



Purchasing Organic & Sustainable Food

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INTRODUCTION

Purchasing Organic and Sustainable food:

- General Strategies
- UC policies & UC Davis FSM Strategies
- Other UC & Non- UC FSM strategies
- Importance of applying those strategies

Why should we talk about this topic? - Purchasing is the first step for the sustainable development of the food system, and building a strong base stone helps with further applications of sustainable development!

“The greatest threat to our planet is the belief that someone else will save it.” – Robert Swan.



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<https://www.scribd.com/document/68079424/Defining>

General Strategies on FSM

Encourages purchasing from Farmers Market

Improves by reduce transportation. Long distance has potential issues such as weather, global supply chain that causes food waste. Transportation fees may applies to the product as well. Footprint decrease (decrease in carbon production which is less harmful to environment) (3)

Encourage purchasing organic food

Benefits environment, such as water quality, soil health and biodiversity, and it increased water sustainability, biological pest control, habitat maintenance. Biological fertilizers are used instead of chemical, therefore, soil is more organic, increase water retention (4).

Encourage purchasing seasonal food

Supports local farming and economics. Food are fresh and nutrient dense. Footprint also decreased so carbon production decrease that are less effective to the environment. (5)

Encourage using reusable package

Applies to grocery store while buying food and also food facilities while packaging food products. Using reusable bag decreases negative impact on the environment and also saves money. Plastic can only be dissolved under high temperatures, and have a low recycling rate (15%) which harms environment and animals because of their characteristics (6).





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Advantages: reduce footprint, increase biodiversity, habitat maintenance, decrease water waste, reduce greenhouse gases (8).

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Disadvantages: Costly, both planting and purchasing, not everyone can afford it; requires more labor while planting, specifically to organic products; shorter shelf life than non-organic food (9).



<https://www.google.com/search?q=https://www.health.harvard.edu/staying-healthy/the-right-plant-based-diet-for-you&rlz=C6C5w1m1Ww9d44d3L1J5VtGust=1715737517683000&source=images&rd=6&img=899784495uedf0CfBlC9wEwntOCfEchyGfYDFAAAA&AAAAA3>

UC System Sustainable Policy (13)



Sustainable Procurement - 1

Reducing unnecessary purchasing;
Purchase surplus or multiple-use products;
Purchase recyclable or compostable products.

Sustainable Food Service

Procure 25% sustainable food products by the year 2030 as defined by AASHE STARS;

Procure 30% sustainable food products by the year 2030 as defined by Practice Greenhealth.

Sustainable Procurement - 2

Purchase of products that disclose known hazards, choosing products with reduced concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment.

Spending Criteria

Reach 25% Preferred Level Green Spend as a total percentage of spend within 3 fiscal years;

Reach 25% Economically and Socially Responsible Spend within 5 fiscal years.



UC System Sustainable Policy

(Cont'd) (13)

Packaging Policies

- Inhibit the usage of packaging foam
- All the packaging meet the UC standards
- All the packaging needs to free from Toxins

Certifications

- The University will require suppliers to clearly identify products with UC-recognized certifications.
- All contract items meet the UC criteria for Green and Economically and Socially Responsible (EaSR) Spend.

Suppliers Reporting

The University will require all strategically sourced suppliers to report annually on their sustainable business operations and quarterly on the University's sustainable purchasing activity.

University's Procurement Department

- Allocating a minimum of 15% of the points utilized in solicitation evaluations to sustainability criteria.
- Provides equal access to small disadvantaged suppliers
- Provide volume-discount pricing for less competitive sustainable products.
- Contracting with suppliers of products that have established end-of-life reuse, recycling, and/or take back programs

UC Davis FSM Strategies

1. Relies heavily on third-party certifiers to guarantee sustainable agricultural practices from select vendors (11).*
2. In the Marketplace, Choose sustainably sourced products, such as: Local, Seasonal foods, Fair Trade, Humanely Raised, Organic, Pest-free, Grassfed, Sustainable Seafood, Rainforest Alliance Certified (14).
3. Purchase it with minimum packaging, or packaging that is reusable, e.g. bulk bin (14). *
4. For online order, ask for no plastic and/or minimal packaging (14).
5. Procure from small local farms (14). *
6. Procures **campus-grown** food from campus partners (14).

Campus-grown (11)

- Sustainable Agriculture*
- Edible Campus:
 - Olive Center
 - Animal Science Meat Lab
 - Farmers Market
 - Student Farm

"Consider the environmental, human and financial sustainability of product and process from raw material to end of product life (12)."



Why UC Davis Strategies Helpful?

Why campus grown food?

Why UC certifications?

Why minimum packaging?

Why sustainability sourced products?



In terms of FSM:

- Research and Education tools (meat lab, olive garden, etc)
- Support small, local sustainable businesses so that more and more businesses are willing to be sustainable
- Reduce carbon output (less transportation, less packaging)
- Sustainability efficiency (set up rules)
- Less greenhouse gas emissions



Individual UC Campus Strategies - UC San Diego

- **UC San Diego**
 - General UC Policy commitment
 - 20% of food on campus from sustainable food products
- **Goals for 2023-2026 (15)**
 - 65% dining purchases is plant-based
 - <10% beef/pork purchases
 - >10% seafood dining purchases
 - 30% whole grain from all grain purchase
 - 30% or more entrees meet Na+ parameters at each large dining facility
 - Planning to save more than 20 million L water by increasing alternative dairy usage over dairy.

Individual UC Campus FSM Example - UC San Diego

Garden of Eden Farms (16)

- Community Supported Agriculture (CSA) program
 - CSA: a program that directly involved with farmers by supporting the sustenance and operation of their farms
 - Weekly delivery
 - A diverse variety of seasonal fresh produce delivered to school dining commons/food pantries
 - Different from traditional, one-farm CSA
 - Co-op of 30 small farms -> more variety
 - Have education session
 - How to buy fresh food locally
- Started to support community and schools since 2010, May 3.



<https://www.goeorganics.com/events>

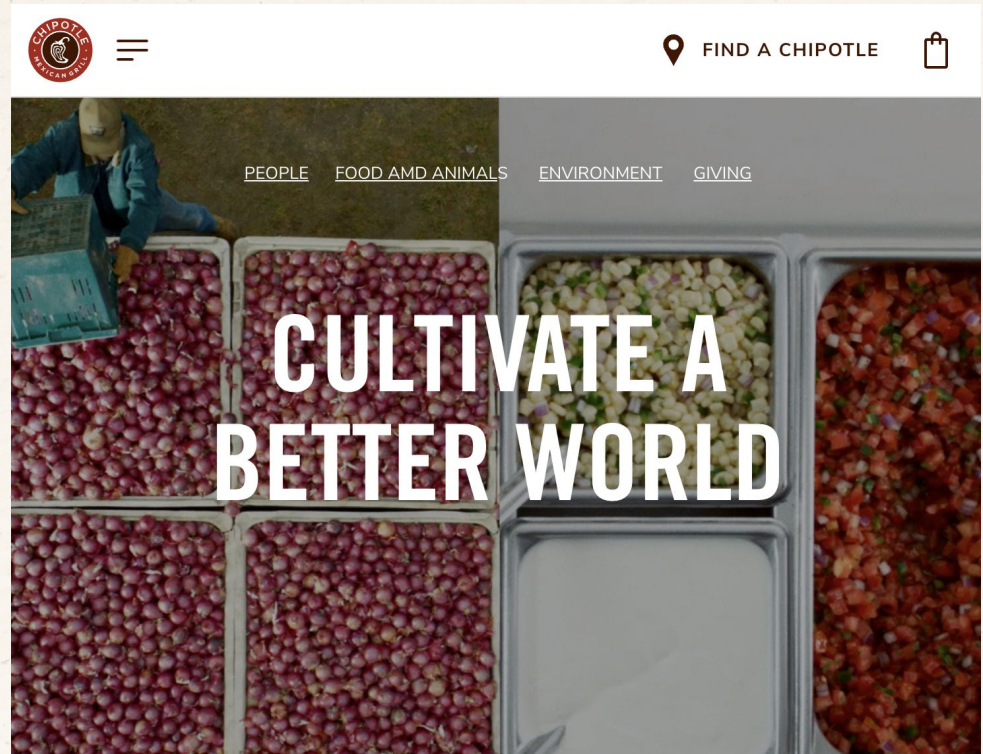
Why Purchasing at Local Farm is Sustainable?



- **Reduced Carbon Footprint (17)**
 - Reduce distance traveled, less greenhouse gas emissions.
- **Preservation of Farmland (18)**
 - Green spaces within communities, prevent urban expansion + preserve biodiversity
- **Support local economy (19)**
 - Jobs created, money circulated within community, economy promoted

Non-UC System - Chipotle

- In 2023, > 40 million lb of local produce purchased -> support local farms
- Goal for 2024:
 - 42 millions of locally grown ingredients
 - Achieved 94% of goal to transition 400 acres of farmland to organic growing practices by 2025
- Due to the high cost of growing and buying sustainable food
 - Smaller restaurants -> cost less to build and maintain, spending less on marketing and menu
- Food With Integrity
 - Food with high authenticity, high quality, and ethical sources provided by the supply chain



What Does Food With Integrity Mean with Examples? - Chipotle

Beef

- No Antibiotics Ever for beef and chicken supplied to Chipotle
- is traceable back to the ranch of origin, vegetarian-fed, and raised without added hormones or antibiotics

Dairy

- F.A.R.M Animal Care Program certified
 - Rigorous standards to ensure high-quality milk production
- Milk cows have access to pasture
 - Promotes natural behavior
 - Maintain environment sustainability

Pork

- Pork comes from pigs raised outdoors or in bedded barns
- No gestation or farrowing pigs are not allowed to be used

* All animals fed strictly following vegetarian diet *

Other Strategies - Chipotle

- **Use of Local Farms**


- Local line
 - a leading local food sourcing platform for regional food systems, serving farms, producers, food hubs, and food buyers by helping them digitize their operations and sell products.

- **Packaging**

- Minimize the amount of virgin materials used.
- Credible third-party certifications for virgin fiber-based materials.
- Utilize recycled materials when feasible.
- Use materials that can be reused, recycled, or composted.





Conclusion



Overall, purchasing organic and sustainable products is the essential step of building a sustainable environment. If all Foodservice operation can encourage the purchase of sustainable and organic products as UC policy stated, more and more sustainable businesses will be developed.

Question: Since one of the UC policy goal is to procure 25% sustainable food products by the year 2030, do you think this goal is feasible? If not, why?

Opportunities: Building a sustainable environment gradually
Challenges: Might over the budget, expensiveness can be the problem



Reference

1. U.S. Department of Agriculture. (n.d.). Definitions: Sustainability and Food Systems. Wwww.usda.gov. <https://www.usda.gov/oce/sustainability/definitions>
2. Organic Facts. (n.d.). Maine Organic Farmers and Gardeners. Retrieved May 13, 2024, from https://www.mofga.org/learn/organic-facts/?gad_source=1&gclid=CjwKCAjwi_exBhA8EiwA_kU1MpxZSvZN8mNSVVZceSCPPkXEthX9FMLUsDspkX_JMz4RFvDOXq3aWBoCH8kOAvD_BwE
3. *Farmers Market: Most Important Phase of Agriculture. (2023, June 1). Wwww.ishamfamilyfarm.com.*
<https://www.ishamfamilyfarm.com/farmers-market-most-important-phase-of-agriculture#:~:text=Environmental%20Benefits>
4. office. (n.d.). Organic FAQs. Organic Farming Research Foundation. Retrieved May 13, 2024, from https://ofrf.org/resources/organic-faqs/?gad_source=1&gclid=Cj0KCOjw6PGxBhCVARIsAlumnWaSEcJI6OnmrMC9Ppk87KnGaU8K6EEJ--yTZ_dAINb7vLDhp4g8OwaAmL6EALw_wcB
5. Aug 1, & Print, 2023 |. (n.d.). The Benefits of Seasonal Eating: Fresh, Nutrient-Dense, and Budget-Friendly. Home & Garden Information Center | Clemson University, South Carolina. Retrieved May 13, 2024, from <https://hgic.clemson.edu/the-benefits-of-seasonal-eating-fresh-nutrient-dense-and-budget-friendly/#:~:text=This%20fosters%20a%20sense%20of>
6. The plastic waste problem explained. (n.d.). Endplasticwaste.org. Retrieved May 14, 2024, from https://endplasticwaste.org/en/our-stories/the-plastic-waste-problem-explained?gad_source=1&gclid=CjwKCAjw9IayBhBJEiwAVuc3fm7Tq8Qsv89DtOterdw8GCi2ADNfOmETkdza_rKzVXYzOPJOObYOBIROCKf4OAvD_BwE
7. Why Is a Plant-Based or Vegan Diet More Sustainable? (n.d.). Sustainable Rookie. <https://www.sustainablerookie.com/veganfood/why-plant-based-diet-sustainable>
8. The Pros And Cons Of Organic Food. (2018, October 16). Wwww.realbuzz.com. <https://www.realbuzz.com/articles-interests/nutrition/article/the-pros-and-cons-of-organic-food>
9. Garnett, T. (2013). Food sustainability: problems, perspectives and solutions. Proceedings of the Nutrition Society, 72(1), 29–39. <https://doi.org/10.1017/s0029665112002947>



Reference

10. Clair, M. (2021). *Sustainable Procurement Guidelines*.

<https://www.ucop.edu/procurement-services/for-ucstaff/sustainable-procurement/sustainableprocurementguidelines.pdf>

11. Corkery, L. (2020, May 19). *Food & Dining*. Sustainable UC Davis. <https://sustainability.ucdavis.edu/goals/food>

12. Corkery, L. (2020, May 19). *Purchasing | Sustainable UC Davis*. Sustainability.ucdavis.edu. <https://sustainability.ucdavis.edu/goals/purchasing>

13. St, M., & Clair. (2024). *Sustainable Practices Contact*. <https://policy.ucop.edu/doc/3100155/SustainablePractices>

14. *Sustainable Dining | UC Davis Student Housing and Dining Services*. (n.d.). Housing.ucdavis.edu. <https://housing.ucdavis.edu/sustainability/dining/>

15. Rooted in flavor. (n.d.). <https://hdhdining.ucsd.edu/nutrition-services/rooted/index.html>

16. Farm fresh!. Garden of Eden. (n.d.). <https://www.goeorganics.com/>

17. Why buy local?. GrowNYC. (2021, May 6). <https://www.grownyc.org/greenmarket/ourmarkets/whylocal>

18. Team. (2023, September 19). 7 benefits of eating local foods. Community Food Systems. https://www.canr.msu.edu/news/7_benefits_of_eating_local_foods

19. Stadwick, R. (2023, March 17). The top ten benefits of buying from local farmers. Tom Maceri And Son.

<https://tommaceriandson.com/the-top-ten-benefits-of-buying-from-local-farmers/>

20. Chipotle. (n.d.). <https://www.chipotle.com/content/dam/chipotle/pages/sustainability/us/2023/updated-2021-annual-cmg-report-update-11-17-22.pdf>

21. Sustainability at chipotle. Chipotle. (n.d.). <https://www.chipotle.com/sustainability>

