

# To Take or Not to Take Daily Baby Aspirin

**O**K Now you are all done with your Ugadi Celebration, it is time to get back to business. For years, doctors prescribed low-dose aspirin for many patients to prevent cardiovascular disease, including heart attack and stroke. However, aspirin is not harmless. It has bleeding risks.

Even though bleeding risk of low-dose aspirin is low, it can be significant and the risks and the benefit should be weighed against each other. Until 2018 giving low-dose aspirin to prevent heart disease was a norm.

In 2018, there were three large clinical trials on the use of aspirin for primary prevention.-that is, in people with risk factors for heart disease, but no history of heart attack, stroke, stents or had heart surgery- this revealed while aspirin reduces the incidence of major cardiovascular events, it also increased the risk of hemorrhagic stroke ( Brain Bleed ) which could be devastating.

It also increases gastrointestinal bleeding, resulting in hospitalization, blood transfusion, or even death. These findings lead to the recommendation that most people with risk factor for cardiovascular disease, but no history of heart attack or stroke should avoid taking daily aspirin as a preventative measure. How does aspirin work? Aspirin helps the heart mainly by preventing blood clots.

Aspirin acts by blocking an enzyme called. COX-1. This prevents the formation of Thromboxane A<sub>2</sub>, a substance that causes platelets to clump together ( Aggregate) and makes platelets less sticky. With less platelet aggregation, aspirin reduces the risk of blood clot formation in arteries, especially in arteries narrowed by atherosclerosis.

Most heart attacks occur when an unstable plaque ruptures and blood clot forms, blocking the blood flow. Aspirin can reduce the likelihood or severity of such an event. Why would many people continue to take aspirin against doctors advise. That is because - -Individuals think that it is better to be safe than sorry and they take it just in case.

They may think that aspirin, sold over-the-counter and commonly referred to as BABY ASPIRIN and can't be very dangerous. -Their parents or grandparents took it, so they were raised with the concept that daily aspirin is cardio protective Who should take daily aspirin ? In primary prevention, aspirin has very little role.

However, it has a place in secondary prevention., Namely, in individuals who have history of heart attack, stroke, stent or bypass surgery, all people with peripheral vascular disease. In these people, the benefits of aspirin outweigh risk So, these people should not stop taking aspirin without first discussing with their physicians. Who else should take aspirin daily?

Some cardiologist recommend aspirin for high risk primary prevention patient with low risk of bleeding. Who belong to this category requires clinical judgment. Aspirin is unlikely to be beneficial in primary prevention under the age of 40, since their cardiovascular risk is typically low.

Aspirin is also not advisable for those older than 70 for primary prevention because of their bleeding risk is higher For primary prevention in patients between the ages of 40 and 70, the following factors will help to decide the need for aspirin. -10 year cardiovascular risk event exceeding 10% -Strong family, history of early coronary artery disease, at a young age -Significant elevation of Lipoprotein (a) level -Elevated coronary artery calcium score In these individuals, the benefits of low-dose aspirin in preventing cardiovascular disease exceeds their bleeding risk Bottom line is that if your doctor recommends you discontinue aspirin, stop taking it.

If your doctor advised you to take daily aspirin, never stop it unless discussing this with your health care provider. Keshava Aithal

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