Vitamin D: Values for Normal Are Exaggerated

Examining a patient's blood for vitamin D levels has become common practice, with many millions of tests performed annually in the US. Based on the current standards of normal—30 ng/mL or greater—between 50 and 90 percent of adults and children are considered deficient in vitamin D.\(^1\) Even people who are exposed to large amounts of sunlight do not meet the standards for sufficiency. For example, after a spring and summer in sunny California and a trip to Costa Rica this past July (2010) with hours spent intentionally sunbathing, Mary McDougall had a vitamin D test run in August of 2010. She failed, based on commonly reported standards, with a value of 29.6 ng/mL. Many well-meaning doctors would have told her she was not in good health and in need of supplementation with vitamin D pills, perhaps for a lifetime.

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What is the Best Baby Formula

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Featured Recipes

Isa Chandra Moskowitz

Isa Chandra Moskowitz is an award-winning vegan chef and author of several best-selling cookbooks, including *Veganomicon*, *Vegan with a Vengeance*, and *Vegan Cupcakes Take Over the World*. A Brooklyn native who began her vegan cooking journey more than twenty years ago, she is inspired by New York City's diverse cuisine. You can find her cooking and writing at The Post Punk Kitchen.

Chickpea Piccata

Miso Udon Stir-fry with Greens & Beans

Mango BBQ Beans

Five-Spice Delicata Squash

Goddess Nicoise

Green Goddess Garlic Dressing
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Mary is not an unusual example of well-sunned people failing this commonly prescribed test. Similar results were found during a study of active young people living in Hawaii with an average sun exposure of 29 hours a week. Even with all that vitamin D-promoting solar radiation, 51 percent of the group failed to meet sufficiency levels of 30 ng/mL.\(^6\) The highest reported level was 62 ng/mL and several people had values below 20 ng/mL. Another study of 495 women with an average age of 74 years, living in Hawaii, a geographical area with high environmental UV irradiance, found 44 percent of subjects had vitamin D values of less than 30 ng/mL, but none were below 10 ng/mL; and there was little evidence of seasonal variation of vitamin D levels.\(^7\)

<table>
<thead>
<tr>
<th>Commonly Reported Standards for Blood Vitamin D Levels:</th>
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<tr>
<td>25-hydroxy vitamin D, reported as ng/mL.</td>
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<tr>
<td>Definite Deficiency: 10 or less</td>
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<tr>
<td>Deficiency: 20 or less</td>
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<tr>
<td>Insufficiency: 20 to 29</td>
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<tr>
<td>Sufficiency: 30 to 80</td>
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<tr>
<td>Above recommended: 81 to 199</td>
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<tr>
<td>Toxic: above 200</td>
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<tr>
<td>Based on recent reviews, adequate, I believe, is 20 ng/mL or greater (see below).</td>
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<tr>
<td>To convert ng/mL to nmol/ml, multiply by 2.496.</td>
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<tr>
<td>Laboratory inaccuracies have been reported to occur, so more than one reading should be requested before any drastic actions are taken, like accepting a lifetime of medication.</td>
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Normal Values for Vitamin D Are Set Too High

Normal levels are determined by comparing the effects of various levels of vitamin D in the blood to parameters of bone health, such as the body’s levels of parathyroid hormone (PTH), the ability of the intestine to absorb calcium, and a person’s bone mineral density (BMD). Recent reviews of the scientific literature have come to the conclusion that the level set as normal (30 ng/mL or greater) is unsubstantiated and in need of revision. Consider these comprehensive reports:

A review paper titled “Vitamin D Insufficiency” by Clifford Rosen published in the January 20, 2011 issue of the New England Journal of Medicine found “...the IOM (Institute of Medicine) report, based on evidence from observational studies and recent randomized trials, suggests that a serum level of 20 ng per milliliter of 25-hydroxy-vitamin D would protect 97.5% of the population against adverse skeletal outcomes such as fractures and falls.”\(^5\)
An editorial in the January 2011 issue of the *American Journal of Clinical Nutrition* reviewed a series of studies of children and found that a vitamin D level above 12 ng/mL had no benefit on calcium absorption and above 20 ng/mL there was no evidence on improved bone health.\(^8\)

A recent *United Kingdom consensus vitamin D position statement* indicates there is currently no standard definition of an optimal concentration of vitamin D, and that concentrations below 10 ng/mL should indicate deficiency.\(^9\)

Widespread recommendations for testing vitamin D levels using a standard that is too high to achieve is another example of *disease mongering*—where healthy people are turned into patients. The net effect is these newfound patients now spend more money on doctors’ visits, vitamin D tests, and supplements. My conclusion, based on the scientific research, is that normal should be considered 20 ng/mL or greater, a standard that most children and adults already meet. People failing to reach this acceptable level need to expose themselves to more sunshine.

**Sunlight Is the Source of Vitamin D**

Vitamin D is a hormone that is naturally produced within the body with the help of the ultraviolet radiation from sunshine. Humans had their origin in lands near the equator and had darkly pigmented skin appropriate for a high intensity of solar radiation. As people migrated from equatorial zones to greater latitudes, north and south, the pigmentation of their skin decreased in order to allow more sunlight to penetrate for D synthesis. This adaptation allowed people to move to parts of the world as far north as Alaska, where sunlight is marginal even during the summer months.

Except for some oily fish swimming in the waters of higher latitudes, vitamin D does not naturally occur in our food supply. The exception of oily fish demonstrates how natural environments support their inhabitants—in this case fish eating provides the preformed hormone vitamin D to people (and polar bears) living with very little sunlight almost all year long.

Outside of the natural production of vitamin D by sunlight and that found in oily fish, the only other substantial sources of vitamin D come from supplements sold as pills or fortified foods. The most well known food to which synthetic vitamin D is added during production is cow’s milk.

**Sunshine Is Essential for Good Health**

Insufficient sunlight unquestionably results in two serious and related diseases: rickets and osteomalacia. Abundant sunshine exposure has also been associated with less risk of heart disease, common cancers, multiple sclerosis, and other medical conditions. A review published in the March 23, 2011 issue of the *New England Journal of Medicine* stated that, “For outcomes beyond bone health, however, including cancer, cardiovascular disease, diabetes, and autoimmune disorders, the evidence was found to be inconsistent and inconclusive as to causality.”\(^10\)

The association between low vitamin D and common diseases is most certainly due to the confounding factor of food. People living in sunny equatorial regions eat a starch-based diet whereas populations living at higher latitudes, where sunshine is less abundant, eat more animal foods, dairy and meat products. An unhealthy diet causes heart disease, cancers, multiple sclerosis and other chronic diseases of Westerners. However, this obvious conclusion should not diminish the importance of sunshine.

**How Much Sun Do You Need?**

Overexposure to sunshine, resulting in skin damage, should be avoided. That said, when the entire body is exposed to enough solar radiation to cause the skin to become slightly pink (reddened)—an amount referred to as the *minimal erythemic dose* (MED)—then the exposed skin will release 10,000–20,000 IU of vitamin D into the circulation within 24 hours of exposure.\(^11\) Vitamin D made in the skin lasts at least two to three times longer in the circulation compared to taking vitamin D as a supplement.\(^12\) Therefore, the human body has a highly efficient capacity to make vitamin D with minimal sun exposure. Compare the effects of supplements in order to get some idea of the potency of sunlight to raise vitamin D levels in the blood: In general, for every 100 IU of vitamin D taken in, there is an increase of slightly less than 1 ng/mL in the serum level of 25-hydroxy-vitamin D.\(^11\)

In practical terms, a person living in Boston who is not suntanned and is fair-skinned will receive their total body MED from just 10 to 12 minutes of midday, July, summer sun. A darker-skinned Asian Indian will require three times this exposure in order to receive their total body MED. Very darkly pigmented people, such as blacks, will require 5 to 10 times more solar radiation than a white person. Vitamin D made in the spring, summer, and fall months is efficiently stored in the body fat and supplies people’s needs for winter months.
during winter months. The next best choice after natural sunlight would be to use artificial sunlight (sun beds, tanning booths).

I do not recommend taking vitamin D pill supplements (pills or liquids) for most people because they provide little benefit in terms of bone health and have concerning side effects. The overall harmful effects caused by nutritional imbalances created by taking these pills are far from fully understood; however, there is sufficient evidence that taking vitamin D by mouth may increase your risk of heart disease, several forms of cancer, and kidney stones. In addition, recent studies have suggested levels of 25-hydroxyvitamin D above 60 ng/mL are associated with an increased risk of pancreatic cancer, vascular calcification, and death from any cause.

These days many people fail to get adequate sun because of their dark skin pigmentation, living in high latitudes, wearing clothes, and working indoors. My initial response to a failed vitamin D test is to not take vitamin supplements, but rather to get outside, get more naked, and get closer to the equator on vacations. I highly recommend a Costa Rica McDougall Adventure trip at least once a year for optimal sunshine and excellent food.

References:

Favorite Five Articles from Recent Medical Journals

Acne Is Caused by Diet, Especially Dairy Products

Two recently published studies make a causal link between the high-fat Western diet and acne. The influence of dietary patterns on acne vulgaris in Koreans by JY Jung published in the European Journal of Dermatology concluded, “This study also showed that a high glycemic load diet, dairy food intake, high fat
diet, and iodine in Korean foods appear to play a role in acne exacerbation.”¹ Another study, Role of insulin, insulin-like growth factor-1, hyperglycaemic food and milk consumption in the pathogenesis of acne vulgaris by Bodo C. Melnik, published in the journal Experimental Dermatology, blamed milk consumption for adult acne.²

Comment: These two new studies add to previous research showing cow’s milk causes acne.³ Researchers reported in 2006 after studying 6,094 girls, aged 9 to 15, that those consuming two or more glasses of milk daily had 20% to 30% more acne, compared to girls consuming less than one glass daily. In this research, low-fat milk was implicated, suggesting that it was not the fat from the milk and cheese, but rather properties of the dairy protein that promoted pimples. This study proposed that milk protein causes a rise of a powerful growth hormone, insulin-like growth factor-1 (IGF-1), in the body, which in turn promotes acne. Male hormones, called androgens, which are increased by the consumption of milk and cheese, provide another mechanism for dairy’s role in causing acne.

For at least the past four decades doctors have told patients that diet has nothing to do with their acne. This dogmatic statement is based primarily on one study published 42 years ago in the Journal of the American Medical Association.² The author, Dr. James Fulton, studied 30 adolescents (14 girls and 16 boys) attending an acne clinic, and 35 young adult male prisoners with mild to moderate acne. The Chocolate Manufacturers Association of America provided the study with two kinds of candy bars: one with and one without chocolate. Both bars were made mostly of fat and sugar and had similar amounts of calories (557 to 592 calories per bar). The subjects then added one or the other bar to their usual daily food intake for the next four weeks. Nothing else was changed in their diet during the experiment except for the addition of the candy bars. They were still eating the same high-fat Western foods: meat, dairy, and free oils. Dr. Fulton and colleagues then counted the pimples on their young faces. Forty-six of the 65 subjects stayed the same, 10 were better, and 9 were worse. Not unexpectedly, the rate of sebum—a fatty substance secreted by the skin—excretion increased by 60% with the addition of either kind of the high-fat, high-sugar candy bar, with or without chocolate.

Please remember that the results of this single, seriously flawed, and irrelevant experiment are the heart and soul of the claim that “diet has nothing to do with acne.” Multiple scientific studies and the experiences of a few teenagers fortunate enough to have changed their diets show otherwise.

During their teenage years, boys and girls are obsessed with their personal appearance—not a single hair can be out of place when they leave for school each morning. Obviously, a face glistening with oily skin and marked by inflamed pustules is likely to destroy a young person’s self-image and self-confidence, to say the least. Protective parents will stand up for their children and make all efforts to support their happiness and success during these developmental years. In this case the benefits for children are as simple as fixing the foods on their dinner plates.


What Is the Best Baby Formula?

Differential growth patterns among healthy infants fed protein hydrolysate or cow-milk formulas by Julie A. Mennella, published in the journal Pediatrics found, “…that CMF-fed (cow milk formula-fed) infants' weight gain was accelerated, whereas PHF-fed (protein hydrolysate formula-fed) infants’ weight gain was normative.”¹ The authors noted that rapid rates of growth during the first year increase the risk for obesity, metabolic syndrome, and mortality from cardiovascular disease later on in life. Thus excessive weight gain for an infant is undesirable. Using breast-fed babies as the “gold standard of normal,” formula feeding has long been known to cause excessive weight gain. Growth differences were attributable to differences in gains in weight, not length. Soy-based formula was not tested.
Comment: As a practicing doctor, I find it very difficult to recommend any kind of artificial infant feeding. I can only recommend human breast milk (preferably from its original container, the breast). Bottle-feeding is known to cause an increase in the risk of sudden infant death syndrome (crib death), pneumococcal pneumonia (occurring 60 times more frequently during the first three months of life), hospitalization (occurring 10 times more frequently during the first year), reduced IQ, behavioral and speech difficulties, and an increase in ear infections. Much of the research states that feeding babies formula rather than breast milk contributes to type-1 diabetes. Furthermore, recent evidence suggests feeding PHF formula rather than cow’s milk-based formula will reduce the risk of children developing type-1 diabetes.7

Soy formulas promote estrogen-like activities due to their soy proteins. Lifetime exposure to estrogenic substances, especially during critical periods of development, has been associated with cancers and several deformities of the reproductive systems, including hypospadias in male babies.9 Research published in the February 2011 issue of the American Journal of Clinical Nutrition found negative effects of bottle-feeding on the health of young children’s arteries.4

My strong recommendation is that at the first hint of a problem with breast-feeding, mothers need to connect with a lactation consultant (like La Leche League). The health and happiness of the entire family depends on successful breast-feeding.

What about those rare circumstances when breast-feeding by the real mother is impossible? The next choice is a surrogate mother (a wet nurse). Unfortunately, this option is no longer the social norm in our society. Milk from a breast-milk bank is the next best choice. If left with the choice between various chemical concoctions called formula, protein hydrolysate formula is the most reasonable one to make.

Protein hydrolysate formulas are also known as “hypoallergenic cow’s milk-based formulas.” They are commonly recommended for infants who cannot tolerate (are allergic to) intact proteins (usually cow’s-milk proteins). In preparing these formulas, the milk proteins are broken down by enzymes and then ultra-filtrated to remove large molecules. Brands of these formulas include Similac Alimentum, Advance Ross Pediatrics EleCare, and Nutramigen Lipil. Thus, when parents and grandparents ask me what the best formula alternative to breast milk is; under duress, I recommend hypoallergenic cow’s milk-based formula.


Hidden Vegetables Cause Weight Loss

Hidden vegetables: an effective strategy to reduce energy intake and increase vegetable intake in adults by Alexandria D. Blatt published in the April 2011 issue of the American Journal of Clinical Nutrition found, “Large amounts of pureed vegetables can be incorporated into various foods to decrease the energy density. This strategy can lead to substantial reductions in energy intakes and increases in vegetable intakes.” Laboratory studies show that people tend to eat a consistent weight of food. As a result, if the energy density of the food is decreased, people consume less energy. The weight of the food remained about the same even after the pureed vegetables were added. To reduce the energy density, the amounts of pureed vegetables (carrots, squash, and cauliflower) in the standard recipe were increased by 3 or 4.5 times as the other ingredients were decreased. The overall vegetable intake was increased from a baseline of nine ounces daily to about sixteen ounces daily, which resulted in 357 fewer calories consumed daily. Ratings of hunger, fullness, and palatability did not differ between the various types of meals with and without added vegetables.

Comment: Increasing the intake of vegetables, especially at the expense of high-fat meat and dairy products, and “free oils,” results in weight loss and better health. Unfortunately, many people do not like vegetables. In this experiment the vegetables were pureed and hidden in the foods. One of the tricks we (Mary and John McDougall) used to get our children to eat vegetables when they were growing up was to blend them first and then add this blend to sauces. Spaghetti sauce was a favorite one for hiding
frightening vegetables.

Unfortunately, blending also causes adverse physical changes to the whole vegetable. Hitting a vegetable with a steel blade thousands of times in a grinder or blender disrupts the structure of the vegetables. The dietary fibers are pulverized, and as a result more food is consumed at a meal, and the body’s insulin levels rise higher—both changes making the pureed vegetables slightly more fattening. But in practical terms this difference will be imperceptible in weight loss and better health. Therefore, it is always better to eat your carrots, broccoli, and cauliflower whole. If that strategy is not resulting in better food choices then hiding pureed vegetables in other foods, and at the same time removing fats and oils, can be an effective way to lower calorie intake and should help with weight loss.


Measurement of PSA Velocity Harms More Men

An Empirical Evaluation of Guidelines on Prostate-specific Antigen Velocity in Prostate Cancer Detection by Andrew J. Vickers published in the March 16, 2011 issue of the Journal of the National Cancer Institute came to the definitive conclusion that, “We found no evidence to support the recommendation that men with high PSA velocity should be biopsied in the absence of other indications; this measure should not be included in practice guidelines....We found no reason to believe that implementation of the guideline (to include the use of the PSA velocity test) would improve patient outcomes; indeed, its use would lead to a large number of unnecessary biopsies. We therefore recommend that organizations issuing policy statements related to PSA and prostate cancer detection remove references to PSA velocity.”¹ These conclusions contradict the National Comprehensive Cancer Network (NCCN) and American Urological Association (AUA) guidelines, which state that men with a high PSA velocity (the rate of change of the PSA level)—between 0.35 to 4.0 ng/mL per year—should be considered for biopsy, even if the absolute level of PSA is very low.

Comment: The diagnosis of prostate cancer usually begins with a blood test to measure the prostate specific antigen (PSA). A PSA value over 4 ng/mL is considered worrisome. Because this static test is highly unreliable, doctors have looked to the rate of rise of the PSA, called the PSA velocity, to better predict who will be found to have prostate cancer by a biopsy of the prostate gland. All this testing is done in hopes of helping men ward off death. The end result, however, is more suffering for men and more profit for the prostate industries. For example, The American Urologic Association (AUA), a heavy promoter of PSA and PSA Velocity testing, represents the interests of its 16,500 members, most of them from urology and oncology businesses, and this organization is funded by GlaxoSmithKline, Lilly, Novartis, Pfizer, and other companies with obvious vested interests.

Think twice before agreeing to a PSA measurement of any kind. The PSA is a high-risk test—there is a 10% chance the results will be positive, leading to the next test, a series of biopsies of the prostate gland, which will show prostate cancer, on average, 30% of the time (depending on a man’s age). In the US the rate of microscopic prostate cancer is found in 8% of men in their twenties, 30% of men in their thirties, 50% of men in their fifties, and 80% of men in their seventies.²³ In addition to the expected anxiety, inconvenience, discomfort, and additional medical expenses, common complications from a biopsy include pain with the biopsy, blood in the urine, pain while urinating, and rectal bleeding. Blood in the semen and erectile dysfunction are also often reported following the biopsies. One month after surgery, 41% of men report erectile dysfunction, and after six months the problem persists in 15% of men.₄ In other words, it is permanent. On average, 12 separate needle biopsies are done during a single evaluation by the urologist, thereby causing damage the nerves involved with male erection.


BP Pills (ARBs) Increase the Risk of Dying
Olmesartan for the delay or prevention of microalbuminuria in type 2 diabetes by Hermann Haller, published in the March 10, 2011 issue of the New England Journal of Medicine found, “Olmesartan was associated with a delayed onset of microalbuminuria (protein in the urine), even though blood-pressure control in both groups was excellent according to current standards. The higher rate of fatal cardiovascular events with olmesartan among patients with preexisting coronary heart disease is of concern.” In this randomized, double-blind, multicenter, controlled trial, 4447 patients with type 2 diabetes, half received olmesartan and have took a placebo, for a median of 3.2 years. Additional antihypertensive drugs were used as needed to lower blood pressure to less than 130/80 mm Hg.

There was a greater number of fatal cardiovascular events in the group on olmesartan (15 patients compared with 3 patients in the placebo group). This excess in deaths was due to more cases of fatal myocardial infarction (5 vs. 0) and sudden cardiac deaths (7 vs. 1) in the olmesartan group.

Daiichi Sankyo supported this study. This Japanese-based company is involved in research, development, manufacturing, import, sales and marketing of pharmaceutical products. As might be expected, the article was written with an obvious effort to minimize the adverse consequences of this medication on patients.

Comment: Olmesartan belongs to a class of drugs known as angiotensin-receptor blockers (ARBs), also called angiotensin-receptor II antagonists. The most common brand name is Benicar. In Canada and Europe it is called Olmetec. These medications act by blocking the action of a blood vessel-constricting hormone called angiotensin. The medication lowers blood pressure by dilating the blood vessels and reducing the resistance to blood flow.

In November of 2004 an editorial titled, “Angiotensin receptor blockers and myocardial infarction. These drugs may increase myocardial infarction—and patients may need to be told,” was published in the British Medical Journal. The truth is, patients are never told about this real risk. This review noted that many previous studies have shown an increase in strokes and heart attacks with the use of ARBs.

One effort was made to take the spotlight off of olmesartan. Rather than the tested medication the researchers suggested the reason for more heart disease could have been the overtreatment of the blood pressure. This phenomena, known as the “J-curve of mortality”, results when blood pressure is lowered with medication below 85 mmHg diastolic. The study was designed to lower patients’ diastolic blood pressure to less than 80 mmHg diastolic.

In general, I introduce medications for elevated blood pressure when the pressure is sustained at 160/100 mmHg or greater for months. I pick this level to initiate drug-therapy based on the British Guidelines for Hypertension. I prefer the diuretic chlorothalidone to all other medications. My goal is to lower the diastolic pressure to between 85 and 90 mmHg with medication, but not any lower than that since the “J-curve of mortality” shows that overaggressive treatment with medications kills. I rarely use angiotensin receptor blockers because of the increased risk of strokes, heart attacks, and death that are described in this article. Other medications in this class include: Cozaar, Diovan, Avapro, Micardis, Teveten, Hyzaar, and Atacand.


Recipes

Featured Book: Appetite for Reduction by Isa Chandra Moskowitz

Mary’s Notes: Although many of the recipes in this book do contain a small amount of oil, it is used mostly for sautéing and an easy substitute is either vegetable broth or water. I like the book because of the many unique recipes with unusual flavors and original ideas. These are a few of my current favorites. I have modified a couple of them slightly to sauté in vegetable broth or water instead of oil, which I find does not change the delicious quality of the recipes and reduces the calories even more.
Appetite for Reduction  
by Isa Chandra Moskowitz

Isa Chandra Moskowitz is an award-winning vegan chef and author of several best-selling cookbooks, including Veganomicon, Vegan with a Vengeance, and Vegan Cupcakes Take Over the World. A Brooklyn native who began her vegan cooking journey more than twenty years ago, she is inspired by New York City’s diverse cuisine. You can find her cooking and writing at The Post Punk Kitchen (theppk.com).

All of Isa’s recipes in this book, Appetite For Reduction, are plant-based, low-fat, satisfying, and nutrient-dense: lots of nutrients with fewer calories. The beauty is you can follow these recipes and not have to obsess over calories to maintain your weight.

Chickpea Piccata
Serves 4  
Active time: 15 minutes. Total time: 30 minutes

A plate of piccata is like an instant fancy dinner with all the stops. One second you’re just sitting there, all normal-like, but the moment that first forkful of lemony wine bliss touches your tongue, you’re transported to candlelight and tablecloths, even if you’re sitting in front of the TV watching Dancing with the Stars. This version is made with chickpeas, which makes it super fast, and it’s served over arugula for some green. I know lots of people are accustomed to piccata with pasta, and that is the Italian tradition, but my first piccata was as a vegan and we vegans love our mashed potatoes, so that is what I suggest serving it with.

1 tablespoon vegetable broth  
1 scant cup thinly sliced shallots  
6 cloves garlic, sliced thinly  
2 tablespoons bread crumbs  
2 cups vegetable broth  
1/3 cup dry white wine  
A few pinches of freshly ground black pepper  
A generous pinch of dried thyme  
1 (16-ounce) can chickpeas, drained and rinsed  
¼ cup capers with a little brine  
3 tablespoons freshly squeezed lemon juice  
4 cups arugula

Preheat a large, heavy-bottomed pan over medium heat. Sauté the shallots and garlic in 1 tablespoon of the vegetable broth for about 5 minutes, until softened. Toast the bread crumbs by stirring constantly in a dry non-stick pan for about 2 minutes. They should turn a few shades darker. Add bread crumbs to vegetable mixture.

Add the vegetable broth, wine, salt, pepper, and thyme. Turn up the heat, bring the mixture to a rolling boil, and let the sauce reduce by half, it should take about 7 minutes.

Add the chickpeas and capers and let heat through, about 3 minutes. Add the lemon juice and turn off the heat.

If you’re serving the piccata with mashed potatoes, place the arugula in a wide bowl. Place the mashed potatoes on top of the arugula and ladle the piccata over the potatoes. The arugula will wilt and it will be lovely. If you are serving the piccata solo, just pour it right over the arugula.
**Miso Udon Stir-Fry with Greens & Beans**
Serves 4  
Active time: 10 minutes. Total time: 30 minutes

Everything you want out of life in one bowl. Or at least everything you want out of dinner: filling udon noodles, beans, and greens with flavorful, salty miso. I love azuki beans here; they have a sweet and nutty flavor that cuddles right up to the miso. They also have a tendency to fall apart just a bit, which is great for coating the noodles. However, if you can’t find azukis, black beans taste really great, too. For this recipe, use whatever miso you have on hand, but note that you may have to add more to your liking because misos vary in saltiness.

1 pound broccoli, stems sliced thinly, tops cut into florets  
8 ounces brown rice udon noodles  
3 Tablespoons vegetable broth  
6 cloves garlic, minced  
1 bunch swiss chard (about ½ pound), coarse stems removed, chopped roughly  
1 cup thinly sliced green onions, plus extra for garnish  
½ teaspoon salt (optional)  
1 (16 ounce) can azuki beans, drained and rinsed  
¼ cup miso  
½ cup hot water  
4 teaspoons toasted sesame seeds  
Sriracha hot sauce, to serve

Prepare a pot of salted water for cooking the noodles.

Preheat a large skillet over medium high heat. First, sauté the broccoli in a dry non-stick pan with a pinch of salt for about 5 minutes. Cover the pan and flip once or twice. The broccoli should be browned in some spots. Add a splash of water at the end, then cover for another minute. The pan should be steaming. Remove the broccoli from the pan and set aside. (By the way, that is my favorite way to prepare broccoli in general if I am serving it on the side.)

At this point, the water should be boiling. Use a mug to remove ½ cup of water; you can use that to mix into your miso in a few steps. Then cook the noodles according to the package directions. Drain when ready.

Now, we’ll put everything together. Preheat the large pan again, over medium heat. Sauté the garlic in the broth for about a minute, until fragrant. Add the chard, green onion, and salt, and sauté for about 5 minutes, until wilted. Add the beans and let heat through.

In the meantime, in a mug or measuring cup, mix together the miso and warm pasta water until relatively smooth.

Add the drained noodles to the pan, along with the miso mixture and broccoli. Sauté for about 2 minutes, using a pasta spoon, making sure everything is nice and coated. Taste for salt. To serve, top with sesame seeds and green onions and keep the Sriracha close at hand.

**Mango BBQ Beans**
Serves 6  
Active time: 15 minutes. Total time: 1 hour

Plain old BBQ beans are nice and everything, but mango gives them another dimension—a tart, tropical sweetness that makes them a bit more special. Barbeque flavors really benefit from a nice, long cooking time. Let these simmer on the stove for at least 45 minutes so that the beans absorb more of the flavor and the mango cooks down and melds with the tomato sauce. Serve with greens and rice.

3 tablespoons vegetable broth  
1 onion, chopped finely  
3 cloves garlic, minced  
1 mango, seeded and chopped small
1 cup tomato sauce
1 cup vegetable broth
½ teaspoon red pepper flakes, or ¼ teaspoon if you want it less spicy
½ teaspoon allspice
1 teaspoon ground coriander
½ teaspoon salt (optional)
1 (25-ounce) can kidney beans, drained and rinsed
1 teaspoon liquid smoke
2 to 3 tablespoons agave nectar

Preheat a 4-quart pot over medium heat. Sauté the onion and garlic in the broth with a pinch of salt for about 5 minutes, until translucent.

Add the mango, tomato sauce, broth, red pepper flakes, coriander, salt, and kidney beans. Turn up the heat and bring to a rolling boil. Lower the heat to a simmer and cover the pot, leaving a little room for steam to escape, and let cook for about 45 minutes, stirring often. The sauce should thicken and the mangoes should cook down a great deal.

Turn off the heat, mix in the agave and liquid smoke, and let the beans sit for about 5 minutes. Taste for sweetness and add more agave if needed. Adjust the salt and seasonings, and serve.

Five-Spice Delicata Squash
Serves 4
Active time: 10 minutes. Total time: 50 minutes

Delicata is the golden child of squash; it’s tender, sweet, creamy, and best of all, you don’t have to peel it; you can eat the skin. I’ve been using this water bath/tinfoil method to cook delicata for as long as I can remember...way before the internet told us how to cook things. I think it brings out the most flavor without adding a ton of (vegan) butter. Five-spice is a perfect blend for squash; star anise, cinnamon and uh, three other spices, I suppose. It just brings out the best.

2 average-size delicata squash, sliced in half lengthwise, seeds removed
4 teaspoons pure maple syrup
1 teaspoon Chinese five-spice powder
1 teaspoon salt (optional)

Preheat the oven to 425°F. Fill an 8 by 13-inch baking pan with about 1 ½ inches of water. Place the squashes in the water, cut side up. Drizzle each slice with a teaspoon of maple syrup, then sprinkle evenly with the five-spice and salt. Place a piece of parchment paper over the pan and then wrap with tinfoil and bake for about 45 minutes, or until the squash is pierced easily with a fork. Serve warm.

Goddess Nicoise
Serves 4
Active time: 20 minutes. Total time: 30 minutes

Salade Nicoise is a bistro staple. It’s steamed potatoes, crisp green beans and salty Nicoise olives dunked in a lush dressing. Traditionally it is served with tuna, but I serve it with lightly mashed chickpeas that are spiked with briny capers. NYC sidewalk cafes are lined with ladies talking on their cell phones, reading French Vogue, and eating this salad. Now you can bring it home, sans all the bus exhaust in your face and the crazy drunk guy trying to steal the bread basket off your table.

Green Goddess Garlic Dressing is a perfect accompaniment, but you can also serve it with the more traditional Balsamic Vinaigrette, if you prefer. Tiny red potatoes work best here, but if you can’t find any, then chop up regular ones into 1-inch pieces. This recipe does make a bunch of dirty dishes, but be a goddess and have someone else clean them up! For time management purposes, prepare the dressing while the potatoes are steaming, or (even better) prepare the dressing day in advance.

1 (16-ounce) can chickpeas, drained and rinsed
2 tablespoons capers
½ pound small whole red potatoes
½ pound green beans, stems removed
½ small red onion, cut into thin strips
1/3 cup Nicoise olives (kalamata olives work, too)
8 cups chopped red leaf lettuce
1 cup cherry tomatoes (orange if you can get them)
Fresh parsley and chopped chives, for garnish
About ¾ cup Green Goddess Garlic Dressing (recipe follows)

Prepare your steamer for the potatoes. Once it’s ready, steam the potatoes for 10 to 15 minutes; they should be pierced easily with a fork. Meanwhile, prepare an ice bath by filling a mixing bowl halfway with ice water. Add the green beans to the steamer and steam for 2 more minutes, until the beans are bright green.

Transfer the potatoes and green beans to the ice bath immediately. Let them cool while you prepare everything else.

Place the chickpeas in a mixing bowl and use a small potato masher or a fork to mash them. There should be no whole chickpeas left, but they shouldn’t be completely smooth like hummus, either, you want some texture. Add the capers and 2 tablespoons of the dressing. Mix well and set aside.

To assemble, place the lettuce in wide bowls. In a Salade Nicoise, usually all the components are kept together, instead of tossed. Place a handful each of potatoes and green beans in piles on the lettuce, along with a wedge of sliced onion and a handful of tomatoes, Place a scoop of the chickpea mixture in the center and top with the olives. Garnish with fresh herbs and serve with the dressing on the side.

Green Goddess Garlic Dressing
Serves 6 (3 Tablespoons each)
Active time: 15 minutes. Total time: 15 minutes

This is the stuff! I don’t use the word mouthwatering lightly, but the moment this dressing touches my tongue it just permeates every taste bud, and perhaps even the very core of my being. Herby, garlicky, tangy, luscious, vibrant....I’m gonna burn out all my food adjectives if I go on. I love to pour it on grain and bean salads. The tahini makes it a natural player in a Middle Eastern spread, and the miso makes it equally at home with Japanese dishes. But really, with all the flavors going on, it’s kind of everyone’s best friend. Again, use whichever miso you have on hand.

2 to 3 average-size cloves garlic
½ cup fresh chives
½ cup fresh parsley
2 tablespoons tahini
2 tablespoons nutritional yeast
1 tablespoon miso
1/3 cup water
2 tablespoons freshly squeezed lemon juice
½ teaspoon salt

Pulse two cloves of garlic, the chives, and the parsley in a food processor just to chop everything up. Add the remaining ingredients and blend until very smooth. Use a rubber spatula to scrape down the sides a few times. Now you should adjust it to your liking. See if it needs more salt and garlic, and thin the dressing with a tablespoon or two of water, if needed. Note that it will thicken a bit as it’s refrigerated, so if it appears thin, don’t worry!

Transfer to a tightly sealed container and chill until ready to serve.