CambridgeMedScience.org

C.I.I.M.S

CAMBRIDGE INTERNATIONAL INSTITUTE FOR MEDICAL SCIENCE
Stephen Cavallino, M.D. - Founder & Chairman (Italy) • Amid Habib, M.D. • David Sim, M.D. • Robert Nemer, D.O.

THE PHYSICIAN'S CONCISE GUIDE TO:

- 21 -

Aspirin is Awful

"...low-dose aspirin, which enhances platelet adhesivity, increases thrombosis (clotting) when platelet adhesion dominates as the response to injury." - Buchanan, MR and Jejana, E, *Journal of Clinical Investigation*, 67503-508.

There is simply no one better in the 21st century at developing practical health-related solutions based on the world's leading medical and nutritional science. **"Science – Not opinion" is Brian's trademark.** When Brian is through explaining a topic it is "case closed!" When he says it, you "can take the information to the bank!"

Unlike most of his peers' recommendations, Brian's health and nutritional recommendations have stood the test of time. **Brian has never had to reverse or significantly alter any of his medical reports—reports that have tackled everything from the dangers of soy, to the wrongly popularized need for fiber in the diet, to his warning about the potential harm of supplementing with copious amounts of omega-3**. In 1995 he published the report "Fiber Fiction" and finally, eleven years later, others in research are acknowledging the silliness of recommending fiber in the diet of a human being. Brian's latest crusade is to warn of the dangers of excess omega-3 (in particular, fish oil) and how it will lead to increased cases of skin cancer. The list goes on and on…

Brian received an appointment as an Adjunct Professor at Texas Southern University in the Department of Pharmacy and Health Sciences (1998-1999). **The former president of the University said of his discoveries: "...His nutritional discoveries and practical applications through *Life-Systems* Engineering are unprecedented."** Brian earned his Bachelor of Science degree in Electrical Engineering from Massachusetts Institute of Technology (MIT) in 1979. Brian founded the field of *Life-Systems* Engineering Science in 1995. This field is defined as *The New Science of Maximizing Desired Results by Working Cooperatively with the Natural Processes of Living Systems*. To many, Brian is THE MOST TRUSTED AUTHORITY ON HEALTH AND NUTRITION IN THE WORLD.

Brian continues to be a featured guest on hundreds of radio and television shows both nationally and internationally. His sheer number of accomplishments during the last decade of the 20th century and into the 21st century are unprecedented and uniquely designate him as the #1 authority in the world of what really works and why. Forget listening to the popular press or most popular so-called health magazines. Their editors simply don't understand the complicated science that they write about – they merely "parrot" what everyone else says without independent scientific verification. Their recommendations often have no basis in reality of how the body works, based on its physiology.

Brian has dedicated his life to provide the truth – which is almost always opposite to what everyone says. Here's why Brian is the #1 man in America to listen to when it comes to your health.

Newsflash 2008: Stop Heart Attacks and Cardiovascular Disease with Aspirin? No, No, No! PEOs are the Solution

Although aspirin is often claimed to be an anti-heart attack solution for all, as you shall soon discover, this is factually incorrect. Please don't fall victim to this fallacy. The following article appearing in the August 8, 2008 edition of the excellent publication, *Pharmacist's Letter* on page 46:

> • "People are asking whether they should take TWO aspirin daily. **This started with Dr. Oz**, best-selling author and Oprah guest. **He's telling men and women over 40 to take 162 mg of aspirin a day … to prevent heart disease and cancer and slow aging**. He says some people might be resistant to 81 mg/day [1 baby aspirin]…"

The editors of this pharmacy newsletter then immediately state the following response to pharmacists:

> • "**There's NO proof that the higher dose is better**." [Note: also, **people at low risk for cardiovascular disease** likely will **not get enough benefit to outweigh the risk of bleeding**.]
>
> • "**[G]iving aspirin to 2000 women** age 55 to 64 **for 10 years will prevent one [1] cardiovascular event**…but ***one [1] in 200 women will be harmed by bleeding***. [Translation: The physician recommendation is completely worthless in preventing disease and can instead cause great harm.[1]]
>
> • "And there's **not enough evidence that LOW-dose aspirin prevents cancer…or that any dose slows aging. Don't recommend aspirin to most** healthy men under age 50 or women under age 65." (Emphasis added.)

◗ *Life-Systems* Engineering Science Commentary

The pharmacists here are much closer to the truth than "America's Doctor"! His worthless and harmful recommendation can cause horrific harm and gives many fine physicians who know better a bad rap!

1 Hannia Campos, PhD; Ana Baylin, MD, Dsc; Walter C. Willett, MD, DrPh, *Circulation*. 2008; 118:339-345.

Because heart disease is such an important topic, here is the science that you need to know. Much of it comes from the medical textbook, *Prostaglandins in the Cardiovascular System*. This superb though expensive textbook contains the proceedings of the 5th International Symposium on *Prostaglandins in the Cardiovascular System*[2], held in Vienna, Austria, September 22-26, 1991. I am referencing in particular pages 273-281. The book offers state-of-the-art science that many physicians and researchers aren't aware of even today. I published most of the following information in my own book, *Peak Performance: Radiant Health – Moving Beyond the Zone* in 2001 (now out of print).

• At the conference it was suggested that "... [a] **combination of** omega-3 and omega-6 is best [to prevent atherosclerosis]."

• "Antiplatelet and anticoagulant drugs are currently used as the standard treatment to prevent and treat thrombosis [blood clots]. While this approach is beneficial, **it is NOT optimal**[3]. Buchanan, et al. state that constituents such as prostaglandin PGI2 [prostacyclin], tissue plasminogen activator, thrombomodulin, and the Lipoxygenase fatty acid metabolites derived from linoleic acid [parent omega-6] 13-HODE directly affect the vessel wall. **Normally platelets circulate as discoid-shaped inert cell bodies which do not interact either with other blood cells or the vessel wall**."

• "**Aspirin prevents the metabolism** of arachadonic acid into thromboxane A2 (TxA2). As a result, platelet function is impaired. It is well-documented that inhibition of platelet function by any 'antiplatelet' agent **renders the platelets 'haemostatically defective,' thereby increasing the risk of bleeding side-effects**."

It gets even worse as evidenced by the next statement:

• "**Once you have arterial blockage, anticlotting (antiplatelet) drugs don't help**, as evidenced in peripheral (involving legs and arms) vascular disease.[4] "**Little attention is given to the importance of this metabolite** when developing 'antiplatelet' drugs for antithrombotic activity."

2. *Prostaglandins in the Cardiovascular System*, Edited by HF Sinzinger, MD and K Schr_r, MD, Birkh_user Verlag, Basel, Switzerland, 1992.

3. "Eicosanoids, Other Fatty Acid Metabolites and the Cardiovascular System: Are the Present Antithrombotic Approaches Rational?," Buchanan, MR, et al., McMaster University, Dept. of Pathology and Surgery, Hamilton Hospital, Hamilton, Canada.

4. 12-HTET , an omega-6 derivative from arachadonic acid, is produced in at least a 10-fold greater amount than TxA2, but the *drug companies have NOT concentrated on the 12-HETE pathway*

• "In fact, **low-dose aspirin**, which enhances platelet adhesivity, **increases thrombosis (clotting) when platelet adhesion dominates as the response to injury**."[5]

• "…[W]hen platelets are **exposed to low-dose aspirin** [you can imagine the effect with high dose aspirin] and their ability to aggregate to a collagen stimulus is impaired, they had an **increased ability to adhere to a collagen coated surface**. These results suggest that **low dose aspirin will enhance thrombosis [a bad outcome]** in some clinical settings in which platelet adhesion per se, dominates as the platelet response to injury. **This, in fact, has been confirmed experimentally**.

> "**Low-dose** aspirin which **enhances platelet adhesivity … increases thrombus formation [clotting] *in vivo*** [inside the body]."

[Note: This is an awful effect in the bloodstream and vascular system because collagen and protein are combined with the lipids allowing this very condition.]

• "Thus a battery of evidence supports the concept that adhesion molecule expression necessary for cell adhesion, be it the endothelia cells [lining of the arteries], platelets or other circulating blood cells, **can be manipulated by altering the fatty acid [parent omega-6 and their derivatives]** milieu, in particular by altering the relative amounts of lipoxygenase products derived from linoleic [parent omega-6] and arachidonic acids [parent omega-6 derivative]. [Note: In this experiment, the researchers found the vessel subwall to not be thrombotic — contradicting other studies suggesting that wall was highly thrombotic (clotted). In PEO deficient people, we should expect problems.]

There is much more to discover in this medical textbook, but you now have plenty of science — in fact, significantly more science than most physicians will remember, if they ever learned it—to conclude that *unadulterated* parent omega-6 is the key to staying heart-healthy.

5. "Enhanced platelet accumulation onto injured carotid arteries in rabbits after aspirin treatment," Buchanan, MR and Jejana, E, *Journal of Clinical Investigation*, 67503-508.

How did aspirin ever become an "approved" anti-heart disease treatment when it is even less effective than statins with their 99% failure rates? They use an artificial "end-point" method which violates all normally used statistical analysis because sample size is eliminated. Everyone, including physicians has been misled because pharmaceutical companies are allowed by law to do this. Here are the results of the aspirin study as published in the *New England Journal of Medicine* (321:129; 1987):

> There were about 255 heart attacks per 100,000 people TAKING the aspirin and 440 per 100,000 people NOT TAKING the drug.

The absolute difference in the drug/non-drug effectiveness (in percentages) is calculated as 0.44 %– 0.255% = 0.185%, which is insignificant because it is significantly less than 1%!

However, the reported effectiveness was (0.44 - 0.255) / 0.44 = 42% reduction in heart attacks. What is wrong with that analysis? Simple, you never take a percentage of a percentage under these conditions. The calculation (440-255) / 440 = 42% reduction DOESN'T take sample size into account. Think about it. If we could use their method then 440 deaths out of 440 people would be no different than 440 deaths out of 1,000,000 people. Of course, it is *much different*. Aspirin also causes the awful side-effecting of significant internal bleeding. Do you still want to take aspirin knowing that it helps less than 1 in every 500 people avoid a heart attack? Of course not. No one would, if given the truth.

◗ *Life-Systems* Engineering Science Commentary

Once again, we see the key is plenty of unadulterated parent omega-6. With a combination of both biochemistry and physiology we can address all three phases of heart disease: improper plasma platelet or other blood cell adhesion, aggregation, and problems in the vessel wall itself like plaque and elasticity. **Platelet adhesion can be altered independently of platelet aggregation**. If you have arterial blockage because of inflammation, aspirin MAKES IT WORSE! Also note that Reye's syndrome is a potentially fatal disease that causes numerous detrimental effects to many organs, especially the brain and liver. **It is associated with aspirin consumption by children with viral diseases such as chickenpox.**

You need to know that the platelets and blood cells that are harmed by low-dose aspirin remain defective until they are replaced by new ones – **platelets last about 10 days and red blood cells have at least a 90-day lifespan**. You don't want your red blood cells defective and functioning poorly for over a month! It is time that doctors pay attention to Nobel Laureate Sir John Vane's discovery about prostaglandins:

> **Aspirin**, by significantly *inhibiting prostacyclin*–the body's most potent natural anti-aggretory–**is unfit for use to prevent the coronary blood clots of heart attacks.** -Burch, JW, et al., "Inhibition of platelet prostaglandin synthetase by oral aspirin," *J Clin Invest*. 1978 February; 61(2): 314–319.

Wouldn't it be delightful if a highly publicized medical "authority" got it "really" right based on science, not opinion? Instead of causing great harm with their supposed "solution," maybe if less time was spent on Oprah and more time studying the science that was already known some 15 years ago, America and then the rest of the world would be much, much healthier. The anti-heart-disease solution is now known and it has nothing to do with aspirin or anticoagulant drugs; PEOs in the ratios this book details are "THE ANSWER to preventing heart disease."

Newsflash 2008: Aspirin does not prevent heart disease in diabetic patients.

That's right. Here's the quote from *Medical News Today* taken from *British Medical Journal* (2008;337:a1840 doi:10.1136/bmj.a1840.)

"**Taking regular aspirin** and antioxidant supplements **does not prevent heart attacks** even **in high risk groups with diabetes** and asymptomatic arterial disease…

"**Patients with diabetes are two to five times more likely to suffer heart disease** than the general population and **heart disease is a major cause of death** in patients with type 1 and 2 diabetes…

"**Overall, the researchers found no benefit** from either aspirin or antioxidant treatment in the prevention of heart attack or death…." (Emphasis added.)

◗ *Life-Systems* Engineering Science Commentary

Once again, we see the failure of aspirin therapy in preventing heart disease. If aspirin worked to prevent heart disease like most people including many physicians mistakenly think it should, then at the very least it should slow down the rate of heart disease in diabetic patients. It doesn't. If aspirin can't help a "tough" population like diabetics then it can't help a "moderate case" either. You have already discovered what does work.

www.medscape.com

From Heartwire

No Benefits of Aspirin for Primary Prevention in Diabetics, Meta-Analysis Suggests

Shelley Wood

November 11, 2009 (London, United Kingdom) — Another meta-analysis--this one focused on diabetics--is questioning the role of aspirin for the primary prevention of cardiovascular events [1]. Writing in a paper published online November 6, 2009 in *BMJ*, **Dr Giogria De Berardis** (Consorzio Mario Negri Sud, Maria Imbaro, Italy) and colleagues conclude that "a clear benefit of aspirin in the primary prevention of major cardiovascular events in people with diabetes remains unproved."

De Berardis and colleagues point out that almost all of the major society guidelines recommend aspirin for primary prevention of cardiovascular events in people with diabetes, based on the evidence extrapolated from trials of high-risk patients. "Patients with diabetes have high cardiovascular risk, so it was supposed that aspirin was also effective in patients with diabetes," senior author **Dr Antonio Nicolucci** (Consorzio Mario Negri Sud) told **heart*wire*** . "But if we look at specific data coming from trials conducted in individuals with diabetes, quickly we realize that the evidence is not so strong."

We need to select very carefully the patients who are more likely to benefit.

Nicolucci, De Berardis, and their coinvestigators reviewed the literature for trials comparing aspirin with placebo or no aspirin in patients with diabetes and no known diagnosis of cardiovascular disease, ultimately identifying six eligible trials. When all of the data were combined, the authors found no statistically significant differences in the risk of major cardiovascular events, cardiovascular mortality, all-cause mortality, MI, or stroke, and "inconsistent" evidence of harm from aspirin use. In an analysis by sex, aspirin in men appeared to significantly reduce the risk of MI by 43%, but no significant reduction in MI was seen in women.

Effect of Aspirin Compared With Placebo or No Aspirin on Relative Risk of Clinical Events in Patients With Diabetes

End point	Relative risk	95% CI	p
Major cardiovascular events	0.90	0.81–1.00	0.06
MI	0.86	0.61–1.21	0.37
Stroke	0.83	0.60–1.14	0.25
Cardiovascular death	0.94	0.72–1.23	0.68
All-cause mortality	0.93	0.82–1.05	0.22
Any bleeding	2.50	0.76–8.21	NS

To **heart*wire*** , Nicolucci pointed to the meta-analysis [2] of aspirin for primary prevention published earlier this year in the *Lancet* by the **Antithrombotic Trialists' Collaboration** and reported by **heart*wire*** --an update to their pivotal 2002 meta-analysis [3].

"It seems that not only in individuals with diabetes, but also in all other high-risk groups, the efficacy of aspirin for primary prevention is lower than expected. It doesn't mean that aspirin is not effective, it means that the efficacy is lower than expected, and that means we need to select very carefully the patients who are more likely to benefit."

Asked whether he thought guidelines should change, Nicolucci pointed out that guideline-writing committees are already softening their blanket recommendations.

"In the most recent guidelines from the **Canadian Diabetes Association**, for the first time they fully acknowledged the lack of definite data on the efficacy of aspirin, and they leave to the physician the decision of whether or not to use aspirin based on the characteristics of the individual patients. And the other [guideline groups] are starting to move from certainty to uncertainty as well."

Randomized Trial Results Needed

Two trials are currently trying to answer key questions about risk and benefit of aspirin for primary prevention in diabetic subjects: **A Study of Cardiovascular Events in Diabetes** (**ASCEND**) and the **Aspirin and Simvastatin Combination for Cardiovascular Events Prevention Trial in Diabetes** (**ACCEPT-D**).

In an accompanying editorial [4], **Drs Richard Haynes**, **Louise Bowman**, and **Jane Armitage** (Clinical Trial Service Unit, Oxford, UK) write that the evidence to date suggests "a modest but consistent reduction in the risk of vascular events with aspirin" but ongoing uncertainty as to whether these benefits are "clinically worthwhile" and outweigh the risks of bleeding.

Until clinical-trial results are in, they write, clinicians should use approaches "known to minimize cardiovascular risk (such as avoidance of smoking, [the use of] statins [and] ACE inhibitors, and good glucose control) before thinking about adding aspirin." Moreover, they note, "guidelines need to acknowledge the current equipoise and not recommend a treatment without supporting evidence, so that clinicians and their patients are fully aware of the evidence when making a decision."

To **heart*wire*** , Nicolucci points to another issue that warrants further exploration: whether there are specific characteristics of diabetic pathophysiology that make aspirin less likely to function as expected.

"There's strong basic research evidence suggesting that diabetes can represent a particular situation associated with poor response of platelets to aspirin, and there are many reasons for that," Nicolucci noted. "Diabetes is associated with hyperglycemia, hyperinsulinemia, insulin resistance, oxidative stress, and advanced glycation end products, and all these factors can be responsible for activation of platelets [via] different pathways that are not blocked by aspirin."

Nicolucci disclosed having no financial conflicts of interest; he is principal investigator for ACCEPT-D. The editorialists disclosed having no financial conflicts of interest; Armitage and Bowman are principal investigators for ASCEND.

References

1. De Berardis G, Sacco M, Strippoli GFM, et al. Aspirin for primary prevention of cardiovascular events in people with diabetes: Meta-analysis of randomised controlled trials. *BMJ* 2009; DOI:10.1136/bmj.b4531. Available at: http://www.bmj.com. Abstract
2. Antithrombotic Trialists' (ATT) Collaboration. Aspirin in the primary and secondary prevention of vascular disease: collaborative meta-analysis of individual participant data from randomised trials. *Lancet* 2009; 373:1849-1860. Abstract
3. Antithrombotic Trialists' Collaboration. Collaborative meta-analysis of randomised trials of antiplatelet therapy for prevention of death, myocardial infarction, and stroke in high risk patients. *BMJ* 2002; 324:71-86. Abstract
4. Haynes R, Bowman L, Armitage J. Aspirin for primary prevention of vascular disease in people with diabetes. *BMJ* 2009; DOI:10.1136/bmj.b4596. Available at: http://www.bmj.com. Abstract

Authors and Disclosures

November 11, 2009 (London, United Kingdom)— Another meta-analysis--this one focused on diabetics--is questioning the role of aspirin for the primary prevention of cardiovascular events [1]. Writing in a paper published online November 6, 2009 in *BMJ*, **Dr Giogria De Berardis** (Consorzio Mario Negri Sud, Maria Imbaro, Italy) and colleagues conclude that "a clear benefit of aspirin in the primary prevention of major cardiovascular events in people with diabetes remains unproved."

De Berardis and colleagues point out that almost all of the major society guidelines recommend aspirin for primary prevention of cardiovascular events in people with diabetes, based on the evidence extrapolated from trials of high-risk patients. "Patients with diabetes have high cardiovascular risk, so it was supposed that aspirin was also effective in patients with diabetes," senior author **Dr Antonio Nicolucci**

We need to select very carefully the patients who are more likely to benefit.

(Consorzio Mario Negri Sud) told **heart*wire*** . "But if we look at specific data coming from trials conducted in individuals with diabetes, quickly we realize that the evidence is not so strong."

Nicolucci, De Berardis, and their coinvestigators reviewed the literature for trials comparing aspirin with placebo or no aspirin in patients with diabetes and no known diagnosis of cardiovascular disease, ultimately identifying six eligible trials. When all of the data were combined, the authors found no statistically significant differences in the risk of major cardiovascular events, cardiovascular mortality, all-cause mortality, MI, or stroke, and "inconsistent" evidence of harm from aspirin use. In an analysis by sex, aspirin in men appeared to significantly reduce the risk of MI by 43%, but no significant reduction in MI was seen in women.

Effect of Aspirin Compared With Placebo or No Aspirin on Relative Risk of Clinical Events in Patients With Diabetes

End point	Relative risk	95% CI	p
Major cardiovascular events	0.90	0.81–1.00	0.06
MI	0.86	0.61–1.21	0.37
Stroke	0.83	0.60–1.14	0.25
Cardiovascular death	0.94	0.72–1.23	0.68
All-cause mortality	0.93	0.82–1.05	0.22
Any bleeding	2.50	0.76–8.21	NS

To **heart*wire*** , Nicolucci pointed to the meta-analysis [2] of aspirin for primary prevention published earlier this year in the *Lancet* by the **AntithromboticTrialists' Collaboration** and reported by **heart*wire*** --an update to their pivotal 2002 meta-analysis [3].

"It seems that not only in individuals with diabetes, but also in all other high-risk groups, the efficacy of aspirin for primary prevention is lower than expected. It doesn't mean that aspirin is not effective, it means that the efficacy is lower than expected, and that means we need to select very carefully the patients who are more likely to benefit."

Asked whether he thought guidelines should change, Nicolucci pointed out that guideline-writing committees are already softening their blanket recommendations.

"In the most recent guidelines from the **Canadian Diabetes Association**, for the first time they fully acknowledged the lack of definite data on the efficacy of aspirin, and they leave to the physician the decision of whether or not to use aspirin based on the characteristics of the individual patients. And the other [guideline groups] are starting to move from certainty to uncertainty as well."

Randomized Trial Results Needed

Two trials are currently trying to answer key questions about risk and benefit of aspirin for primary prevention in diabetic subjects: **A Study of Cardiovascular Events in Diabetes** (**ASCEND**) and the **Aspirin and Simvastatin Combination for CardiovascularEvents Prevention Trial in Diabetes** (**ACCEPT-D**).

In an accompanying editorial [4], **Drs Richard Haynes**, **Louise Bowman**, and **Jane Armitage** (Clinical Trial Service Unit, Oxford, UK) write that the evidence to date suggests "a modest but consistent reduction in the risk of vascular events with aspirin" but ongoing uncertainty as to whether these benefits are "clinically worthwhile" and outweigh the risks of bleeding.

Until clinical-trial results are in, they write, clinicians should use approaches "known tominimize cardiovascular risk (such as avoidance of smoking, [the use of] statins [and] ACE inhibitors, and goodglucose control) before thinking about adding aspirin." Moreover, they note, "guidelinesneed to acknowledge the current equipoise and not recommenda treatment without supporting evidence, so that cliniciansand their patients are fully aware of the evidence when makinga decision."

To **heart*wire*** , Nicolucci points to another issue that warrants further exploration: whether there are specific characteristics of diabetic pathophysiology that make aspirin less likely to function as expected.

"There's strong basic research evidence suggesting that diabetes can represent a particular situation associated with poor response of platelets to aspirin, and there are many reasons for that," Nicolucci noted. "Diabetes is associated with hyperglycemia, hyperinsulinemia, insulin resistance, oxidative stress, and advanced glycation end products, and all these factors can be responsible for activation of platelets [via] different pathways that are not blocked by aspirin."

Nicolucci disclosed having no financial conflicts of interest; he is principal investigator for ACCEPT-D. The editorialists disclosed having no financial conflicts of interest; Armitage and Bowman are principal investigators for ASCEND.

Journalist

Shelley Wood

Shelley Wood is a journalist for theheart.org, part of the WebMD Professional Network. She has been with theheart.org since 2000, and specializes in interventional cardiology. She studied literature at McGill University and the University of Cape Town and received her graduate degree in journalism from the University of British Columbia, specializing in health reporting. She can be reached at SMWood@webmd.net.

Medical News TODAY www.medicalnewstoday.com

Aspirin Does Not Prevent Heart Attacks In Diabetes Patients

17 Oct 2008 Click to Print

Taking regular aspirin and antioxidant supplements does not prevent heart attacks even in high risk groups with diabetes and asymptomatic arterial disease, and aspirin should only be given to patients with established heart disease, stroke or limb arterial disease, according to a study published today on bmj.com.

In light of these findings, and the evidence from six other well controlled trials, the prescribing practice of doctors and international guidelines should be reviewed so that aspirin is only prescribed to patients with established heart and stroke disease, argues the author of an accompanying editorial.

Patients with diabetes are two to five times more likely to suffer from heart disease than the general population and heart disease is a major cause of death in patients with type 1 and 2 diabetes. Although there is considerable evidence showing no protective benefit of aspirin in high risk patients without heart disease, guidelines are inconsistent and aspirin is commonly prescribed for the primary prevention of heart disease in patients with diabetes and with peripheral arterial disease.

But aspirin is one of the top 10 causes of adverse drug events reported to the Commission on Human Medicines. It causes gastrointestinal bleeding and the risk of bleeding increases with age and prolonged use.

Professor Jill Belch and colleagues from Scotland investigated whether aspirin and antioxidants given together or separately can reduce heart attacks and death in patients with diabetes and arterial disease. 1276 patients with diabetes and evidence of artery disease over 40 years of age were randomised to receive either aspirin or placebo, an antioxidant or placebo, aspirin and antioxidant or double placebo, and followed over eight years.

Overall, the researchers found no benefit from either aspirin or antioxidant treatment in the prevention of heart attacks or death. Patients in the aspirin groups had 116 primary events compared with 117 in the placebo group. No significant difference in events was seen between the antioxidant group and the placebo group.

The authors conclude by voicing their concern at the widespread prescribing of aspirin despite the lack of evidence to support its use in the primary prevention of heart attacks and death in people with diabetes and in view of its possible side effects.

These findings show that unlike statins and drugs for reducing hypertension, which have a benefit in all risk groups including those with and without heart disease, only patients with a history of clinical or symptomatic heart disease or stroke disease benefit from taking aspirin, writes Professor William Hiatt in an accompanying editorial.

Research paper:
"The prevention of progression of arterial disease and diabetes (POPADAD): a factorial randomised placebo controlled trial of aspirin and antioxidants in patients with diabetes and asymptomatic peripheral arterial disease
Jill Belch, Angus MacCuish, Iain Campbell, Stuart Cobbe, Roy Taylor, Robin Prescott, Robert Lee, Jean Bancroft, Shirley MacEwan, James Shepherd, Peter Macfarlane, Andrew Morris, Roland Jung, Christopher Kelly, Alan Connacher, Norman Peden, Andrew Jamieson, David Matthews, Graeme Leese , John McKnight, Iain O'Brien, Colin Semple, John Petrie, Derek Gordon, Stuart Pringle, Ron MacWalter
BMJ 2008;337:a1840 doi:10.1136/bmj.a1840
Click here to view abstract online

Editorial:
"Aspirin for prevention of cardiovascular events"

BMJ 2008;337:a1806 doi:10.1136/bmj.a1806
Click here to view first 150 words online

British Medical Journal
http://www.bmj.com

Article URL: http://www.medicalnewstoday.com/articles/125892.php

Main News Category: Diabetes

Also Appears In: Cardiovascular / Cardiology,