VEGETARIAN ANIMALS
FACTS ABOUT PROTEIN
OBAMA CARE AND LIMITATION ON EXCLUSION
WHOLE-BODY VIBRATION

PECAN-BERRY COFFEE CAKE
VEGETARIAN ANIMALS
Large herbivorous mammals are declining throughout Africa and worldwide, and have already gone extinct in many places. The decline may have complicated, and often unanticipated, consequences for the entire ecosystem.

North America is one place where mammoths, giant sloths, camels and other large herbivores once were common. But most of these mega-fauna species were eliminated during the Pleistocene epoch that ended about 10,000 years ago, raising questions about how these extinctions affected ecological processes. The cascading effects may have been important in the history and evolution of ecosystems that today are bereft of large herbivores, and that although many of these cascades went extinct at the end of the Pleistocene along with the large herbivores that caused them, their legacies may well remain(2).

In addition to the well known vegan animals, such as Bison, Cattle, Deer, Elephant, Hippo, Horse, Rhino, Yak, etc., the following are also vegetarians: Capybara, Chinchilla, Beaver, Octodont, Mice, Squirrels, Chevrotain, Chinkara, Guinea pig, Rabbit, Koala, Kangaroo, Gorilla, Mantee, Panda, Kinkajou etc.

MANATEE (Trichechus) (3)
These large, gentle herbivorous animals are also known as sea cows. They can weigh up to 590 kilos and grow up to 13 feet in length.

Manatee calves drink their mothers' milk, but adults are voracious grazers. They eat water grasses, weeds, and algae—and lots of them. A manatee can eat a tenth of its own massive weight in just 24 hours.
WHALE (4)

Some whales subsist entirely on plankton. All 12 species of baleen whale depend upon plankton for food. Plankton is a catch-all term for the multitude of small, sometimes even microscopic, organisms that occupy the bottom rung of the food chain in marine environments. Some types -- phytoplankton -- are plants, while others -- zooplankton -- are animals, including small crustaceans such as krill, marine worms and snails, sea urchin larva and fish that travel in schools.

HUMAN and GORILLA (5)

Gorillas are ground-dwelling, predominantly herbivorous apes that inhabit the forests of central Africa. They are the largest living primates by physical size. The DNA of gorillas is highly similar to that of humans, from 95–99% depending on what is counted, and they are the next closest living relatives to humans after the chimpanzees and bonobos. The closest relatives of gorillas are chimpanzees and humans, all of the Homininae having diverged from a common ancestor about 7 million years ago.

Mountain gorillas mostly eat foliage, such as leaves, stems, pith, and shoots, while fruit makes up a very small part of their diets. Eastern lowland gorillas have more diverse diets, which vary seasonally. Leaves and pith are commonly eaten, but fruits can make up as much as 25% of their diets.

Herbivorous baboons, geladas, and mandrills have enormous canines in the males, which force even successful predators on anthropoids, such as leopards and lions, to treat them with respect.
The majority of the food consumed by primates today, and every indication is for the last thirty million years, is vegetable, not animal. Plants are what our apey and even earlier ancestors ate; they were our paleo-diet for most of the last thirty million years during which our bodies, and our guts in particular, were evolving. In other words, there is very little evidence that our guts are terribly special and the job of a generalist primate gut is primarily to eat pieces of plants. We have special immune systems, special brains, even special hands, but our guts are ordinary and for tens of millions of years those ordinary guts have tended to be filled with fruit, leaves (6).

Primates are one of the many exceptions to the so-called rule that carnivores have binocular visions. Primates have highly developed binocular vision that in unrelated to carnivorous diet, instead it is the need of precise depth perception in order to jump from branch to branch without missing the branch, without falling to their death below. Humans have the same convergent condition with very highly developed 3D depth perception, as their vegetarian arboreal ancestors have(7).

Carnivores have numerous nipples and large litters, and by contrast, herbivores have only one pair of teats and a maximum of two offspring. The single pair of human bosoms was a primary piece of anatomical evidence in favor of human herbivorous origins. Women’s breasts bore the scientific testimony to humanity’s original herbivorous nature (8).

Humans have flattened nails, which are another adaptation of herbivores. Carnivores have sharp claws.

**SOME OF THE DISTINGUISHING FEATURES**(8a)

**Facial Muscles**
- CARNIVORE: Reduced to allow wide mouth gape
- OMNIVORE: Reduced
- HERBIVORE: Well-developed
- HUMAN: Well-developed

**Jaw Type**
- CARNIVORE: Angle not expanded
- OMNIVORE: Angle not expanded
- HERBIVORE: Expanded angle
Jaw Joint Location

CARNIVORE: On same plane as molar teeth
OMNIVORE: On same plane as molar teeth
HERBIVORE: Above the plane of the molars
HUMAN: Above the plane of the molars

Jaw Motion

CARNIVORE: Shearing; minimal side-to-side motion
OMNIVORE: Shearing; minimal side-to-side motion
HERBIVORE: No shear; good side-to-side, front-to-back
HUMAN: No shear; good side-to-side, front-to-back

Major Jaw Muscles

CARNIVORE: Temporalis
OMNIVORE: Temporalis
HERBIVORE: Masseter and pterygoids
HUMAN: Masseter and pterygoids

Mouth Opening vs. Head Size

CARNIVORE: Large
OMNIVORE: Large
HERBIVORE: Small
HUMAN: Small

Teeth: Incisors

CARNIVORE: Short and pointed
OMNIVORE: Short and pointed
HERBIVORE: Broad, flattened and spade shaped
HUMAN: Broad, flattened and spade shaped

Teeth: Canines
- CARNIVORE: Long, sharp and curved
- OMNIVORE: Long, sharp and curved
- HERBIVORE: Dull and short or long (for defense), or none
- HUMAN: Short and blunted

Teeth: Molars
- CARNIVORE: Sharp, jagged and blade shaped
- OMNIVORE: Sharp blades and/or flattened
- HERBIVORE: Flattened with cusps vs complex surface
- HUMAN: Flattened with nodular cusps

Chewing
- CARNIVORE: None; swallows food whole
- OMNIVORE: Swallows food whole and/or simple crushing
- HERBIVORE: Extensive chewing necessary
- HUMAN: Extensive chewing necessary

Saliva
- CARNIVORE: No digestive enzymes
- OMNIVORE: No digestive enzymes
- HERBIVORE: Carbohydrate digesting enzymes
- HUMAN: Carbohydrate digesting enzymes

Stomach Type
- CARNIVORE: Simple
- OMNIVORE: Simple
- HERBIVORE: Simple or multiple chambers
- HUMAN: Simple
Stomach Acidity
CARNIVORE: Less than or equal to pH 1 with food in stomach
OMNIVORE: Less than or equal to pH 1 with food in stomach
HERBIVORE: pH 4 to 5 with food in stomach
HUMAN: pH 4 to 5 with food in stomach

Stomach Capacity
CARNIVORE: 60% to 70% of total volume of digestive tract
OMNIVORE: 60% to 70% of total volume of digestive tract
HERBIVORE: Less than 30% of total volume of digestive tract
HUMAN: 21% to 27% of total volume of digestive tract

Length of Small Intestine
CARNIVORE: 3 to 6 times body length
OMNIVORE: 4 to 6 times body length
HERBIVORE: 10 to more than 12 times body length
HUMAN: 10 to 11 times body length

Colon
CARNIVORE: Simple, short and smooth
OMNIVORE: Simple, short and smooth
HERBIVORE: Long, complex; may be sacculated
HUMAN: Long, sacculated

Liver
CARNIVORE: Can detoxify vitamin A
OMNIVORE: Can detoxify vitamin A
HERBIVORE: Cannot detoxify vitamin A
HUMAN: Cannot detoxify vitamin A
Kidney

CARNIVORE: Extremely concentrated urine
OMNIVORE: Extremely concentrated urine
HERBIVORE: Moderately concentrated urine
HUMAN: Moderately concentrated urine

Claws/Nails

CARNIVORE: Sharp claws
OMNIVORE: Sharp claws
HERBIVORE: Flattened nails or blunt hooves
HUMAN: Flattened nails

PANDA

Some carnivorans are herbivorous, e.g., Panda(4). Panda belongs to the order: Carnivora; family: Ursidae; and genus and species: Ailuropoda melanoleuca.

A giant panda’s digestive system is more similar to that of a carnivore than an herbivore. A wild giant panda’s diet is almost exclusively (99 percent) bamboo. In zoos, giant pandas eat bamboo, sugar cane, rice gruel, a special high-fiber biscuit, carrots, apples, and sweet potatoes.

KINKAJOU

Resembling a small primate but actually related to the raccoon, the Central and South American kinkajou uses its long tongue to remove honey from beehives and nectar from flowers. Kinkajous live in the tropical forests of Central and South America, where they spend most of their time in the trees. They are able to turn their feet backwards to run easily in either direction along branches or up and
down trunks. The kinkajou also has a prehensile (gripping) tail that it uses much like another arm. Kinkajous often hang from this incredible tail, which also aids their balance and serves as a cozy blanket while the animal sleeps high in the canopy.

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FACTS ABOUT PROTEIN
Protein is an important part of every cell in your body. It makes up about 15% of your weight. Protein has many jobs including repairing bones and muscles, building cells, and helping with immune system. How much protein a person needs depends on sex, age, weight and activity. Men usually need more protein than women. About 10% of total calories every day may be obtained from protein. An average man needs about 56 grams of protein a day. Women need 46 grams. Athletes may need slightly more protein than non-athletes, to repair and rebuild muscles. Beans, lentils, milk, eggs and meat have high protein content. Meat and eggs are high in saturated fat, which can lead to high cholesterol and heart disease.

Complete, or high quality proteins, are packed with specific amino acids, which are the building blocks of proteins. There are about 20 different amino acids body needs. Body makes most of them, but cannot make nine of them, which are called essential amino acids, because they have to come from the diet. Complete proteins have all nine essential amino acids. Eggs, cheese, and meat have complete proteins. "Incomplete" protein sources are low in one or more essential amino acids. Beans and tofu are good sources of protein. Whole soy gives you all the essential amino acids, just like protein from animal sources. It is also used instead of meat in some vegetarian dishes. Experts say soy protein is a good low-fat option instead of high-fat, animal-based proteins, like red meat. The key is to be smart with portions, by keeping soy between two and four servings a week. The USDA’s MyPlate program includes as protein beans and peas, processed soy products, nuts, and seeds. Beans and peas are also part of the vegetable group.

Body doesn't store proteins the way it stores carbohydrates and fats. Therefore, excess protein will be converted into carbohydrates and fats and stored. Although protein can help repair muscles after working out, the key nutrient to strengthen muscles is carbohydrates. Most Americans get all the protein they need from their diet. In fact, most of Americans get more than enough. Vegetarians and vegans get enough
plant-based proteins by eating a balanced diet. Older people may also need to make sure they get enough protein, as they lose muscle.

Most people don't need to worry about eating enough protein, but should know the signs of too little protein such as weight loss, tired muscles, and a drop in muscle strength. However, eating more protein means more calories which can lead to weight gain. In addition, if the protein is from meat or other animal sources, high in saturated fat, can lead to high cholesterol and heart disease. Too much protein can also cause problems such as kidney disease.

OBAMA CARE AND LIMITATION ON EXCLUSION\(^{(11)}\)

Policymakers often use the tax code to encourage behavior. For decades, economists have suggested that Congress should place a limitation on the exclusion. The drafters of the Affordable Care Act (ACA) did just that to limit the exclusion by imposing an excise tax on employer-sponsored insurance coverage whose aggregate cost to employer and employee exceeds a specified threshold. The goal for limiting the exclusion is to reduce offers of “comprehensive” health coverage, like 100% pay-all plans and plans with low or no cost-sharing. While the employer and labor community continue to raise concerns about any limitation on the exclusion, the limitation will remain in the law, even if the Obama Care is repealed.

Typically, the dollar value of a health plan (i.e., the aggregate cost to employer and employee) is a proxy for its “richness.” However, the dollar value for a comprehensive plan providing rich benefits in Arkansas may be the equal the same dollar value for a less comprehensive, high-deductible health plan (HDHP) in the Bay Area. To address this inequity, the dollar value of a direct cap must vary by geography.

Alternatively, limiting the exclusion could be based on the greater of a dollar value or the “actuarial value” (AV) of the plan. An AV metric (which is a measure of how much the insurance pays for medical expenses) would effectively impose a tax on the comprehensive plan in Arkansas, while shielding the HDHP in the Bay Area from any tax.

In 2012, the Supreme Court of the US (SCOTUS) ruled that the Affordable Care Act was constitutional\(^{(12)}\). In King v. Burwell in 2015\(^{(13)}\), the SCOTUS ruled 6-3 that residents of states where the federal government operates a public health insurance exchange who meet certain income requirements are indeed entitled to federal tax credits to help them buy insurance. The ruling upheld an IRS rule that
allowed the federal government to help pay for individual health insurance in the 34 states that didn’t set up their own health care exchanges. The states instead rely on a federally run exchange. Congress passed the Affordable Care Act to improve health insurance markets, not to destroy them. The court’s role is to say what the law says, which is not always easy, said the Chief Justice John G. Roberts Jr., the SCOTUS’s conservative member.

Health insurance should be affordable and available in every state, without the role of an employer, similar to car insurance.

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WHOLE-BODY VIBRATION(14)

Physical activity can reduce your risk of chronic disease, improve your balance and coordination, help you lose weight, and even boost your self-esteem, regardless of age or sex.

Whole-body vibration (WBV), also known as "Power Plate" exercise, is a passive exercise category developed from a program used to train Russian cosmonauts. WBV quickly spread from Russia through Europe and Japan, and finally after a few decades to the US.

Most people stand on the platform with knees bent at about a 30-degree angle, while the surface beneath their feet vibrates 30 times per second. Vibrations cause rapid muscle contraction, by activating the so-called stress reflex.

Manufacturers’ sales brochures tout a long list of benefits such as increased circulation, muscle strength, and flexibility; better range of motion; core conditioning and stability; faster muscle recovery after working out; enhanced metabolism; increased bone mineral density; reduction of the stress hormone cortisol; elevation of human growth hormone levels; improved lymphatic flow; reduction in cellulite and stimulation of collagen production for smoother skin; and muscle toning and conditioning for those who have health restrictions that keep them from exercising, such as multiple sclerosis, Parkinson's disease, and some forms of arthritis. Experts agree that some benefits are real, but not all are proven scientifically.

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For example, a study published in the *Journal of Bone and Mineral Research* in 2004 supports the bone density claim. A study published in the *Journal of the American Geriatric Society* supports muscular benefits in elderly, and another study published in the *Proceedings of the National Academy of Sciences* supports increased metabolism along the possibility weight loss. Experts think that it may be beneficial to use WBV as an addition to normal exercise routine that include aerobic and strength exercises. Some experts liken WBV to the "jiggly belts" used in the 1950s, which caused the body to shake, a form of vibration.

The WBV machines are also known as Chi machines because the theory is based on Eastern philosophies of energy centers and those are being stimulated by this movement activity.

WBV may be a fad like “jiggle belts,” because of the desire for instant gratification and gullibility. Regular exercise comprising aerobics and strength training can help control body weight, reduce risk of heart disease, and strengthen bones and muscles. An added benefit may be obtained by adding WBV to the regimen, if the fad holds water and becomes a fact.

PECAN-BERRY COFFEE CAKE(14)

Ingredients: 1 cup all-purpose flour, or white whole-wheat flour, plus 1 1/2 teaspoons, divided; 3 tablespoons cornmeal; 1 teaspoon baking powder; 1/2 teaspoon salt; 3 tablespoons butter, softened 3 tablespoons canola oil; 3/4 cup sugar; 2 egg-replacers; 1/3 cup low-fat or Soy milk; 3 tablespoons lemon zest; 1 1/2 teaspoons vanilla extract; 1 1/2 cups blueberries, or raspberries, fresh or frozen (not thawed); 3/4 cup finely chopped peeled apple; 2 tablespoons cold butter; 1/4 cup sugar; 1 cup chopped pecans

Preheat oven to 350°F. Line an 8-inch-square pan with foil, leaving an overhang on all sides. Lightly coat the foil with cooking spray.

To prepare cake: Whisk 1 cup flour, cornmeal, baking powder and salt in a medium bowl. Beat softened butter and oil in a large bowl with an electric mixer on high speed for 2 minutes. Scrape down the sides. Add 3/4 cup sugar and beat on medium-high until smooth, about 2 minutes. Add egg-replacer, milk, lemon zest and vanilla and beat on medium-high until smooth, about 1 minute. Scrape down the sides. Add the flour mixture and beat on low speed just until incorporated.
Place berries and apple in a small bowl, sprinkle with the remaining 1 1/2 teaspoons flour and toss very gently to coat. Sprinkle the fruit over the batter and very gently fold in until just combined. Scrape the batter into the prepared pan, smoothing the top.

To prepare topping: Combine cold butter and 1/4 cup sugar in a bowl. With two knives or a pastry blender, cut them together until the butter is in small pieces and uniform crumbles form. Add pecans and toss until evenly incorporated. Sprinkle the topping over the batter.

Bake the cake until a tester inserted in the center comes out clean and the nuts are a deep brown, 50 to 55 minutes.

Let the cake cool in the pan on a wire rack for about 2 hours. Lift it out of the pan, using the edges of the foil, onto a cutting board, and cut into 16 squares. Use a spatula to lift the cake from the foil.

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Om! Asatoma Sadgamaya, Tamasoma Jyotirgamaya, Mrityorma Amritgamamaya, Om Shantih, Shantih, Shantih! (Aum! Lead the world from wrong path to the right path, from ignorance to knowledge, from mortality to immortality, and peace!)