WHERE'S THE BEEF?

Understanding Meat Alternatives

by Ethan Balk, PhD, RDN, ACSM-EP

Few dishes top a burger from the grill or a hot dog at the ball game. But what about our daily routine? Americans consume more meat and poultry on a regular basis than any other country in the world.

This daily habit may be taking a serious toll on our bodies and our planet. Current research suggests that too much daily red and processed meat may lead to serious health complications including heart disease and various cancers. Moreover, maintaining the amount of livestock it takes to feed our country's demand is one of the largest contributors to greenhouse gas production.

> "IT LOOKS LIKE A BURGER, IT CHEWS LIKE A BURGER, IT BLEEDS LIKE A BURGER. AND IT'S MADE ENTIRELY OF PLANTS."

TIME FOR A CHANGE?

It seems that changes to our traditional meals may be necessary. But what about that burger from the grill or hotdog at the game or even a sausage breakfast sandwich? Is it really goodbye forever?

Maybe not. Thanks to some amazing food science miracles, "meatless meat" has become reality and is super popular!

A LOOK BACK TO OPTIONS TO DATE

A few new companies are making major waves in the meat business with their new meatless meat products. Of course, the attempts to construct "veggie meat" are not new. There are many popular brands that have been successfully selling veggie versions of popular meat items including veggie burgers, tofu dogs, veggie sausage patties and so on for decades. And while variety and taste have improved over time, let's be honest. It's not a burger. It's not a hot dog. A vegetable patty? Sure. But as far as burgers go, it's a completely different ballpark.

TODAY'S REALITY

And then it all changed with the arrival of the Impossible Burger and Beyond Meat, two popular brands that are re-inventing the veggie burger. These two products are skyrocketing in popularity as word of their meatless meat advances gain attention. Let's be clear, their meatless burgers are the real deal. Some might even say they are creepy real. It looks like a burger, it chews like a burger, it bleeds like a burger. And it's made entirely of plants.

WHAT?! IS THIS THE TWILIGHT ZONE?

Ok. So, meat that's not "meat." What gives, right? A burger made entirely out of plants that still tastes like a burger.

ARE THEY HEALTHY?

We all remember the magical Snackwell cookie – like so many things, too good to be true. Does it mean that meat alternatives are too good to be true as well?

The companies that produce these meat alternative options keep their recipes tightly guarded. However, a look at the ingredient lists and nutrition facts labels can give you an idea of what it takes to make these burger options and some idea about how healthy they are.

Let's take a look…The Impossible and Beyond burgers contain higher amounts of sodium, carbs and fat than a traditional burger (*so if you are on a restricted diet, check with your healthcare provider before making these a part of your meal plan*). However, they also contain more iron, fiber, calcium and vitamin B12 than a traditional meat burger.

Additionally, it is important to look at the entire nutrient profile of each option and understand that:

- The macronutrient content is very similar among each type of burger – a few more carbs in the plant burgers (*which makes sense because they're plants*).
- The fat content is a bit higher in the Beyond Meat Burger because of the use of a few types of oils, including coconut oil which has saturated fat—even though it comes from plants.
- The amount of protein for all three burger options is basically the same.
- One four-ounce meat alternative patty contains three grams of dietary fiber. That's a big deal since most Americans do not consume enough dietary fiber in their daily meal plans.

The case for the plant burgers may lie in the "micronutrient fine print." Although sodium is higher in both the Impossible and Beyond burgers, these plant burgers are great sources of calcium, iron, potassium, thiamin, niacin, vitamin B6, folate, vitamin B12 and zinc. Having one of these burgers and a side salad is a load of vitamins and minerals!

So overall, when compared to meat from a cow, these options are probably better for us and definitely better for the planet!

BURGER PATTY COMPARISON

Beef Burger

Nutrition Facts
Serving Size 4 oz (112g)
Servings Varied

Amount Per Serving	raw, as packaged	%DV*	pan-broiled**	%DV*
Calories	280		210	
Calories from Fat	200		120	
Total Fat	22g	**34%**	13g	**21%**
Saturated Fat	8g	**42%**	5g	**25%**
Cholesterol	80mg	**27%**	70mg	**24%**
Sodium	75mg	**3%**	70mg	**3%**
Total Carbohydrate	0g	**0%**	0g	**0%**
Protein	19g	**38%**	20g	**40%**
Iron		10%		10%
Riboflavin		10%		8%
Vitamin B6		20%		15%
Phosphorus		20%		15%
Selenium		25%		25%
Thiamin		0%		0%
Niacin		25%		25%
Vitamin B12		40%		40%
Zinc		30%		35%

Not a significant source of dietary fiber, sugars, vitamin A, vitamin C or calcium.
*Percent Daily Values (RDV) are based on a 2,000 calorie diet.
**Cooked data based on lean only, visible fat trimmed.

Impossible Burger

Nutrition Facts

Serving size	4 oz (113g)
Amount per serving	
Calories	**240**
	% Daily Value*
Total Fat 14g	**18%**
Saturated Fat 8g	**40%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 370mg	**16%**
Total Carbohydrate 9g	**3%**
Dietary Fiber 3g	**11%**
Total Sugars <1g	
Includes <1g Added Sugars	**1%**
Protein 19g	**31%**
Vitamin D 0mcg	0%
Calcium 170mg	15%
Iron 4.2mg	25%
Potassium 610mg	15%
Thiamin 28.2mg	2350%
Riboflavin 0.4mg	30%
Niacin 5.3mg	35%
Vitamin B_6 0.4mg	25%
Folate 115mcg DFE	30%
Vitamin B_{12} 3mcg	130%
Phosphorus 180mg	15%
Zinc 5.5mg	50%

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Beyond Meat Burger

THE BEYOND BURGER
PLANT-BASED BURGER PATTIES

Nutrition Facts
Serving Size: 1 Patty, 4 oz. (113g)
Servings Per Container: 2

Amount Per Serving		
Calories 290	Calories from Fat 190	
		% Daily Value*
Total Fat 22g		**34%**
Saturated Fat 5g		**25%**
Trans Fat 0g		
Cholesterol 0mg		**0%**
Sodium 450mg		**19%**
Total Carbohydrate 6g		**2%**
Dietary Fiber 3g		**12%**
Sugars 0g		
Protein 20g		**32%**
Vitamin A 0%	• Vitamin C	90%
Calcium 2%	• Iron	25%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Protein		50g	65g

Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4

AT BEYOND MEAT, WE STARTED WITH SIMPLE QUESTIONS. WHY DO YOU NEED AN ANIMAL TO CREATE MEAT? WHY CAN'T YOU BUILD MEAT DIRECTLY FROM PLANTS? IT TURNS OUT YOU CAN. SO WE DID. WE HOPE OUR PLANT-BASED MEATS ALLOW YOU AND YOUR FAMILY TO EAT MORE, NOT LESS, OF THE TRADITIONAL DISHES YOU LOVE, WHILE FEELING GREAT ABOUT THE HEALTH, SUSTAINABILITY, AND ANIMAL WELFARE BENEFITS OF PLANT PROTEIN. TOGETHER, WE CAN TRULY BRING EXCITING CHANGE TO THE PLATE—AND BEYOND.

GO BEYOND!
ETHAN BROWN, FOUNDER & CEO
(ETHANANDTEAM@BEYONDMEAT.COM)

INGREDIENTS: Pea Protein Isolate, Expeller Pressed Canola Oil, Refined Coconut Oil, Water, Yeast Extract, Maltodextrin, Natural Flavors, Gum Arabic, Sunflower Oil, Salt, Succinic Acid, Acetic Acid, Non-GMO Modified Food Starch, Cellulose From Bamboo, Methylcellulose, Potato Starch, Beet Juice Extract (for color), Ascorbic Acid (to maintain color), Annatto Extract (for color), Citrus Fruit Extract (to maintain quality), Vegetable Glycerin.
Contains: Coconut Oil.

NO SOY · NO GLUTEN · GMO FREE

TWO 1/4 LB PATTIES • NET WT. 8 OZ (227 g)

JOIN IN: #BEYONDBURGER #BEYONDMEAT @BEYONDMEAT

	Beef Burger	Impossible Burger	Beyond Meat Burger
Calories	200-250 calories	240 calories	290 calories
Sodium	70 milligrams	370 milligrams	450 milligrams
Carbohydrates	0 grams	9 grams	6 grams
Fat	13-15 grams	14 grams	22 grams
Protein	20 grams	19 grams	20 grams
Dietary Fiber	0 grams	3 grams	3 grams

Pease note: The nutrient discussion above, the comparison chart and the nutrition facts labels are all for one plain burger patty. When we pile on the condiments – ketchup, mayo, BBQ sauce, etc. – and extra toppings (*cheese, bacon, avocados, onion rings, etc.*), the calorie, fat and sodium content start to skyrocket whether it's a real or plant-based burger!

WHAT TO LOOK FOR WHEN YOU SHOP

It is important to remember that a meatless meat product is processed. This means there are certain combinations of ingredients included to produce the look, taste and texture of its intended counterpart. As with all processed foods, not all veggie burgers are created equal. So, when shopping, read the product's ingredient list first. The ingredients that produce red flags in meatless meat products would be added sodium, the inclusion of nitrates or nitrites (*which are linked to increased risk in various cancers*), the types of fats used in the recipe and whether the product contains actual plant proteins as opposed to grains and fillers.

When choosing a meatless meat product, look for a product that:

1. Contains plant-based proteins: soy or pea proteins, quinoa, tofu or beans.
2. Most closely mirrors the amount of protein in real meat: 20 grams per serving.
3. Uses the least amount of sodium: ideally, less than 300 milligrams per serving.
4. Has the least amount of fat (*particularly saturated fat*): less than 10 grams per serving.

"AS WITH ALL PROCESSED FOODS, NOT ALL VEGGIE BURGERS ARE CREATED EQUAL."

WHERE'S THE BEEF ALTERNATIVE?

The popularity of the Impossible and Beyond burgers has exploded overnight. And like all food trends, not all options for sampling these meat alternatives are healthy—even if they are convenient.

The healthiest options for sampling these new food innovations, like most eating options, come from your grocery store and are prepared at your home. Sold frozen, they can be found at Whole Foods, Publix, Kroger, Giant Eagle, Target, Safeway, Walmart and Albertsons—just to name a few.

If you are looking to try out these non-meat burgers without preparing them yourself, there are numerous options. Just keep in mind that portions at restaurants are generally larger and contain the toppings we noted that top on the calories. White Castle, Subway, Cheesecake Factory and—most recently—Burger King have all rolled out sandwich options made with Beyond or Impossible meat alternatives.

CONCLUSION

Overall, it is safe to say we should all probably be eating less meat for the health of our bodies and our beautiful planet. It's no secret – plants are good for you. Really, really good for you. Thankfully, with the help of science, we don't have to miss out on some of our traditional favorites. So, why not shake up your usual routine and add some plant-based "meats" to the daily mix? You might be pleasantly surprised.

About the Author:
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OAC
Obesity Action Coalition

ABOUT THE **OBESITY ACTION COALITION (OAC)**

The Obesity Action Coalition (OAC) is a National non-profit organization dedicated to giving a voice to individuals affected by obesity and helping them along their journey toward better health. Our core focuses are to elevate the conversation of weight and its impact on health, improve access to obesity care, provide science-based education on obesity and its treatments, and fight to eliminate weight bias and discrimination.

VIBRANT COMMUNITY

NATIONAL AWARENESS CAMPAIGNS

ANNUAL CONVENTION

ADVOCACY

PUBLIC EDUCATION

LEARN, CONNECT, ENGAGE

The OAC knows that the journey with weight can be challenging but we also know that great things happen when we learn, connect and engage. That is why the OAC Community exists. Our Community is designed to provide quality education, ongoing support programs, an opportunity to connect, and a place to take action on important issues.

Through the OAC Community, you can get access to:

Weight & Health Education • Community Blogs • Community Discussion Forum • Ongoing Support • Meaningful Connections

AND MUCH MORE

JOIN TODAY: GO TO **OBESITYACTION.ORG/JOIN**

info@obesityaction.org
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