

The Multivitamin does it cover a multitude of dietary sins?

The Multivitamin is the most used supplement in the country with estimates that anywhere between 1/3 to 1/2 of the population use them. Who uses it? Why do we use it? Which one should you use? And is it worth using. We will try to answer all of these questions and more about the multivitamin!

So I hate vegetables- can't I just get what I need in a multivitamin?

No! Dietary supplements like a multivitamin can't ever replace the foods that have the same nutrients in the multivitamin because 1) It won't and can't contain all the nutrients and the benefits of the meat, fruit, or vegetable it is replacing. Whole foods contain a complex variety of nutrients and provide the needed dietary fiber that can help prevent diabetes, heart disease and help with constipation.

Furthermore, there are numerous other compounds which to date aren't easily replicated and put into a pill such as phytochemicals and antioxidants that can help prevent cancer, blood pressure issues, diabetes mellitus and other issues such as regular cell damage. Source-

www.mayoclinic.com/health/supplements/NU00198

What harm could a multivitamin do?

There are some studies that suggest that a multivitamin could increase the risk of prostate cancer. One study suggested that risks for advanced prostate cancer especially seemed to increase in males who had a family history of prostate cancer and were taking higher doses of multivitamins. That being said, these studies, while large, did have many questions and these results are only suggestive of a link at this time and more research needs to be done. There are also some other studies that suggest that betacarotene can increase the risk of lung cancer in smokers. Other studies out of the University of Washington have failed to show any reduction in the risk of lung cancer while taking multivitamin, vitamin E, vitamin C, and folate. Furthermore, the studies suggested a small increase in the risk of lung cancer with vitamin E use. But, if anything it should remind us that taking too much of a vitamin can be a bad thing and it is in no way a replacement for a well balanced diet! Some other mild symptoms include upset stomach or unpleasant taste. Source- Harvard Health Publications- originally printed in 10/07 issue of Harvard Mens's Health Watch, American Journal of Respiratory and Critical Care Medicine Vol. 177 pp. 525-530, (2008), MayoClinic- multivitamins- Are the they best thing for you? 3/6/08

What if I am 75 or over shouldn't we all be taking a multivitamin?

While many elderly should consider a multivitamin – they don't all need them. Again- the same scenario holds where if they are active, exercising regularly and having a good balanced diet, then they likely don't need a multivitamin. However, don't forget that the elderly should still focus on their calcium and vitamin D- intake (see vitamin-D- and calcium newsletter on our website for further information). In truth though, about 1/3 of the elderly are found to be deficient in certain vitamins and minerals. But while Iron, B12, Magnesium, and Folate are often low in the elderly, use of a multivitamin is usually the way to prevent that deficiency rather than individual supplements of Iron-etc. Part of the problem is that the people over age 75 tend to consume only about 1200 calories a day and that decreases their ability to get all of the needed vitamins and minerals they need. Source- http://myclevelandclinic.org/heart/prevention/alternative/vitamins_elderly.aspx

Who should take a multivitamin dietary supplement?

If you eat a balanced diet the good news is you likely don't need a multivitamin. It is difficult to truly say without extensive analysis of your diet but generally if you eat a wide variety of whole foods including fruits, vegetables, whole grains, lean meats and fish and legumes you likely don't need to take a multivitamin. Interestingly, the people most likely to take a multivitamin are the people that exercise

regularly and do eat a balanced healthy diet. Furthermore, because of the bias of who takes multivitamins in general (ie the healthy people with good habits) it makes it difficult to really say what benefits the multivitamin does versus the other things a healthy patient is doing. Sources- Www.mayoclinic.com/health/supplements/NU00198

That being said the following people would likely benefit from a multivitamin or other vitamins as noted--

a) Those with a poor diet or eat under 1600 calories a day (multivitamin) b) vegans or vegetarians who eat a limited variety of foods- (multivitamin and b12 likely helpful) c) those pregnant, breast feeding, or those planning to get pregnant (best to take a prenatal vitamin) d) if you have heavy periods or bleeding (consider Iron but talk to your health care provider) e) post menopausal women (should be on calcium and vitamin D) f) If you have any condition that prevents absorption of foods in any way – such as chronic diarrhea or food allergies or intolerance issues, or diseases of the pancreas, gallbladder, liver or intestines you should discuss what supplements are needed. g) Anyone who has had surgeries on the digestive tract that can affect how nutrients are absorbed (most notably gastric bypass surgery but many other problems) Source- Www.mayoclinic.com/health/supplements/NU00198

What multivitamin should I take?

You should take the one that is designed to provide the nutrients you need for your age and sex. It would be best to discuss this with your primary care provider. Some important considerations would be if you are taking Coumadin (warfarin), if you are pregnant or wish to become pregnant, and making sure that you take enough calcium and vitamin D- for your age (see my newsletter on Vitamin D- and Calcium). Furthermore, you want to take one that has only 100% of each daily value of vitamins (the exception to this would be vitamin D- and calcium levels- you will likely need to supplement these separately). While the daily value is only an estimate of the amount each vitamin or mineral, they are the best estimates we currently have of how much of each one you should get each day. So even the worst American diet in combination with a multivitamin (that has 100% of most all vitamins and minerals potentially excluding Calcium and Vitamin D) you get more than enough of all the vitamins and minerals. Just keep in mind that this does not replace a good diet and exercise plan. You also want to choose a supplement that has the USP label to ensure that the standards for strength, purity, and availability to the body is evaluated by the testing organization- U.S. Pharmacopeia (USP). Lastly watch your expiration dates and store it correctly. Source- Www.mayoclinic.com/health/supplements/NU00198

What about my kids should they take a multivitamin?

Given the number of “picky eaters” amongst kids one would think that most of them would need a multivitamin. However, since many of the foods they eat are “fortified” with vitamins like vitamin D, calcium, and vitamin C in many breakfast cereals, milk and orange juice, they supply most if not all of the needed vitamins and minerals for most kids. So most of the time they should be fine, but discussing this with your primary care provider to make a more accurate decision would be best. You should watch to make sure the vitamin D- and calcium, and iron amounts for your child are adequate in their diet. In some cases supplementation may be helpful, but again not usually necessary. Interestingly, there have been studies that conclude (just like their adult counterparts) that it was usually the kids who did not need the multivitamin that took one and the kids who should be on a multivitamin were not. Other situations where a multivitamin would be helpful include kids who have eating disorders, if they are not gaining enough weight (especially with a diagnosis of failure to thrive), if they don't have regular well-balanced meals, if they have a problem with any absorption issues or diarrhea, those with food allergies, or those on strict diets- including a vegan diet. Another thing to keep in mind is not to overdo vitamins- so watch several things. 1) Make sure the multivitamin is indicated for your child's

age group and doesn't give more than 100% of the daily value of the vitamins and minerals in the vitamin. 2) Given the array of gummi vitamins and tasty vitamins for kids, keep them out of reach of kids to make sure they don't eat more than they should or treat it like candy. 3) Remember multivitamins don't replace a well balanced diet- and you should not overdo Vitamins A,D,E, and K as they can be toxic. High doses of Vitamin C to fight a cold can cause headache, diarrhea, cramping and nausea. Source- www.mayoclinic.com- "Should I give multivitamins- to my preschooler, who's a picky eater." Arch Pediatr Adolescent Med/Vol 163 (No. 2) 2/09, Vitamin Supplements and Children from American Academy of Pediatrics- source- Caring for Your School-Age Child: Ages 5-12

So what is my take on the idea of a multivitamin?

There are studies to suggest that multivitamins may be harmful in certain situations. I don't think anyone could argue that a multivitamin is an adequate replacement or a great safety net for people who aren't doing regular measures to maintain a healthy diet and regular exercise. Also, for those of you who do have a good balanced diet and exercise regularly, I am not sure it is worth taking a multivitamin. If you healthy folk do take a multivitamin, make sure you don't take more than 100% of the recommended daily value as you are likely getting more than enough of these vitamins and minerals in your regular diet and higher doses may bring harm. While multivitamins are unlikely to harm you, (outside of the potential situations we outlined above) it is a drug and should be treated like one and moderation is key. To date, we have little proof that the multivitamin does much help unless you meet certain criteria. In low doses it should be ok for most to take, but we have little to say it is worth it. Ultimately, that is your call but excessive amounts of a good thing are not always a great idea. Looking at what many of the experts say (from the Mayo Clinic, Cleveland Clinic, National Institute of Health and Harvard) and what studies we do have on the topic, we know the multivitamin doesn't replace a good diet and exercise. Furthermore, it may not even be a good idea to prevent chronic disease. By the way, if anyone out there can find other studies out there please let me know as much of what I could find was 3-5 years old and I would love to include good information in a future newsletter. (National Institutes of Health State-of-the-Science conference statement: multivitamin/mineral supplements and chronic disease prevention. Ann Intern Med. 2006;145:000-000.