What You Need to Know About Vitamin A

*This handout was adapted from an articles posted March 2019 from unlockfood.ca*

Vitamin A is an essential vitamin, meaning it supports normal functioning but can’t be synthesised by the body. Our body needs a daily supply of this nutrient from Vitamin A rich foods but in small amounts as vitamin A is also a fat soluble vitamin that is stored in our liver when consumed in excess. Vitamin A contributes to normal growth and development while keeping our eyes, skin and immune system healthy. Vitamin A plays a key role in maintaining healthy vision and reproduction. Vitamin A supports the immune system by helping make white blood cells and is needed for formation and maintenance of mucous membrane, skin and bone.

There are two types of vitamin A: retinoids (derived from animal products) and carotenoids (derived from plants). The liver converts both forms of vitamin A into retinol.

How much vitamin A do I need per day?

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| **Age group** | **Recommended per day** |
| Boys 9-13 years old | 600mcg |
| Boys 14-18 years old | 900mcg |
| Girls 9-13 years old | 600mcg |
| Girls 14-18 years old | 700mcg |

**What are carotenoids?**

Carotenoids are [phytonutrients](https://www.unlockfood.ca/en/ViewDocument.aspx?id=147) found in different brightly colored vegetables and fruit. There are many types of carotenoids with different functions in the body. Some carotenoids (like **beta-carotene**) can be turned into vitamin A in the body.

Health Canada recommends that we eat **one dark green and one orange vegetable** or fruit each day. The reason for this recommendation is because the carotenoids from these foods contribute to our daily intake of vitamin A.

**What food contains sources of vitamin A?**

**Can your skin turn yellow if you eat too many carrots?**

*Yes.* This happens because we store beta-carotene (which is a yellow-orange pigment) in the cells under our skin.  Eating a lot of beta-carotene from foods can make your skin look yellow, but this is not harmful to your health.

Sources of vitamin A include eggs, milk, yoghurt, cheese, oily fish, liver and liver products and fortified low-fat spreads. You can also increase your vitamin A intake by eating more sources of beta-carotene, which the body then converts into vitamin A.  The main dietary sources of beta-carotene are:

* Yellow fruit - papaya, apricots, cantaloupe and mango
* Yellow, orange and red vegetables – carrots, bell peppers, summer squash, tomato, sweet potato
* Dark green (leafy) vegetables – broccoli, spinach and kale

**Do I need to take a vitamin A supplement?**

*No.* It is not recommended that you take a vitamin A supplement. High doses of vitamin A are toxic. We can store vitamin A in our liver for long periods of time. This means we are not at risk for becoming deficient in vitamin A, even if we don’t eat vitamin A rich foods for a few days.

Balanced, healthy eating based on [Canada’s Food Guide](http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/food-guide-aliment/view_eatwell_vue_bienmang-eng.pdf) will provide enough vitamin A for your daily needs either from animal food sources of vitamin A or the carotenoid rich dark green and orange

vegetables and fruit.