

Vitamins

Parents always need to think about what's best for their kids. What is the best breakfast? Best snack? Basically, what are the best foods so my kids don't get sick? It's not always easy to know what's right. One of the biggest points that gets forgotten – beside macro-nutrients (protein, fat and carbohydrates) in our body - is **vitamins** play a big role in kids' health by building a platform to support their healthy growth and overall well being. They are essential nutrients our body needs to work properly.

Why are vitamins so important for kids?

When kids ride their bicycles, go to soccer practice or fall by running too fast, vitamins (and minerals) make sure that every scratch and bruise heals properly.

Vitamins boost the immune system, support normal growth and development and help cells and organs do their jobs. As our children grow from infancy to puberty, their bodies' needs are changing on a daily basis. Whatever they eat at a young age will become their bodies' foundation which will decide their health in the future.

Vitamins give their bodies the ability to grow and proceed through these natural changes much more efficiently; it helps them stay on track developmentally. When kids are deficient in vitamins over a longer period of time, they can end up with various conditions and problems in the future. Since most children are physically active and their metabolisms are fast, parents may not see any damage, if any.

What kinds of vitamins are there?

Without complicating it too much, there are two categories of vitamins. There are **fat-soluble** vitamins and **water-soluble** vitamins.

FAT SOLUBLE VITAMINS

The fat-soluble vitamins (also called lipid-soluble vitamins) such as A, D, E and K are transported through the body by being absorbed and stored in our body fat for long periods of time, therefore we don't need to replenish them every day. But because these vitamins build up over long periods of time, it's possible to develop vitamin toxicity from too much. This is very unlikely to happen though from normal food consumption and a healthy, well balanced diet.

Fat-soluble vitamins are:

Vitamin A

- **prevents eye problems**
- **promotes a healthy immune system**
- **is essential for the growth and development of cells**
- **keeps skin healthy.**

Good sources of Vitamin A are cheese, milk, eggs, liver, fortified cereals, darkly colored orange or green vegetables (such as carrots, sweet potatoes, pumpkin and kale) and orange fruits such as cantaloupe, apricots, peaches, papayas and mangos.

Vitamin D

- **strengthens bones and teeth in our body**
- **help regulate the amount of calcium in the body**

We get most of our vitamin D from sunlight on our skin. This vitamin is produced by our body under the skin as a reaction to sunlight. You can also get vitamin D from eggs, fish oils (salmon, sardines, mackerel), milk and fortified foods like milk spreads and cereals.

A lack of vitamin D can lead to bone deformities such as rickets in children.

Vitamin E

- **works as an antioxidant and helps protect cells from damage**
- **is important for the health of red blood cells**

Vitamin E can mostly be found in vegetable oils (and soy, olive, corn), nuts and seeds, green leafy vegetables, avocados, wheat germ and whole grains.

Vitamin K

- **is needed for blood clotting**
- **helps build strong bones**

Vitamin K is found in green leafy vegetables, such as broccoli and spinach, vegetable oils, cereals.

WATER SOLUBLE VITAMINS

Water-soluble vitamins dissolve in the body's water for transport through the body. Since they are not stored in the body, you need to replenish them more frequently (daily). If you have more than you need, your body gets rid of the extra vitamins when you urinate. Since the body does not store water-soluble vitamins, they are generally not harmful. However, this does not mean that large amounts are necessarily harmless. Water-soluble vitamins, unlike fat-soluble vitamins, can be destroyed by heat or by being exposed to the air for too long. So if you juice fruits and vegetables in the morning, it is best to drink the juice right away to keep vitamins alive and get the most benefits possible. They can also be lost in water used for cooking. This means by cooking foods, especially boiling, we lose many of these vitamins. The best way to keep as many of the water-soluble vitamins in your food is to steam or grill foods rather than boil them.

Water-soluble vitamins are:

Vitamin C

- **helps wounds heal**
- **helps protect healthy cells**
- **strengthens the immune system, connective tissue and organs**

Vitamin C is found in oranges, strawberries, red and green peppers, broccoli, Brussels sprouts, potatoes, kiwi and tomatoes to name a few

B Vitamins

There are 8 types of vitamin B:

- Vitamin B1 (thiamine)
- Vitamin B2 (riboflavin)
- Vitamin B3 (niacin)
- Vitamin B5 (pantothenic acid)
- Vitamin B6 (pyridoxine)
- Vitamin B7 (biotin)
- Vitamin B9 (folic acid)
- Vitamin B12 (cyanocobalamin)

They all have important functions. To make it a little easier we combined the majority of vitamin B benefits and where you can find them.

B Vitamins:

- **help release energy from food**
- **keep nerves, cells, muscle tissue and digestive system healthy**
- **form red blood cells and help carry oxygen through our body**
- **keep skin and eyes healthy**
- **support our central nervous system**

They can be found in:

- beef, pork, chicken, turkey, fish (salmon, cod), liver
- mostly green vegetables (broccoli, Brussels sprouts, spinach, asparagus, peas, kale)
- fresh and dried fruits
- peanuts
- eggs, milk, cheese
- whole grains (breads, some cereals, oats, wheat germ, brown rice)
- potatoes

What are the most important vitamins for kids and how do I get them?

Many parents don't know how to supply their kids with enough vitamins to make it through the day or where to find them. This could be complicated, but it doesn't need to be.

When it comes to vitamins, you need to be aware that too much and/or too little of something over time can cause harm in our body, so it is important to maintain a healthy diet with "a little bit of everything." Most kids aren't heavy eaters and their portions are small, therefore, a vitamin "overdose" is hardly possible. Unfortunately, though the items most kids like to eat (i.e. mac 'n cheese, chicken fingers, etc.) aren't necessarily great sources of vitamins at all.

Produce centers and farmers markets offer us a wide variety of fresh and healthy food items to get us the vitamins and minerals our body needs.

A few tips:

- Instead of trying to memorize every vitamin, its function and where to find it, please see the food items listed below each vitamin in this article and get inspired. Are your kids eating these items for breakfast, lunch, dinner or as snacks? If yes, how many? And if not, how can you improve that?
- Find out what your kids like to eat and talk to them about trying some new things here and there.
- Little by little introduce new items. Make yourself a shopping list and shop for these items, maybe replace some "habit" veggies with new ones to see how your kids like them.
- Shop, prepare, cook and eat the new items together with your kids to inspire them. Then, get their opinion on them.
- Pick foods items with certain vitamins based on what your child likes to do.
EXAMPLE: Many kids today spend more time watching TV or on the computer. Since vitamin A supports the eye health, it is helpful to choose food items with lots of vitamin A.

Can there be too many vitamins?

More is not always better...

I spoke to a lot of different people, ranging from stay-home moms to exercise fanatics, about vitamins. Many of them thought if they filled up their body with as many different vitamins as possible then they would stay healthier, in better shape or wouldn't get sick anymore. That is not true. Think of your body as a glass of water – if you keep pouring water into it after it's full, it will simply overflow. Your body can only absorb and use a certain natural amount of vitamins per day. After that, anything extra will be "washed out" (water soluble vitamins) or could create some damage to your body if consumed in abundance.

Since the fat-soluble vitamins A, D, E and K are stored in the body for long periods of time they generally pose a greater risk for toxicity when consumed in excess than water-soluble vitamins. Symptoms of a vitamin “overdose” in children would be stomach problems such as diarrhea, nausea and cramps. A vitamin overdose in adults over many years could be more severe. Since children don’t eat large portions, it is easier to introduce healthier snacks throughout the day to cover all necessary vitamin groups. Therefore, eating a normal, well balanced diet will not lead to toxicity in healthy and active children.

Can there be not enough vitamins?

As we learned in this article, vitamins are part of the functioning, healing, development and overall well being of a kid’s body so not getting enough vitamins will create the opposite effect.

If your children are low in vitamins and specific nutrients, they become more likely to experience a variety of conditions. These can affect everything from their developmental growth to their internal systems. The problem is that many of these symptoms may not show up immediately. This leaves time for their bodies to develop problems that are a bigger concern instead of small immediate issues.

For example, a lack of vitamin D in children’s diets could create a condition called rickets which can lead to weak or possibly even deformed bones for a lifetime. Kids experience breaks and fractures much easier which will become more severe in adult life. Therefore, you want to make sure your children get plenty of vitamin D through both sun exposure and eating the right foods. A lack of vitamin C can lead to tiredness, weakness, sore muscles and bleeding gums. And not enough vitamin E can cause the destruction of vital red blood cells. More severe conditions can be obesity, diabetes, liver dysfunction and heart problems. In extreme cases, vitamin deficiencies can even lead to death.

All of this should not scare you, but it should definitely make you aware of what can happen if the human body doesn’t get enough good nutrition at a young age. A healthy diet with fresh food items with the right amount of exercise is a great beginning to build a VERY healthy foundation.

Please leave us some comments, ideas and inspirations for others how you add vitamins and nutrition into your child’s life.

Written by Sven Garrett