HARVARD FOOD SYSTEMS INITIATIVE

WHAT IS HFSI?

The Harvard Food Systems Initiative (HFSI) is an educational and experiential program to inspire elevated thinking and change to shape future food systems leaders for a more sustainable future. For students, with students—led by Harvard University Dining Services in collaboration with Harvard Faculty and practitioners in the field—HFSI will drive knowledge and experience in pursuit of food systems citizenship.

hfsi.harvard.edu

Protein: The "Package" Matters

When we eat foods for protein, we also eat everything that comes alongside it: the different fats, fiber, sodium, and more. It's this protein "package" that's likely to make a difference for health.

LENTILS 1 CUP	VS.	BEEF 4 OZ. PATTY
18 g	PROTEIN	21 g
0.1 g	SATURATED FAT	7.2 g
15.5 g	FIBER	0 g
6.6 mg	IRON	1.2 mg
230	CALORIES	250
177 g CO2-eq	CARBON FOOTPRINT	3,000 g CO2-eq

© UCLA Housing 2021. All rights reserved.

Lentils provide 18 grams of protein along with fiber, iron, and virtually no saturated fats.

Beef delivers only a few more grams of protein, along with nearly half a day's worth of saturated fats and zero fiber.

17x the carbon footprint of lentils!

WANT TO DIVE DEEPER?

See more protein 'Package' comparisons on The Nutrition Source:

KNOWLEDGE. ENGAGEMENT. COMMUNITY.

HARVARD FOOD SYSTEMS INITIATIVE

Spotlight on Protein Powder

Do I need it? No. Most people get enough protein by consuming enough calories from whole foods. **Is it healthy? Maybe.** Protein is an important macronutrient, but protein powders are not reviewed by the FDA for safety or effectiveness.

Whey & Casein

- Come from cow milk.
- Contain all essential amino acids.
- Whey is rapidly metabolized into amino acids.
- Casein is digested more slowly, releasing amino acids into the blood stream for several hours.

Pea

- Contains 8 of 9 essential amino acids.
- Low in methionine which can be obtained from rice *(some pea proteins will blend in rice protein to provide methionine.)*
- As effective as whey at promoting muscle thickness when consumed after exercise

Soy

- Contains all essential amino acids.
- Rapidly absorbed by the body *(but may not be as bioavailable as animal-protein)*
- Superior to casein in supporting muscle protein synthesis, but inferior to whey.

Hemp

- Comes from seeds of the hemp plant.
- Contains Omega-3 fatty acids and some essential amino acids. *(Research is mixed as to the exact amount .)*

WHAT CAN YOU DO?

Protein powders can often contain non-protein ingredients, including vitamins & minerals, thickeners, added sugars, non-caloric sweeteners, and artificial flavoring. If you choose to consume protein powder, it is important to read the nutrition and ingredient labels beforehand so you know what you're buying.

WANT TO DIVE DEEPER?

Read about the research behind these facts on the **Nutrition Source!** https://www.hsph.harvard.edu/nutritionsource/workout-supplements/

WHAT IS HFSI?

The Harvard Food Systems Initiative (HFSI) is an educational and experiential program to inspire elevated thinking and change to shape future food systems leaders for a more sustainable future. For students, with students—led by Harvard University Dining Services in collaboration with Harvard Faculty and practitioners in the field—HFSI will drive knowledge and experience in pursuit of food systems citizenship.

hfsi.harvard.edu

HARVARD FOOD SYSTEMS INITIATIVE

WHAT IS HFSI?

The Harvard Food Systems Initiative (HFSI) is an educational and experiential program to inspire elevated thinking and change to shape future food systems leaders for a more sustainable future. For students, with students—led by Harvard University Dining Services in collaboration with Harvard Faculty and practitioners in the field—HFSI will drive knowledge and experience in pursuit of food systems citizenship.

hfsi.harvard.edu

Soy: Setting the Record Straight

Soy is at the center of some debate–some claim it's health benefits, others claim it's risks!

So, why all this conflicting information? Soy contains isoflavones, which can have estrogenic or anti-estrogenic effects depending on an individuals hormone levels. As a result, studies present conflicting conclusions, largely due to the variation in how soy is studied.

WHAT TO KNOW ABOUT SOY:

Soy is a complete protein *–contains all 9 essential amino acids–*and is rich in B vitamins, fiber, potassium & magnesium.

Population studies suggest that **soy has a beneficial or neutral effect on our health.**

Enjoying **soy foods** several times a week is **likely to provide health benefits**—especially when eaten as an alternative to red and processed meat.

WANT TO DIVE DEEPER?

Learn more from this article, "Straight Talk about Soy" on The Nutrition Source!

HARVARD FOOD SYSTEMS INITIATIVE

Planet-Friendly Proteins

WHAT IS HFSI?

The Harvard Food Systems Initiative (HFSI) is an educational and experiential program to inspire elevated thinking and change to shape future food systems leaders for a more sustainable future. For students, with students—led by Harvard University Dining Services in collaboration with Harvard Faculty and practitioners in the field—HFSI will drive knowledge and experience in pursuit of food systems citizenship.

hfsi.harvard.edu

Legumes

Lentils, beans, and peas, are excellent sources of protein and fiber.

Soy (Tofu, Tempeh)

Proteins made from soy are high-quality proteins, rich in B vitamins, fiber, potassium, and magnesium.

Nuts & Seeds

Almonds, pistachios, cashews, walnuts, pecans, hemp, pumpkin, sunflower, flax, sesame seeds, etc, provide a good serving of protein and healthy fats.

Whole Grains

Kamut, teff, wheat, quinoa, rice, wild rice, millet, oats, and buckwheat are excellent sources of protein.

Fish & Eggs

Small, wild-caught fish and farmed mollusks *(oysters, mussels, scallops)* typically have the lowest environmental impact of animal proteins. Eggs can be a good choice, too.

WHAT CAN YOU DO?

Get your protein from plants when possible. Eating legumes (beans and peas), nuts, seeds, whole grains, and other plant-based sources of protein is a win for your health and the health of the planet.

WANT TO DIVE DEEPER?

Find more sustainable eating tips: **https://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/protein/**

HARVARD FOOD SYSTEMS INITIATIVE

Spotlight on Meat Alternatives

Replacing red meat with nuts, legumes, and other plant-based proteins is associated with lower risks of several chronic diseases. However, we don't have enough research on the health impacts of newer plant-based meats.

Potential health benefits:

Leading plant-based meats (like Beyond) have nearly equivalent calories and protein, more fiber, zero cholesterol, equal or less saturated fat than beef from a cow.

Environmental benefits:

Plant-based meats generate a fraction of the greenhouse gas emissions, water pollution and require far less land use compared to animal meat production.

Potential health pitfalls:

Plant-based meats tend to have more sodium than raw animal meat because they are pre-seasoned.

Some contain heme *(as do animal meats)*, which has been linked to increased risk of type II diabetes.

Plant-based products can be highly-processed. Ultra-processed foods have been linked with excessive calorie consumption.

Bottom line:

There is not enough evidence to substantiate whether meat alternatives offer significant health harms or benefits.

However, plant-based alternatives do offer significant environmental benefits when used as a replacement for animal-meat.

WANT TO DIVE DEEPER?

A discussion on health & meat alternatives with Dr. Hu, Chair of Nutrition at Harvard School of Public Health!

https://www.hsph.harvard.edu/nutritionsource/2019/08/26/questions-plant-based-meat-alternatives/

WHAT IS HFSI?

The Harvard Food Systems Initiative (HFSI) is an educational and experiential program to inspire elevated thinking and change to shape future food systems leaders for a more sustainable future. For students, with students—led by Harvard University Dining Services in collaboration with Harvard Faculty and practitioners in the field—HFSI will drive knowledge and experience in pursuit of food systems citizenship.

hfsi.harvard.edu

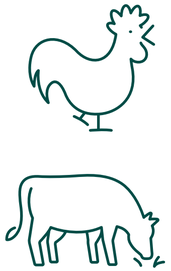
HARVARD
FOOD
SYSTEMS
INITIATIVE

WHAT IS HFSI?

The Harvard Food Systems Initiative (HFSI) is an educational and experiential program to inspire elevated thinking and change to shape future food systems leaders for a more sustainable future. For students, with students—led by Harvard University Dining Services in collaboration with Harvard Faculty and practitioners in the field—HFSI will drive knowledge and experience in pursuit of food systems citizenship.

hfsi.harvard.edu

How to Protect Animal Welfare



Understand your impact. Your food choices matter!

1. Limit meat, dairy & eggs.

Choose plant-based options whenever you can.

2. Look for higher-welfare options.

When possible, shop at farmers markets or buy directly from small farms. Ask the farmers how their animals are raised and whether you can visit the farm.

3. Find out which labels you can trust.

Many label's claims are meaningless or misleading. Find out which claims have legal definitions, and which are certified by trustworthy, third-party standards.

Two examples of trustworthy labels:

ANIMAL WELFARE APPROVED BY AGW

CERTIFIED HUMANE RAISED & HANDLED

WHAT CAN YOU DO?

Do research to find out what companies/farms align with your values.

WANT TO DIVE DEEPER?

Visit sites like the Animal Welfare Institute to gain more understanding: https://awionline.org/

KNOWLEDGE.ENGAGEMENT.COMMUNITY.

HARVARD FOOD SYSTEMS INITIATIVE

From Beef to Beans

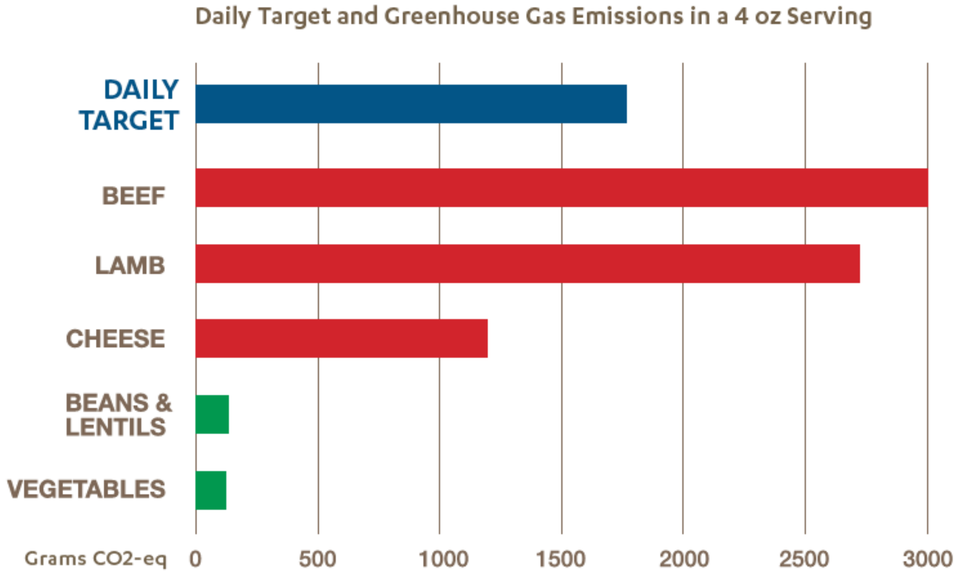
Swapping out beef for beans can make a world of difference!

WHAT IS HFSI?

The Harvard Food Systems Initiative (HFSI) is an educational and experiential program to inspire elevated thinking and change to shape future food systems leaders for a more sustainable future. For students, with students—led by Harvard University Dining Services in collaboration with Harvard Faculty and practitioners in the field—HFSI will drive knowledge and experience in pursuit of food systems citizenship.

hfsi.harvard.edu

Just 4 oz. of beef or lamb puts you over your daily target for food-related greenhouse gas emissions!



The food-related carbon footprint target of 1780 grams CO2-eq per day is calculated based on Willett et al. (2019) Planetary Health Diet.

WANT TO DIVE DEEPER?

Read the EAT Lancet report on food-related carbon targets.

https://eatforum.org/

© UCLA Housing 2021. All rights reserved.