day can reduce plaque by up to 30%! So every day: wash your face, brush your teeth, and drink your POM Wonderful.

POM Wonderful Pomegranate Juice. The Antioxidant Superpower."

Life support.

POM Wonderful Pomegranate Juice fills your body with what it needs. On top of being refreshing and delicious, this amazing juice has more naturally occurring antioxidants than any other drink. These antioxidants fight hard against free radicals that can cause heart disease, premature aging, Alzheimer's, even cancer. Just drink eight ounces a day and you'll be on life support—in a good way.

POM Wonderful Pomegranate Juice. The Antioxidant Superpower.®
Amaze your cardiologist.

POM Wonderful
100% Pomegranate Juice

Ace your EKG: just drink 8 ounces of delicious POM Wonderful Pomegranate Juice a day. It has more naturally occurring antioxidants than any other drink. Antioxidants fight free radicals... nasty little molecules that can cause sticky, artery clogging plaque. A glass a day can reduce plaque by up to 30%! Trust us, your cardiologist will be amazed.

POM Wonderful Pomegranate Juice. The Antioxidant Superpower.™

Cheat death.

Dying is so dead. Drink to life with POM Wonderful Pomegranate Juice, the world’s most powerful antioxidant. It has more antioxidants than any other drink and can help prevent premature aging, heart disease, stroke, Alzheimer’s, even cancer. Eight ounces a day is all you need. The sooner you drink it, the longer you will enjoy it.

POM Wonderful Pomegranate Juice. The Antioxidant Superpower.