## **Benefits of Vitamin D**

Vitamin D plays an important role in bone building by enabling calcium uptake by your body. It is also very important for healthy immune system function and may help lower your risk of contracting colds. Vitamin D also helps confer innate immunity which may protect your body from the influenza virus. Vitamin D has been linked to the prevention of many different diseases, including multiple sclerosis, arthritis and even cancer. Children with higher vitamin D levels are less likely to suffer from asthma and allergies than those who are vitamin D deficient. Mental agility might be maintained by adequate levels of the vitamin, especially in the elderly. Because Vitamin D promotes calcium absorption, it is important for bone mineralization (hardening), which keeps your bones strong and supple. A sufficient amount of Vitamin D helps prevent joint pain and osteoporosis.

There is also evidence suggesting that Vitamin D may play an important role in weight loss, both in adults and in children. Some researchers are exploring whether vitamin D may act as a natural protector from low levels of radiation, such as the background radiation we receive from sunlight and other sources.

### What can high-vitamin D foods do for you?

- Help optimize calcium metabolism
- Help optimize phosphorus metabolism
- Help prevent type 2 diabetes, insulin resistance, high blood pressure, heart attack, congestive heart failure, and stroke
- Help prevent falls and muscle weakness
- Help prevent osteoporosis while
  maintaining bone integrity
- Help regulate insulin activity and blood sugar balance
- Help regulate immune system responses
- Help regulate muscle composition and muscle function
- Help regulate blood pressure
- Lower risk of excessive inflammation
- Lower risk of some bacterial infections
- Support cognitive function, especially in older persons
- Support mood stability, especially in older persons
- Help prevent chronic fatigue
- Help prevent the following types of cancer: bladder, breast, colon, ovarian, prostate and rectal

# What events can indicate a need for more foods rich in vitamin D?

- Muscle aches and muscle weakness
- Frequent falls, particularly among older persons
- Bone pain, frequent bone fractures, or soft bones
- Stunted growth in children
- Asthma in children (especially severe asthma)
- Impaired cognitive function, especially among older persons
- Lowered immunity
- Chronic low energy and fatigue
- Depression, particularly among older persons
- Presence of any autoimmune disorder
- Lack of exposure to sunlight for any reason, including geography, use of sunscreen, or wearing of protective clothing

## Foods High in Vitamin D

- Mushrooms
- Salmon
- Mackeral
- Sardines
- Tuna
- Eggs (yolk)
- Yogurt

### Overdose of Vitamin D (from suppliments)

Overdose of vitamin D makes the intestines absorb too much calcium. As a result, levels of calcium in blood will increase. This will lead to the calcification of soft tissues in the body like the heart, lungs, blood vessels and renal tubules, that will impair their ability to function properly.

High levels of vitamin D may also have a negative effect on the functioning of the renal system. This will be manifested in the form of polyuria, nocturia, polydipsia and renal failure.

Another symptom of vitamin D overdose include formation of kidney stones that may cause a lot of pain. Mental retardation, nausea, weakness of the muscles, muscle cramps, muscle atrophy, severe headache and nervousness are associated with high levels of vitamin D in the blood. Overdose of vitamin D also makes one prone to high blood pressure and heart diseases.



## **Top Foods Containing Vitamin D**

#### Shiitake and Button Mushrooms

Surprisingly, the dried versions of shiitake mushrooms are high in Vitamin D. This may be due to the fact that these mushrooms are adept at sucking up sunlight. Shiitake is also rich in B Vitamins like B1 & B2. Make sure that you find mushrooms that have been dried in the sun, not by some artificial means, in order to extract the benefits of high Vitamin D content.

#### Mackerel

A small, 3½ ounce portion of this Omega-3 rich fish will give you 90% of the recommended daily amount. Currently, the FDA recommends that we eat more of these oily fishes to infuse our bodies with the vitamins and omega-3 essential fatty acids (EFA's) that our body cannot produce on its own.

#### Sockeye Salmon

A small 3½ ounces portion of cooked salmon will give you 90% of the Dietary Reference Intake for Vitamin D. Make sure to purchase salmon that has been caught from the wild, if not, then sustainably farmed. Salmon eat zooplankton, an excellent source of the important vitamin.

#### Herring

Fish like herring are so high in vitamin D because they are the part of our food chain that thrive on plankton, which is chocked full of the vitamin.

#### Sardines

Sardines are one of the best foods containing Vitamin D. One small tin can of sardines will provide you with approximately 70% of your daily needs. These tiny canned fish are also a great source for Vitamin B12, Omega-3 Fatty Acids, protein and selenium.

#### Catfish

Again, another fish that makes a habit of feeding on plankton, catfish are constantly taking in minuscule sea life that create vitamin D from sunlight.

#### Tuna fish

Eat 3 ounces of tuna daily for 50% of your Vitamin D needs. Fresh, wild-caught tuna is the most nutritious. Remember, eating oily fish can also lubricate the body with "good fats," providing a host of health benefits to your body, like better memory and brain function.



#### Cod Liver Oil

If you can stomach the strong aroma, this oil is superrich in sunlight Vitamin D. This marvelously golden, yet terrible-tasting oil, is also rich in omega-3 fatty acids. Incorporating this oil into your diet will help you increase your bones ability to stay strong and healthy. Because of its high Vitamin D content, cod liver oil has also been shown to prevent osteoporosis in adult, improve brain function and optimize the functioning of the nervous system. What is more, the oil holds 10,000 IUs of vitamin D. One tablespoon of the oil provides more than enough Vitamin D for the day.

#### Eggs

Eggs are another food containing vitamin D in small amounts. Eating one egg will provide you with approximately 10% of your daily needs. I would personally recommend to eat free-range eggs from a local farm, if possible.

#### Sunshine

Okay, we know it's not a food, but daily "doses" of sunshine can seriously up your Vitamin D intake. In fact, this vitamin has actually been referred to as the sunshine vitamin. Light hitting the skin from the sun's rays stimulates the production of this vitamin and hormone. This is great news for those of us that can take a sun-bath daily. But for those of us in colder, cloudier climates, we can up our intake from the foods we eat. This could explain why Native Inuit people in Alaska ate so much fish!

#### Health Benefits of Vitamin D

There are many reasons to stock up on foods containing vitamin D. Health benefits of the vitamin include:

The prevention of chronic diseases such as many forms of cancer, osteoporosis, diabetes, heart disease, hypertension. The protection and lubrication of your bones, teeth and hair. The regulation of cellular growth and healthy cell activity Overall reduction of the inflammatory response, a condition known to cause many chronic diseases, from cancer to diabetes to obesity. Protection against adult osteoporosis Reduction in the risk of breast cancer in postmenopausal women Significant reduction in the occurrence of prostate cancer in African-American men