

Should You Be A Vegetarian or Meat Eater? Part III

Built for Plants or Animals?

Penelope was born with the perfect body for a plant-based diet. Her muscular calves look like they belong to a Tour de France cyclist though she does not own a bicycle and her exercise program is best described as relaxed. Her stomach is flat even when she carries a spare fifteen or twenty pounds because she ate too many Christmas cookies or drank an extra margarita. Penny is blessed with good muscle tone.

Muscle tone is the indicator of how primed and ready your muscles are for action. Your muscles are always partially contracted even when they are resting. The level of firmness in their relaxed state is your level of muscle tone. Exercise improves muscle tone but some people like Penny can exercise very little and maintain good tone. Others who exercise regularly can still be on the doughy side.

Penny is also blessed with energy to burn. Her family and friends struggle to keep up with her. Full of ideas and life she go, go, goes like the energizer bunny. Everybody wants to be energetic but Penny has a hard time calming down her mind. Her vivacity comes with equal measures of intensity and anxiety.

Her metabolism, on the other hand is a slug. Very few extra cookies were needed to pack on five extra pounds over the holidays. She does not need to eat much to maintain her energy level or weight. For Penny, a little food goes a long way. Her food also seems to take the long road through her digestive system so

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she struggles with constipation and irritable bowel syndrome (IBS). When she stopped eating meat and cheese and concentrated on beans, vegetables and whole grains, her digestion improved and the extra weight disappeared.

Sergio needs to eat meat. He is an attractive man in his late twenties who I am sure never has trouble getting dates. Nonetheless, he did not fare as well in the muscle tone department. Early during our consultation, he shot out of his chair, pulled up his shirt and grabbed a small handful of stomach flesh. “Look at this,” he cried. “I work out six days a week, watch everything I eat and still am not ripped. My friends show up at the gym a couple times a week, drink beer on the week-end and have better muscles,” he observed miserably.

Sergio’s energy was fine as long as he watched his diet. He avoided junk food and ate regular meals or he would feel the effects immediately. There was nothing medically wrong with Sergio but he should have had more muscle development given his work out regime. On the sliding scale of dense vs. softer muscles, he leaned towards the softer side. He also had fast but not particularly efficient digestion and absorption. This was how his body was telling him he would do best with meat in his diet.

Your Body’s Secret Signals

Your body configuration, energy levels and digestive system all provide clues about how you turn the energy potential of food into energy your body can use. The energy potential of food is most concentrated in meat and least concentrated in fruits and vegetables. Eggs, fish, nuts, dairy foods and grains

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are somewhere in between. In the simplest terms, the better you are at extracting energy out of your food (digestion and absorption) and then converting those chemicals to cellular fuel (as indicated by muscle tone and vigor), the less you need meat.

Let's look at the clues in each of these areas starting with the digestive system. The digestive system is the way food gets processed and delivered to the cells. If you look at your cells as energy making and consuming factories, think of your digestive system as the trucks delivering the raw materials so they can function.

People like Penny with efficient digestion can squeeze every last nutrient out of a meal even if the process generates a few cramps or gas. Digestion starts with the mechanical process of grinding up a mouthful of burrito into smaller pieces. The masticated mush travels down the esophagus to an acid bath, otherwise known as the stomach. The stomach churns until the acid and food are thoroughly mixed.

Stomach acid is critical for protein digestion but is too corrosive for the rest of the system. Rather than neutralize the acid all at once, the belly spits out little balls of the mixture into the intestine so they can be alkalized in an orderly fashion. The process is similar to the conveyor belt at a donut shop. Imagine the little rings of dough rolling out of the oven and being sprayed with glaze. A donut conga line is not the healthiest food image but you get the picture.

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In the intestines, enzymes and bacteria attack the little balls of food mush. They process the food until the particles are small enough to be absorbed into the blood. Fiber and anything else that cannot be digested ends up in the toilet.

The healthiest vegetarians and vegans have efficient digestive systems. They can squeeze the protein, vitamins and minerals out of the less energy dense plant foods. People with strong digestive constitutions are not overly tied to eating schedules. If they are a few hours late for lunch or even skip a meal they do not suffer from serious symptoms of low blood sugar. Their bodies manage their energy flow throughout the day without much ado.

Another common characteristic of those who thrive without meat is sensitivity to heavy food. Natural born vegetarians do not require large quantities of food and may find meat overwhelms their finely honed digestive system. Penny's sluggish digestion and irritable bowel syndrome disappeared when she stopped eating meat. The only down side of her vegan diet is she now get symptoms of low blood sugar such as headaches and crankiness if she skips a meal. Because plant based food is less dense, it has less staying power so she needs to eat regular meals. Vegetarians who eat cheese and eggs are less susceptible to low blood sugar issues because cheese and eggs are more energy dense foods.

Once food is broken down to molecule size, it seeps from the blood into the cells. In the cells are tiny energy making factories called mitochondria. They turn the now microscopic particles into cellular fuel or ATP (adenosine triphosphate). This process involves many chemical steps and is complicated. You do not need

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to understand the whole mind bending process but what you do need to know is your muscle tone reflects how good you are at converting food energy into cellular energy.

Exercise yields bigger muscles when you have an even and efficient energy supply of ATP. Your basic ability to convert food energy to ATP is inherited but pesticides, toxins and viruses can damage the mitochondria and alter your natural tendencies. Whether you were born with a tendency towards low tone or acquired it, you will do better or worse with the hand you were dealt depending on your lifestyle choices.

How Does Your Energy Flow?

Energy constitution can also be gauged by intensity and stamina. When Greta comes to visit, I feel like if I had hatches, I should batten them down. Gregarious and rosy cheeked, she is the personification of the 5 Hour Energy shots sold at gas stations. When she is relaxed, she laughs frequently and lifts the mood of everyone in her orbit. Under stress, she is intense and volatile.

Greta loves to eat but puts on weight easily. Her physical complaints are occasional joint pain and a tendency towards high blood pressure. Though she can get tired like anyone, she is a robust specimen.

Because a vegetarian diet has soothing and anti-inflammation effects, limiting meat and eating plenty of vegetables is the best diet strategy for Greta. Once on a difficult trip to the Himalayas she lived on bread and rice for a few weeks. While not a healthy regime by any stretch, the fact that she thrived during

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this period and did not return needing intravenous nutrients is a testament to her strong constitution and vitality.

Rosemary can also light up a room but with a bright smile and thoughtful conversation rather than an energy infusion. She is peppy and productive but can only maintain her busy schedule if she eats carefully and gets plenty of rest, a lesson she learned the hard way after she collapsed after a stressful period several years ago. During the illness, she discovered she was sensitive to several foods. Rosemary recovered after many months but must avoid these food irritants to maintain her energy reserves and consume healthy, regular meals.

Unlike Greta, Rosemary needs to eat meat to feel her best. She has tried several times to take meat out of her diet because she believes a vegetarian diet should be healthier but finds her stamina wanes. “No matter how many green vegetables I eat or herbs I take, they never work as well as meat,” she laments. She was relieved when I explained because of her tendency towards low blood sugar, poor stamina and food sensitivities her body required the denser nutrients in meat. We then strategized about finding the healthiest, most humane sources.

Muscle tone, stamina levels and digestion efficiency are your energy making indicators. The stronger and more flexible you are in these areas, the less you need animal protein. The more sensitive you are to dietary changes and a regular eating schedule, the more you need meat. Whether you consume meat or not, the experts agree that everyone needs plenty of fruits and vegetables. Where specialists and consumers continue to collide is over the question of

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animal proteins. We should all insist and fight for safe and humanely raised animals but it is time to stop squabbling over whether it is better to be a vegetarian or omnivore. The healthy choice depends on who you are.

While you are trying to figure yourself out, nutrition experts will churn out diet books proclaiming if you have ever felt bad or have a pulse, this diet is you. The well argued advice will urge you to go vegan, eat more meat, don't eat red meat, or only eat meat before lunch. And people will continue to want a right or wrong answer when it comes to the diet. And there is a right answer, but it only applies to you.

Box 1: Every Way of Eating Has A Name

Here are the definitions for the most popular diets centered around which animals are or are not eaten:

Lacto-ovo-vegetarian diet: No meat, fish, fowl or products containing these items, but include dairy and eggs. (Lacto = dairy; ovo = eggs.)

Macrobiotic diet: Not necessarily vegetarian, but based largely on grains, legumes and vegetables. Could include eggs and fish but not dairy products.

Paleolithic Diet: Based on what our Paleolithic ancestors probably ate. Excludes dairy products, grains, legumes and potatoes. Heavy on fish and pasture raised meats.

Pescetarian Diet: Excludes land animals and birds but includes fish, crustaceans, mollusks and all other plant based foods.

Vegan Diet: Avoids all meat, fish, dairy and eggs – no animal products at all.

Vegetarian Inclined: Part-time vegetarians.

Box 2: Plants vs. Animals By Nutrient

When it comes to the nutrients associated with energy, animal sources are best.

The plants get top billing for anti-oxidants and nutrients that may lower inflammation.

| <u>Energy Nutrients</u> | <u>Best Plant Source</u> | <u>Best Animal Source</u> |
|-------------------------|-----------------------------|---------------------------------------|
| Vitamin B-1 | Green Peas (1 cup) .45mg | Lean Pork (3 oz.) .95mg |
| Vitamin B-2 | Almonds (2 oz.) .56mg | Beef/Lamb (3 oz.) .73mg |
| Vitamin B-3 | Peanuts (1/2 cup) 10 mg | Tuna (3 oz.) 19mg |
| Vitamin B-5 | Trout (3 oz.) 1.9 mg | Shitake Mushrooms (1/2 cup) 2.25mg |
| Vitamin B-6 | Tuna (3 oz.) .88mg | Sunflower Seeds (2 oz.) .76 mg |
| Vitamin B-12 | Clams (one dozen) 84mcg | No naturally occurring sources |

| <u>Antioxidants</u> | <u>Best Animal Source</u> | <u>Best Plant Source</u> |
|---------------------|---|----------------------------------|
| Vitamin A | Cooked Beef Liver (3 oz.) 22,000 IUs | Sweet Potato (med) 28,000 IUs |
| Vitamin C | No significant sources | Red Pepper (diced-1/2 cup) |

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|-----------|------------------|-------------------------|
| | | 158 mg |
| Vitamin E | Butter (1 Tbsp.) | Sunflower Seeds (2 oz.) |
| | .3 mg | 20 mg |
| Selenium | Oysters (3 oz.) | Brazil Nuts (1 oz.) |
| | 131 mcg | 537 mcg |

Source: USDA Natural Agriculture Database: <http://ndb.nal.usda.gov/>

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