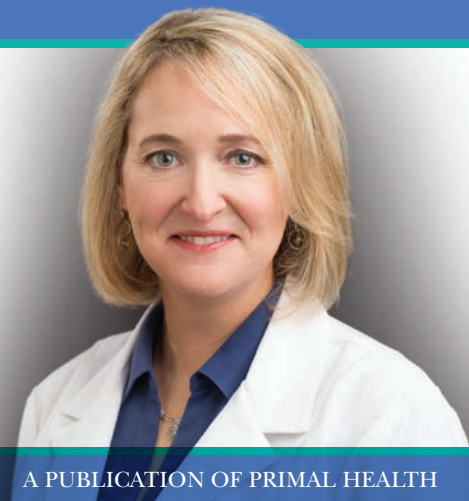


Dr. Marlene's NATURAL HEALTH CONNECTIONS

VOLUME 3 | ISSUE 02

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The Diabetic's Guide to Eating Meat



If you want to prevent diabetes, reduce dependence on diabetes drugs, or reverse the disease, should you eat meat? The answer depends on the type of meat and how you eat it.

Meat has been maligned as a source of bad fat and a contributor to diabetes, heart disease, and other ills — so much so that some health experts advocate shunning all foods that come from animals, including meat, eggs, dairy products, and fish. But don't panic.

You may be relieved to hear that meat can be a healthy food. When eaten the right way (which I'll explain in a moment), it can help to prevent diabetes and restore health if you have the disease. Although unprocessed plant foods are essential and most people need to eat more of these, I don't recommend a diet of *only* plant foods.

Health experts who tout a plant-only diet can be very passionate and vocal, but they're a minority. There's a bigger movement of leading health organizations recommending limiting meat in general and especially reducing red and processed meat. If you're trying to make healthy food

choices, this can be quite confusing and disheartening.

My patients often feel guilty when they eat beef. "I know I shouldn't be eating it," they tell me, and they're genuinely embarrassed. This can create unnecessary stress, which doesn't help your digestion, overall health, or risk for diabetes.

Not surprisingly, I find that meat is one of the most confusing aspects of diet for anyone. In the case of type 2 diabetes, it's even more critical to understand what role meat can play, and how it can harm or help.

A Word About Fish

I want to clarify the subject of fish, because it can be confusing in this context. Some of my patients tell me, "I don't eat meat, but I do eat fish." Well, fish and other forms of seafood may live in the ocean instead of on land, but they're still animals.

When I mention "meat," I'm including fish and other types of

seafood. Of course, there are nutritional differences between fish and meat from land animals. Bear with me — I'll get to these and how they relate to diabetes.

Important Meat Facts

Before I address specific types of meat that can help to prevent or reverse type 2 diabetes, I want to give you a bit of food history. The whole debate about whether people should eat meat leads to so many confusing messages that

Dr. Marlene's NATURAL HEALTH CONNECTIONS

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I find it's helpful to have some context. Then, you're in a better position to evaluate the latest headlines for yourself.

Some of our most popular cuts of meat and cooking methods aren't the healthiest ones (nor are other aspects of today's typical diets). But meat is not inherently bad for you — quite the opposite. Some of the essential nutrients in meat simply aren't found in plant foods. That said, there is a problem: The way we eat meat today can trigger higher levels of inflammation that contribute to diabetes and overall poor health. But meat doesn't have to work that way.

From everything we know about what humans have eaten throughout recorded history, meat has generally been one of the staples. War or famine may have temporarily made it unavailable, but it's historically been a desired and nutritious part of our diets.

There were movements in ancient Greece and in some Eastern religions to abstain from eating animal flesh to avoid inflicting pain on animals. However, total abstinence from animal-based foods has not been widely practiced around the world, with some isolated, mostly religious exceptions.

Throughout most of our history, any meat-free diets did not usually exclude all forms of animal-based foods. They were generally vegetarian: Animal flesh was excluded, but some products of animals, such as eggs, milk, and other dairy foods, were included.

The word "vegan," which describes abstinence from the flesh of all animals and all animal byproducts, is relatively new.

The term was coined in 1944 by Donald Watson, a woodworker in England, who also promoted "VEE-gan" as the correct pronunciation, which has been widely adopted.

The Vegan Lifestyle

Since the 1940s, the concept of a strictly vegan lifestyle has expanded to exclude every possible product that can come from an animal. Foods we may not automatically think of as animal products, such as honey or gelatin that's added to many foods (even marshmallows), would not be part of a vegan diet.

In a completely vegan approach, animal products would not be used in clothing and other everyday items, such as leather in jackets, shoes, handbags, luggage, furniture, or car interiors. Wool and silk fabrics and goose down and feathers in bedding or cushions, for example, would also be excluded.

In this broad sense, a vegan way of life aims to be kinder to all living things and the environment. It has a following among some celebrities and regular folk dedicated to this cause, which is admirable but difficult to adhere to.

Most people don't live a vegan lifestyle. But quite a few try to make at least some vegan choices of food or other goods because they believe this is a better way to be a citizen of the Earth.

Vegan Diet Pitfalls

Rather than adopting a vegan lifestyle for philosophical reasons, some people focus on eating a vegan diet because they believe it's healthier. If such a diet is carefully designed to deliver ample nutrients from a variety of fresh foods, with

(continued on page 4)

Experts Clash About Meat

There is no consensus among health experts about the healthiest diet. There are differing opinions about various aspects, such as the right amount of carbs, or whether it's better to eat small, frequent meals or larger ones less often. Discussion of such differences is often scholarly and generally quite civil.

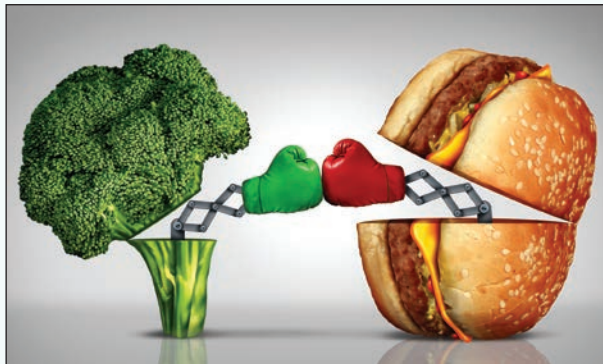
However, when it comes to whether meat is healthy, or whether a vegan diet is best, proponents tend to be much more vocal, passionate, and zealous. Criticism of one side by the other can be fierce.

Red meat, and even more so processed meat, has been labeled as a promoter of diabetes, heart disease, and cancer.¹ Guidelines from leading health organizations recommend eating less meat overall, and especially cutting back on red and processed meat. Research that disagrees can elicit extreme reactions.

Fierce Disagreement

In the fall of 2019, a panel of 14 researchers from seven countries — including one from Harvard and two others from leading universities in the United States — stirred up quite a controversy when they recommended different guidelines.

This group of researchers did the most extensive review to date of all the available studies about the health effects of red and processed meat, and their findings were published in a respected, peer-reviewed scientific journal: *Annals of Internal Medicine*.



They concluded that it's okay for people to keep eating the amount of red and processed meat that they're eating.

The publication of these findings triggered immediate and fierce criticism from groups that have issued recommendations to significantly limit red and processed meat. Such criticism came from the American Heart Association, the American Cancer Society, and other organizations.

The Physicians Committee for Responsible Medicine, a nonprofit group that advocates eating only plant foods, went so far as to file a petition with the Federal Trade Commission. It demanded that the government agency stop the journal from advertising its publication of the research, claiming the conclusions were false.

What the Latest Research Found

In the report in *Annals of Internal Medicine*,² the group of 14 researchers noted that the recommendations to avoid red and processed meat are based on observational studies that don't prove cause and effect. They also pointed out that organizations that produce guidelines "did not conduct or access rigorous

systematic reviews of the evidence."

The group of 14 analyzed dozens of earlier studies that tracked a total of several million people and found that the effects of reducing red and processed meat were relatively slight — too small to merit recommending the reduction in dietary

guidelines. Here are some of their conclusions:

Per 1,000 people, if everyone ate 3 fewer servings per week of red and processed meats, there would be:

- 6 fewer cases of type 2 diabetes.
- Between 1 and 6 fewer cases of heart disease, heart attack, or stroke.
- 7 fewer cancer deaths (except from prostate cancer, for which there would be no meaningful difference in death rates).
- No difference in the incidence of breast, colorectal, esophageal, gastric, pancreatic, and prostate cancers.

This group of researchers also noted that because all the research is observational, this isn't the last word on the subject, and it doesn't mean that people who choose to eat less or no red and processed meat wouldn't experience benefits.

For the record, I don't recommend eating large quantities of meat. As I discuss in the rest of this article, it matters what kind of meat you eat, how you prepare it, and what else you're habitually eating.

supplements to provide nutrients that are difficult or impossible to get in adequate amounts from plants, it can enhance health.

This is especially true if plant foods are unprocessed, are not too high in starchy carbs, and replace unhealthy processed foods and junk-food snacks. But beware: There are plenty of unhealthy processed vegan foods and snacks.

To be truly healthy, a vegan diet must be formulated very carefully to provide a variety of nutrients, to avoid deficiencies, and to include vitamin B12 supplements at the very least. Vitamin B12, iron, zinc, and collagen are the most likely nutrients to be lacking in a diet that excludes meat.

Most people don't have the time, knowledge, resources, or inclination to design and follow a nutritious vegan diet. For anyone who has type 2 diabetes or is at risk for the disease, deficiencies from not eating meat may well have a worse effect on overall health, which is already compromised.

Meat Provides Essential Vitamin B12

Vitamin B12 is found only in animal foods and is an essential nutrient, especially for anyone with type 2 diabetes. A deficiency may lead to weakness, fatigue, depression, memory loss, confusion, constipation or diarrhea, vision problems, heart palpitations, shortness of breath, nerve problems, and, in severe cases of longer-term deficiency, permanent nerve damage.

Deficiency of vitamin B12 can cause peripheral neuropathy — pain, tingling, and numbness in extremities — and in diabetics,

can contribute to foot ulcers.³ Peripheral neuropathy is a common complication of diabetes.

To make matters worse, metformin, the first drug typically prescribed for type 2 diabetes, depletes B12. This is a known problem, and anyone taking the drug on an ongoing basis should get B12 levels checked by their doctor.

Older people tend to be low in Vitamin B12 even if they aren't vegetarians or vegans, because their digestive system is less efficient at absorbing the vitamin from food. Avoiding animal foods compounds the problem.

One review of 18 studies, at East Carolina University in Greenville, N.C., found that both vegetarians and vegans are very likely to lack vitamin B12. Researchers found that up to 90 percent of older adults following such diets fell short, especially if they had followed a vegetarian diet for many years or were vegan.⁴

Meat Contains Bioavailable Zinc

Zinc is an essential trace mineral, meaning we need it in small amounts. For overall health, zinc is essential for healthy immune function, to help you resist infections, and to heal wounds. For anyone with diabetes, there are additional reasons why it's vital.

In the human body, zinc enhances sensitivity to insulin. This plays a major role in stopping or slowing the pathway to diabetes, which starts with reduced sensitivity to insulin. Less sensitivity to insulin leads to elevated levels of insulin, followed by elevated blood sugar, followed by a diagnosis of diabetes. Zinc also activates molecules that help to maintain stable levels of blood sugar, and it makes insulin work better.⁵

The amounts of zinc in plant foods are a fraction of those in meat, and the mineral is not as well

About Dr. Marlene

Dr. Marlene Merritt's passion for natural medicine is fueled by her drive to help others, and her own experience of overcoming a debilitating heart condition, diagnosed at the age of 20. A competitive cross-country cyclist at the time, she suddenly began experiencing severe chest pains. Forced to quit the sport, she suffered from extreme fatigue and constant pain for another 15 years, despite doing everything that conventional, Western medical doctors told her to do.

And then, the tide turned. A physician trained in naturopathic healing recommended a whole-food vitamin E supplement. A week after starting the supplement regimen, her energy began to return, and the pain began to disappear.

Dr. Marlene is a Doctor of Oriental Medicine, has a Master's in Nutrition, and is an Applied Clinical Nutritionist. She is Board Certified in Bariatric Counseling, and certified in the Bredesen MEND Protocol,[™] a groundbreaking method of reversing Alzheimer's disease. She sees patients at the Merritt Wellness Centers in Austin, Texas, and Santa Fe, New Mexico, trains health practitioners nationwide, and is the author of *Smart Blood Sugar* and *The Blood Pressure Solution*.



absorbed from plant sources as it is from meat. A review of 26 studies that compared zinc levels in people who do and don't eat meat found that zinc levels were significantly lower in vegetarians.⁶

Meat Contains Bioavailable Iron

It's quite possible to obtain enough iron by eating only plant foods, if the diet is designed correctly. Nonetheless, the form of iron in meat is more bioavailable than iron in plants. Some, but not all, studies have found lower levels of iron among people who don't eat meat.⁷

Excessively high levels of iron can increase risk for diabetes. On the other hand, lack of iron can lead to anemia and symptoms such as tiredness, shortness of breath, pale skin, heart palpitations, restless legs, and mouth sores.

Meat Is the Only Source of Essential Collagen

Collagen is a type of protein that is a major building block of your body, and it's found only in animals — not plants. Its name comes from the Greek word for glue, “kolla,” because it acts like a glue that holds all our tissues together, providing strength and structure.

Collagen is present everywhere in the human body. It supports the structure of skin, bones, connective tissue, arteries, organs, muscles, teeth — everything. As we get older, collagen breaks down.

Visible signs are thinner, more fragile skin, and wrinkles and sags; healing from a wound takes longer; and joints become less flexible or painful. We don't see internal changes with the naked eye, but they're there.

How to Make Bone Broth

Bone broth made the traditional way, by simmering bones and vegetable scraps for many hours, is a healing food because it's a rich source of collagen and other nutrients. I recommend it as a staple for everyone. But it's especially beneficial if you have type 2 diabetes or elevated levels of insulin or blood sugar, because collagen helps protect you against diabetes-related damage. Here's how to make it:

- Save up or buy bones of fish and bony, gristly parts of meat and poultry, including gizzards, backs, feet, and necks — parts you would normally throw out. To make a more gelatinous broth, which is very healing for your digestive system and joints, include chicken feet and pig feet or hocks.
- At the same time, save leftover vegetables and parts you would normally discard, such as tops and ends of carrots, celery, and onions, and leftover parsley. Keep all these in a bag in the freezer until you're ready to make broth.
- To make the broth, put all the bones (you can cook different kinds together) and vegetables in a crock pot, cover them with water, and add 2 tablespoons of white vinegar. The vinegar helps to pull minerals out of the bones.

Cooking Times

Set the crock pot temperature on low, put the lid on, and use these cooking times:

Fish bones: at least 4 hours

Chicken bones: at least 8 hours

Turkey bones: at least 12 hours

Beef bones: at least 24 hours

For a combination of bones, use the longest time. For example, if your pot includes beef bones, cook for at least 24 hours.

Strain the Broth and Remove Fat

After turning off the crock pot, let the broth cool. With a slotted spoon, remove large pieces. Then pour the liquid through a fine sieve into a pot. Cover the pot and put it in the fridge. In the next couple of hours, the fat will form a semi-solid layer on the top. Scrape off the fat and you're done.

Ways to Use Bone Broth

Heat up a cupful and drink it any time. Mixing in some turmeric or ginger adds more anti-inflammatory punch and some flavor. If you prefer to make it creamier, add some organic butter or coconut oil and froth it with a handheld blender. Bone broth can also be used in any sauce or soup recipe that calls for stock.

How to Store Bone Broth

Quantities that you'll use in the next day or two can be kept in the fridge, but the rest should be frozen. I like to pour it into ice cube trays. Once frozen, the cubes can be stored in a freezer bag, ready to use when needed.



Why Collagen Is Vital for Diabetics

When collagen or any other type of protein binds with sugar, its structure is damaged. The process is called “glycation.”

In diabetes, you have elevated levels of blood sugar, which causes collagen to break down more rapidly than it would in the normal process of aging. This mechanism underlies complications of diabetes, such as damage to skin, arteries, and eyes.⁸

Nearly 80 percent of people with type 2 diabetes experience skin problems at some point, which may include foot ulcers, skin infections, and wounds that don’t heal or heal very slowly. And in the presence of diabetes, skin ages more quickly.

One study, led by the University of Michigan in Ann Arbor, analyzed skin samples from people with and without type 2 diabetes. It found that even when there were no visible signs or history of skin problems in diabetics, collagen was damaged.⁹

The Best Kind of Meat

Our diets are sparse in collagen because we eat very few parts of animals. We eat only muscle meat, which contains very little collagen, and experts encourage us to stick with lean cuts such as skinless chicken breasts.

I’m not advocating fatty cuts. Rather, we need to eat other parts of animals: organs, some poultry skin, and the cheaper cuts around animal joints — because those are the richest sources of collagen and other nutrients.

In addition to collagen, these same cuts of meat — not muscle

Convenient Alternatives to Bone Broth

There are packaged versions of bone broth made the traditional way — not the same as “stock” or “beef broth” or “chicken broth.” The traditional ones are called “bone broth,” and labels describe how the product was made, including how many hours the broth cooked. But they’re very expensive, and you may or may not like the taste.

If you don’t have the time or inclination to make your own bone broth, I’ve found that these are a couple of practical ways to get extra collagen:



Make Your Own Healthy Gelatin Dessert

I’m *not* recommending Jell-O, which contains unhealthy sweeteners and additives. Instead, you can buy unflavored gelatin and make your own healthy version. I prefer Great Lakes unflavored gelatin because it’s made from grass-fed cows, and Knox unflavored gelatin is my second choice. Here’s how to turn it into a tasty, healthy dessert:

- Boil 4 cups of water.
- Add 3 tablespoons of sweetener such as xylitol, or to taste, and stir to dissolve.
- Add 4 herbal tea bags, such as tangerine, black cherry, or hibiscus, and let it steep for a few minutes.

- Sprinkle 2 tablespoons of gelatin into the warm liquid and let it sit for a few minutes to start dissolving.
- Mix thoroughly. A handheld frother works best.
- Pour the liquid into single-serve molds or ice cube trays and freeze.

Eat one serving or a few cubes each day. Gelatin is a pure protein supplement and can be a pleasant way to get healing collagen. You can also use unflavored gelatin to thicken soups and sauces, but be aware that it dissolves best in a warm liquid — not one that’s cold or boiling hot.

Collagen Supplements

You can buy pure collagen protein powder supplements; they’re formulated to mix well in both cold and hot liquids. They’re tasteless, so you can mix them into your favorite beverage or smoothie.

I like Great Lakes Collagen Hydrolysate. The term “hydrolysate” means that it’s broken down into smaller particles that are easier to dissolve and to be absorbed by your system. Some brands use the terms “hydrolyzed” or “collagen peptides” to describe the same type of formulation.

How much to take: I recommend 1 to 2 tablespoons daily in a liquid. The temperature doesn’t matter, but the best way to dissolve collagen powder is to pour it into a dry cup and then pour in the liquid and mix.

The Difference between Gelatin and Collagen Supplements

Both are good sources of collagen. Collagen supplements are more versatile because they dissolve in hot, warm, or cold liquids and don’t have a gelatinous texture, so you can mix them with any beverage. Gelatin dissolves only in warm liquid and has a gelatinous consistency.

meat — are rich in glycine, an amino acid that helps our bodies to detoxify. It also helps us make our own collagen internally.

I'm not saying you should never eat muscle meat. But our diets lack collagen because we almost *never* eat anything *but* muscle meat.

Way back when, long before vitamins and minerals had been discovered, organ meats were everyday fare and fulfilled the same role as our dietary supplements do today.

Grass-fed Meat Is Healthier

There's another issue with meat: Most of it comes from animals raised in feedlots and given growth hormones and antibiotics. They are fed corn and soy, which is not their natural diet, and the feed is sprayed with herbicides and pesticides. This type of diet makes the meat from feedlot animals inflammatory, and it contains toxins.

Grass-fed animals produce healthier meat because they eat a more natural diet, and this changes the type of fat in their meat. Their fat contains less inflammatory substances and more anti-inflammatory ones — the healthy omega-3 fats that are found in fish.

What About Fish?

The fish meat we eat is also muscle meat. As in land animals, collagen in fish is in the areas around the bones and other parts we don't eat. Buy a whole fish and instead of throwing out the head, bones, and other parts you don't eat, use them to make bone broth.

Coldwater fish are the richest source of healthy omega-3 fats that are anti-inflammatory and help to counteract the development of

diabetes. But mercury is a problem in large fish, such as albacore tuna and swordfish. Large fish live a long time, during which mercury keeps accumulating. Small fish with short lifespans, such as wild salmon, sardines, and herring, don't accumulate much mercury and are the best bets.

Farmed salmon contains just as much healthy omega-3 fats as wild salmon, and sometimes more. It's lower-priced and more plentiful in stores than wild salmon, but the farmed varieties may contain toxins, from food pellets and

unclean pens in which the fish are raised. Some farms don't have these problems.

If you're going to buy farmed salmon, learn about the fish-farming practices of the supplier. As a rule, stores that carry good-quality fish will be able to tell you about their sources and practices. Ask the staff at the fish counter and check the store's website for information.

The Best Ways to Cook Meat and Fish

There's a stereotypical image of a caveman cooking a big chunk

Healthy Meat Checklist

The healthiest meats are not processed, packaged, or cured with chemicals, but are fresh cuts. These are the most nutritious parts of an animal:

Organ meats such as liver, hearts, and kidneys, from land animals and fish, are the most nutrient-dense.



Bone foods are essential for collagen. These include bone broth and dishes that include bone marrow or are made with animal joints, such as pork knuckles.

Skins of poultry and fish contain more collagen than muscle meat. While skins don't make a meal, they should be eaten along with muscle meat.

Muscle meats of cows, pigs, chickens, turkeys, and fish are what we typically

eat. They aren't as nutrient-dense as organ meats and contain very little collagen — not enough to protect against diabetes damage or provide the best nutrition for healthy people.

If you don't routinely eat collagen-rich meats, drink traditional bone broth, eat gelatin, or take collagen supplements.

Cooking Methods

Slow cooking in a liquid at a low temperature — not over 300 degrees — is healthiest. Grilling at high temperatures produces toxic, inflammatory compounds, especially in the charred pieces. If charred meat is your favorite, consider it an occasional treat and explore the tastes and textures of slow-cooked recipes.

How Much Meat to Eat

The largest part of a healthy plate should be filled with vegetables that aren't starchy: different types of greens (raw or cooked), cruciferous vegetables such as broccoli, and other brightly colored ones, rather than potatoes, sweet potatoes, or corn. See *Related to This Topic* on page 8 for more details.

of meat over an open flame, but it isn't based on fact. The humans of that era preferred to boil their meat or to wrap it in leaves for cooking, and these are healthier cooking methods for meat.

For healthy dishes, slow-cook meat at a low temperature in liquids such as a broth, a marinade, or a wine-based sauce, and the juices of the meat. This type of cooking works very well for the cheaper, tougher cuts of meat that are rich in collagen.

Fish can be wrapped in parchment with fresh herbs and vegetables, which emit moisture for a steaming effect. And they infuse the fish with flavor.

When meat or fish is cooked at high temperatures (over 300 degrees) in a fryer or on a grill — and especially where meat is charred over an open flame — the process generates toxic compounds that are inflammatory and contribute to cancer as well as diabetes. Such compounds include advanced glycation end products, or AGEs for short. The acronym is appropriate because AGEs make

even healthy people age faster, on the outside and internally.

Advanced Glycation End Products (AGEs) and Diabetes

The levels of AGEs in our bodies increase as we get older, even if we're in good health. For anyone who has high blood sugar or diabetes, AGEs rise even more.

AGEs form when proteins and sugars combine. Elevated blood sugar leads to more AGEs, in addition to AGEs from high-heat cooking. You can reduce damage by eating a diet that keeps blood sugar at healthy levels and by slow-cooking meat at lower temperatures.

Oddly enough, experts routinely recommend grilling or broiling lean cuts of meat. That means you get no meaningful amount of collagen, which is protective, and more AGEs, which accelerate aging and contribute to disease.

The Bottom Line

Meat has been routinely eaten for as long as humans have been on

Earth, without causing problems. There were no diabetes epidemics among cavemen or the cultures that existed between those early times and the past few decades. What changed?

Our meat doesn't come from wild animals that forage for food in an environment free from pollution. Ancient humans weren't indulging in sugary and starchy foods whenever they pleased. And there was no processed food.

Most of today's meat contains toxins, such as pesticide and herbicide residues. And because animals are fed starchy corn and soy, instead of grazing on grasses, the fat in most meat is much more inflammatory than in earlier eras.


Put all these factors together and it isn't surprising that excess weight, high blood sugar, and diabetes are major problems. But if you eat a healthier diet overall, with as little processed food as possible and plenty of fresh vegetables, the right kinds of meat can help you stay healthy, prevent diabetes, and reverse the disease process.

Related to This Topic

These are some earlier issues of this newsletter that address related topics:

Related Topic	Volume	Issue	Title
Diabetes	1	1	The Link Between Diabetes and Alzheimer's Disease
Liver (page 7)	1	2	Liver: Nature's Superfood
Diabetes	2	4	Type 2 Diabetes: The Road to Recovery
A Healthy Diet	1	8	The Guide to Healthy Eating
Healthy Weight	2	1	10 Reasons Why You Gain Weight and Can't Lose It

Access these online by logging in to www.NaturalHealthConnections.com.



1 Battaglia, R.E., et al. "Health Risks Associated with Meat Consumption: A Review of Epidemiological Studies." *Int J Vitam Nutr Res.* 2015;85(1-2):70-8.

2 Johnston, B.C., et al. "Unprocessed Red Meat and Processed Meat Consumption: Dietary Guideline Recommendations From the Nutritional Recommendations (NutriRECS) Consortium." *Ann Intern Med.* 2019 Oct 1.

3 Badii, M., et al. "Vitamin B12 Deficiency and Foot Ulcers in Type 2 Diabetes Mellitus: A Case-Control Study." *Diabetes Metab Syndr Obes.* 2019; 12: 2589-2596.

4 Pawlak, R., et al. "How prevalent is vitamin B(12) deficiency among vegetarians?" *Nutr Rev.* 2013 Feb;71(2):110-7.

5 Björklund, G., et al. "The role of zinc and copper in insulin resistance and diabetes mellitus." *Curr Med Chem.* 2019 Sep 2.

6 Foster, M., et al. "Effect of vegetarian diets on zinc status: a systematic review and meta-analysis of studies in humans." *J Sci Food Agric.* 2013 Aug 15;93(10):2362-71.

7 Haider, L.M., et al. "The effect of vegetarian diets on iron status in adults: A systematic review and meta-analysis." *Crit Rev Food Sci Nutr.* 2018 May 24;58(8):1359-1374.

8 Paul, R.G., et al. "Glycation of collagen: the basis of its central role in the late complications of ageing and diabetes." *Int J Biochem Cell Biol.* 1996 Dec;28(12):1297-310.

9 Argyropoulos, A.J., et al. "Alterations of Dermal Connective Tissue Collagen in Diabetes: Molecular Basis of Aged-Appearing Skin." *PLoS One.* 2016 Apr 22;11(4):e0153806.

70-Year-Old Man Feasts on Pasta, Cheese, Bread, and Wine...

...and wakes up with a normal blood sugar reading of 84!

After getting “the lecture” from his doctor, 70-year old Bob Bianchi finally decided to eat better to help control his blood sugar. And while he wasn’t happy about it, he’d been doing pretty well...

Then recently, Bob’s son wanted him to celebrate his birthday together at a favorite Italian restaurant. How could Bob turn him down? “I’m just gonna take a night off and go for broke,” Bob decided.

And boy did Bob *feast*. He ordered the linguini with shrimp, layered in gooey mozzarella cheese and buried under heaps of sauce. Add in some bread and red wine, and it was heavenly!

So when Bob went to test his blood sugar the next morning, he was ready for bad news. But when the numbers popped up on the screen, he couldn’t believe it... His fasting blood sugar **was a mere 84** — smack dab in the middle of the normal range!

How the heck could this happen? Well, Bob had been eating sensibly most of the time, following his doctor’s orders. And he’d also been protecting his blood sugar by taking **GlucoBurn** from Primal Labs, a leader in nutritional supplements.

In fact, after just two days of taking Primal Labs’ **GlucoBurn**, Bob was shocked to see his morning fasting numbers at 63!

GlucoBurn is an easy-to-swallow gel cap containing four powerful nutrients to help with blood sugar control:

- 1 **White Mulberry Leaf Extract (the “Sugar Blocker”):** Prevents carbohydrates from getting broken down into sugar, so they never make it to your bloodstream.
- 2 **Banaba Leaf Extract:** Acts like an insulin copycat because it mimics the way insulin works at the cellular level. This allows your body to burn more sugar.

3 **ALA (Alpha Lipoic Acid):** Deep inside the energy factories in your cells, ALA helps break down sugars and amino acids into raw fuel — giving you more energy.

4 **Gymnema Sylvestre (the “Sugar Destroyer”):** This powerful nutrient slows down the digestion of carbs and sugar, making it harder for glucose to reach your bloodstream.

Here’s How GlucoBurn Works:

Just take one capsule with each meal. You’ll receive an optimal dose of the pure form of all four nutrients. Their effectiveness is supported by over 25 scientific research studies, including 11 randomized controlled trials, the gold standard of scientific research.

These clinical findings show that the four ingredients in **GlucoBurn**:

- ✓ Support **healthy blood sugar metabolism**
- ✓ **Reduce blood sugar spikes** after meals
- ✓ Support **healthy fasting blood sugar** levels
- ✓ Support **healthy HbA1c** levels
- ✓ **Stimulate insulin** release
- ✓ **Mimic** naturally occurring insulin

YES! You can do all these things with **GlucoBurn**. With blood sugar in the normal range, you’ll also enjoy better concentration, more energy, and a brighter mood. Put **GlucoBurn** to the test, and you’ll be convinced.



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Meatless Burgers

Are They Good for You?

The movement to eat less meat has prompted a flurry of new meat alternatives: burgers and other “meats” made from plant ingredients that mimic the real thing in texture, flavor, and appearance — some even bleed. But are they healthy options?

Burgers made of plant foods have been around for decades, but they haven’t become mainstream. New products — notably Impossible Burger and Beyond Burger — are appearing in regular supermarkets, fast-food chains, and other restaurants. These are going mainstream. So, I thought this would be a good time to see how the meatless burgers compare with real ones.



The Big Difference

If you grind up real meat and turn it into patties, you’re eating whole food. The meat may contain some toxins if it comes from conventional feedlots, and fast-food and packaged beef patties may contain artificial food additives. But the main ingredient is still a real food.

“Meat” made from plants generally contains either

100-percent processed ingredients (extracts of foods, substances created in a lab, and food additives) or some real foods plus a variety of processed ingredients. All the ingredients in the new, high-tech, more-realistic “meat” burgers are processed.

Protein and Carb Differences

Burgers full of processed ingredients contain amounts of protein comparable to a real beef burger, or maybe a bit more. But those with more real-food ingredients have less protein. While beef contains no carbohydrates, meatless burgers contain varying amounts. If you’re watching your carbs, it’s something to be aware of.

I looked at some popular brands of veggie burgers and found one (there may be others) with an ingredient list of only foods rather than extracts and additives: Amy’s Organic Sonoma Veggie Burger. This is encouraging, but its protein content is less than half that of a real burger, and it has 18 grams of carbs — compared to zero in beef. There isn’t anything wrong with that if you’re aware of the nutritional content and it works well in your diet.

The Soy Problem

Soy protein is a major ingredient in many meat alternatives. Soy is touted as a health food, yet there’s a lot of evidence that shows the

opposite, and I recommend staying away from it.

Soy contains anti-nutrients, meaning substances that prevent your digestive system from absorbing nutrients from the soy and other foods you’re eating.¹ And it can cause bloating, gas, and overall digestive upset. It’s also one of the most common food allergens, which is why the FDA requires that soy and any ingredient or food additive made from soy be clearly disclosed on labels.

Much of the research showing that soy is beneficial comes from Asia, where soy is eaten in very small quantities and fermented to make miso, tempeh, and natto. The fermentation eliminates the anti-nutrients. Studies have found that the Asian health benefits of soy don’t translate to this country.²

What to Look for on Labels of Meat Alternatives

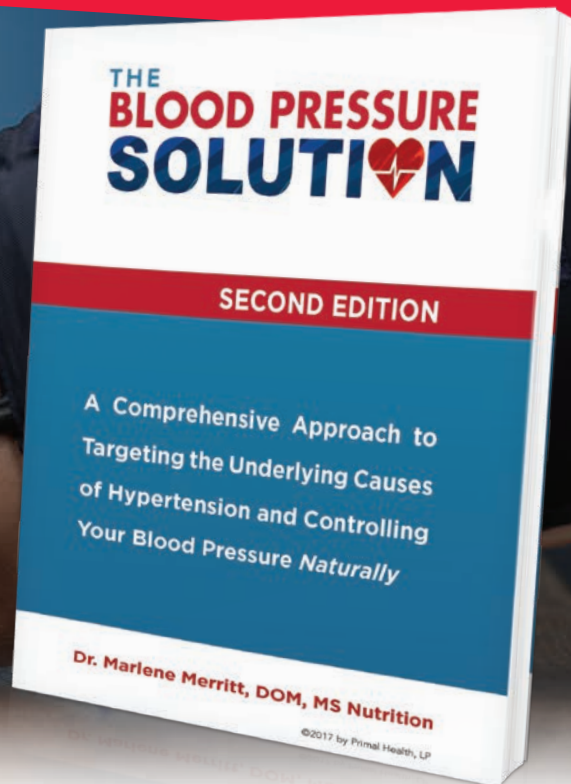
Ingredients may include a variety of food additives and various combinations of these: soy protein, pea protein, rice or rice protein, other grains, beans, wheat gluten, vegetables, seeds, nuts, or mushrooms. I recommend:

- Avoid soy.
- Avoid gluten.
- Check carb content.
- Aim for real-food ingredients rather than processed ones.

If you don’t object to meat for philosophical or religious reasons, I would consider grass-fed beef as an alternative — see pages 1–8 of this issue for reasons why.

1 Liener, I.E. “Implications of antinutritional components in soybean foods.” *Crit Rev Food Sci Nutr.* 1994;34(1):31-67. 2 Chen, M., et al. “Association between soy isoflavone intake and breast cancer risk for pre- and post-menopausal women: a meta-analysis of epidemiological studies.” *PLoS One.* 2014 Feb 20;9(2):e89288.

Get Dr. Marlene's Best-Selling Book... **Blood Pressure Solution!**



Dr. Marlene has been sounding the alarm about dangerous blood pressure drugs for the last 15 years — and offering a safe, natural alternative.

She has worked with hundreds of patients who were suffering high blood pressure—many were taking two, three, even four medications and going through awful side effects...

Just like Kathleen Kelly, whose ankles swelled up from the prescription blood pressure drugs she was taking. She also suffered an awful cough from using Lisinopril. By the time she read Dr. Marlene's best-selling book, **Blood Pressure Solution**, Kathleen's doctor had her on three blood pressure medicines combined—and her blood pressure was still high!

"My patients are always surprised to see how easy it is to use my natural Blood Pressure Solution," said Dr. Marlene. "The diet is not restrictive. Many of the foods you thought were taboo are perfectly ok—like steak is ok, butter is ok, natural sea salt is ok, even several carb foods are good. Part of the solution is to get good fats into your diet."

After reading **Blood Pressure Solution**, Kathleen made simple lifestyle changes found in the book and began to see immediate results...

"My blood pressure came down right away...I just feel great. I'm ecstatic. I go around telling everybody I found the fountain of youth. I have much more energy now. My concentration and focus are better. I can walk around my block without getting winded anymore. I am 100% off my medication."

Did you see that? Kathleen reports she is 100% off her medications. And so can you!

Yes! You too can be off these anti-hypertensive drugs... maintain blood pressure in the normal range... and feel good again!

Dr. Marlene Merritt's **Blood Pressure Solution** is working for people all across America. And she believes it can work for you, too. Here's how...

Dr. Marlene originally developed her unique solution for her patients at the Merritt Wellness Center in Austin, Texas. And after seeing just how successful it was for people in her own community—she decided to put her entire natural solution, with step-by-step guidance, into an easy-to-use book called, **Blood Pressure Solution**.

This is a comprehensive approach to targeting the underlying causes of hypertension and controlling your blood pressure naturally.

Dr. Marlene's book has been sweeping the country with over 330,000 copies sold in the U.S., and even 32,000 copies shipped overseas.

So, are you ready to bring your blood pressure back to the normal range? Gain more energy? Drop a few unwanted pounds? And feel better than you have in years, just as Kathleen did?

Great! Get your copy of Dr. Marlene's best-selling book, **Blood Pressure Solution** today! Go to the website listed below, and you'll see a complete review of the book, watch videos from people just like Kathleen and order your copy of **Blood Pressure Solution**!

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Q&A

Q: I recently started having trouble digesting food, and my doctor told me I have gastroparesis. I also have type 2 diabetes and am struggling with my blood sugar. Can apple cider vinegar help my digestion? — *Margie M.*



A: In gastroparesis — also described as delayed gastric emptying — food stays in the stomach for too long before moving through the digestive system. Heartburn is one symptom, along with feeling uncomfortably full after eating. Diabetes is the most common cause of the condition.

Elevated levels of blood sugar can damage nerves. In the case of gastroparesis, the damage would be to nerves that stimulate contractions of internal muscles that help to move food out of the stomach after you've eaten.

In this situation, it's essential to reduce levels of blood sugar, and the best way to do this is by changing your diet. Many of my patients have done this by following my regimen, described in Volume 2, Issue 4, of this newsletter: *Type 2 Diabetes: The Road to Recovery*.

If you're taking diabetes medication and make changes in your diet, let your doctor know so that medication dosages can be reduced as your body naturally starts to bring down levels of blood sugar.

Meanwhile, apple cider vinegar may help if you have low levels of stomach acid, which your stomach needs to break down food. Low stomach acid doesn't cause your nerves to malfunction, but it does slow down the digestive process in a different way than gastroparesis.

If you want to try apple cider vinegar, start with a small amount. Mix a teaspoon in a glass of water and drink it just before a meal. Or, drink a smaller amount before two or three meals, for a total of a teaspoon for the whole day.

It's important to dilute the vinegar well so that it doesn't irritate your throat. After drinking it, rinse your mouth with plain water because vinegar is hard on the enamel of your teeth.

If the vinegar helps, gradually work up to a tablespoon of apple cider vinegar in a glass of water for the day. But if the vinegar makes you feel worse, don't keep taking it.

Q: What is your take on legumes as part of a heart-healthy diet? On the one hand they are higher in carbs than other vegetables, but they are also a great source of protein and fiber. — *Carlton D.*

A: You're absolutely correct about legumes, such as beans and peas, being nutritious. The short answer is that they certainly can be part of a healthy diet.

As you mention, legumes are relatively high in carbs, and I find



that an overload of carbs is so common these days. I don't believe in excluding any entire category of food, but eating too many legumes can add to that overload.

Fresh vegetables that aren't high carb, such as all the greens, cruciferous vegetables, and all the brightly colored vegetables, are in short supply in the conveniently packaged foods that we're surrounded with. So, I put a high priority on eating more of those vegetables.

What really matters is your overall diet. For anyone who is struggling to control their weight, blood sugar, or blood pressure, it's important to recognize that legumes are rich in carbs and to make sure that overall carb intake each day isn't too high.

Do you have a question for Dr. Marlene?

Send your health-related questions to drmarlene@naturalhealthconnections.com. Please include your first name and the initial of your last name. Although she cannot answer each question directly, Dr. Marlene will select a few in each newsletter and will address other questions and concerns in articles in future issues. Answers are intended for educational purposes only and should not be viewed as medical advice. If you need help with your subscription or have questions about Primal Health supplements, email support@primalhealthlp.com or call 877-300-7849.