



**WESTMINSTER**  
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# CAMPUS SUSTAINABILITY FOOD SURVEY - 2009

*Campus Values Regarding Food Sourcing and  
Preparation*

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INDEX \_\_\_\_\_

Introduction.....	2
Acknowledgements.....	2
Methodology and Scope.....	3
Limitations.....	4
Rationale for Survey Questions.....	4
Findings.....	6
Food System Recommendations.....	9
Next Steps for Campus Sustainability Fellows.....	12

## INTRODUCTION

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As we chose sustainability-related projects to pursue during the Spring 2009 semester, one topic that was unanimously agreed upon from the beginning was food. What we eat intimately effects our environment as well as our personal health, and provides a unique opportunity to connect with our community, other institutions and our local ecosystems. As we quickly discovered all of the complexities within the food industry as well as the complexities behind personal dietary choices, we chose to administer a survey to determine whether there was campus interest in revising the present structure of our food services.

What we discovered was a growing culture of food and environmental awareness among the students, faculty, and staff. Our hope is that this initial interest can serve as a springboard from which organic and local food education initiatives can begin to disseminate. We aim to help students understand the complexities and benefits of simply being aware of what they eat. Although there exists some stigmatization of the terms 'organic' and 'local' as environmental buzzwords, students and staff already generally support the basic aspects of these definitions, including fresher, pesticide-free produce and hormone and antibiotic free meats and dairy. Additionally, the fostering of this type of a food culture on campus has the potential to affect both our local environment and the environments of other communities.

As a group, the Sustainability Fellows believe that Westminster College, as a community and an institution, should view its food options as an opportunity to improve student health, to further the environmental commitments already emphasized by the President's Climate Commitment Contract, and to invest in food industry developments that help the planet beyond a scope that simply serves to lower our carbon emissions. By purchasing and supporting options within the food industry that are more environmentally sustainable, we believe that Westminster can serve as a leader both in sustainable student lifestyles and happy, healthy living.

## ACKNOWLEDGEMENTS

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Many thanks must be given to those who contributed to the development and implementation of this survey project. The project could not have occurred without the encouragement and guidance of Kerry Case, director of the campus Environmental Center and mentor to the Sustainability Fellows. Special thanks must also be given to Sodexo, particularly Jessica Alford, Lew DelFierro and Nathan Diogo, who have been willing to collaborate with us on this difficult and broad issue. We would like to sincerely thank each professor who allowed us to administer the survey in their classroom, as well as all of the individuals who volunteered to complete the survey. We could not have completed this project without the generosity of all of these people.

## METHODOLOGY AND SCOPE

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### *Participants*

295 campus members completed our paper survey. Of those, 85.7% were students, 5.8% faculty, and 8.5% staff. The sample size and distribution was chosen to represent 10% of the campus population. Survey administration occurred on a voluntary basis as fellows visited classrooms, offices and other campus locations. The following is a comprehensive list of campus classes and buildings in which the survey was offered: Introduction to Psychology/Transitioning to College (INTR) Learning Community, Introduction to Psychology/Introduction to Literature Learning Community, Methods of Counseling, Advanced Topics in Neuroscience, Personal Finance and Investing (two sections), Lifespan Development, Introduction to Environmental Studies, Human Evolution and Archeology, Spanish Literature, Environmental Ethics and Policy, Introduction to Sociology, Arts and Performance, Green Modernism, College Algebra, Speech, Rock Climbing, US History, Bamberger Hall, the HWAC climbing wall, and the campus Writing Center.

### *Measures*

The administered survey consisted of 10 multiple choice questions, 1 ordered ranking, 4 Likert scale rankings, and 4 long answer questions. The survey aimed to assess campus perspectives and values regarding local and organic foods, as well as other factors within the growing, processing, distributing and preparing process that could be altered to contribute to the goal of campus sustainability. Some questions were asked regarding the current food provider to assess both the necessity and feasibility of future initiatives.

### *Procedure*

Each Sustainability Fellow listed the courses that he/she was enrolled in, and assessed this list as representative of an appropriate cross-disciplinary sample. Fellows then presented each class with the opportunity to complete the survey, on an anonymous and voluntary basis. Additional courses were surveyed by Breanna Glaeser, as she had access to two freshman learning communities. Megan Johnston and John Coleman surveyed the Bamberger Hall employees on a walk-through, and Megan Johnston administered surveys to students in the HWAC facility. Additionally, Jennifer Neidfeldt surveyed members from the campus production of *A Chorus of Disapproval*. The professors in each visited course were also asked to complete the survey. Students and faculty were surveyed specifically from the following departments: Psychology, Environmental Studies, Foreign Language, Business & Finance, Anthropology, Speech, Sociology, Art, Math, Physical Education, English, Nursing, History, Neuroscience, and likely many more unreported departments.

## LIMITATIONS

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The obtained sample size just minimally approached a 10% sample, without precise accuracy. Surveyed courses seemed appropriately cross-disciplinary but no mechanism was used to verify or optimize this goal. A simple statistical breakdown was utilized to analyze the answers on the survey, while a more complex analysis may be ideal to isolate certain populations. The fellows intend to pursue more advanced statistical analyses of these data in the future if doing so will help us move closer to our sustainability goals. Finally, some questions may have been unclear to those taking the survey, such as: “How often do you eat on campus?” which aimed to assess how often those surveyed ate in the Shaw cafeteria; and “How satisfied are you with Sodexo products and services?” which may have improperly assumed all campus members were aware that Sodexo is the food service provider. Fellows did attempt to make up for these lapses with further explanation during the administration of the survey.

## RATIONALE FOR SURVEY QUESTIONS

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### *Campus Status*

Demographic information was obtained to classify each survey participant as student, faculty or staff. This allows us to assess whether we have a sample representative of the campus population.

### *Living Location*

We wanted to compare the number of surveyed participants living on campus and off campus. The assumption is that those living on campus have less opportunity to eat food from somewhere other than the school cafeteria and isolating these responses could provide valuable information for our current food service provider. With these data we can also assess how many commuting individuals choose to eat at the school cafeteria, and perhaps identify how this number could be increased.

### *Money Remaining on Meal Plan*

Students who reported having a meal plan with the cafeteria were asked to report how much money they had remaining at the end of the semester, on average. These reports were used as one way to assess how much money students are currently spending in the cafeteria, as well as the effect that increased prices might have on the current meal-plan system.

### ***Frequency of On-Campus Dining***

All survey participants were asked how often they ate food from the campus cafeteria. This was another way for us to assess how often members of the campus community choose to eat in the cafeteria.

### ***Satisfaction with Current Food Service through Sodexo***

Survey participants were asked to rate their satisfaction with current food service provider, Sodexo, not to target Sodexo explicitly but to evaluate campus satisfaction with the food program that is currently being offered. Answers to this item will allow us to get an idea of how much improvement is needed.

### ***Money Spent in Cafeteria per Week***

This was the third item that allowed us to assess the dominance of the Shaw cafeteria within the diets of each individual. Items addressing frequency of dining and amount of money spent (coupled with amount of money remaining on meal cards) were written to assess just how much investment our campus members have in our food service program, and in turn how much their health and lifestyles may be affected by the food served.

### ***Dietary Restrictions***

All individuals were asked to report their food allergies or dietary restrictions so that we could be sure to address whether Shaw is meeting the needs of all campus members. This item may help us to identify the need for clear allergy labeling in the cafeteria.

### ***Food Value Rankings***

Individuals were asked to rank the order of importance for the following food qualities: Health, Cost, Organic, Variety, and Locally Grown. This item will allow the fellows to compare the priorities of the campus population to the campus sustainability goals. It is our aim to make only the changes that address the demands of the campus members, and not to enforce our own agenda without campus support.

### ***Food Values Relative to Meat, Dairy, Grains and Produce***

Individuals were asked to report how important food quality is to them relative to meat, dairy, grain and produce specifically. Answers could be either “not at all,” “somewhat” or “very,” and the following qualities were assessed: organic, locally grown, hormone-free, and humanely raised for meat and dairy; organic, locally grown, and whole grain content for grains; and organic, locally grown, seasonal, and fresh for fruits and vegetables.

### ***Willingness to Pay More for Local/Organic***

This question assesses the campus population's willingness to pay more for local and organic products, specifically. Answers could range from willing to pay "none," "5%," "10%," "20%" to "30% or more." This is a crucial evaluation that will affect the feasibility of our proposed changes based on financial cost.

### ***"Healthy" Food Qualifications***

A previous survey item asked individuals to report how important "healthy" food was to them. Thus, this question was created to define what our campus members believe to be "healthy." This also allows us to identify the connections that exist between what is perceived to be healthy and what is sustainable. Possible answers included: low-fat, low-sugar, whole grains, organic/pesticide free, fresh fruits/vegetables, unprocessed foods, no high-fructose corn syrup, and other (with a write in section to follow).

### ***Perceived Benefits***

Three long-answer questions were proposed on the survey, asking about the perceived benefits of organic food, locally grown food, and healthy food. These questions were to allow individuals to provide additional details about their food values.

## **FINDINGS**

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### ***Campus Status***

**85.7%** Student

**5.8%** Faculty

**8.5%** Staff

### ***Living Location***

**33%** On Campus

**67%** Off Campus

### ***Money Remaining on Meal Plan***

Students with meal plans = **41.8%**

**37.4%** Less than \$100

**36.6%** \$100-\$500

**26%** \$500 +

### ***Frequency of On-Campus Dining***

**37.3%** Daily

**25.7%** Weekly

**24.7%** Less than weekly

**12.3%** Never

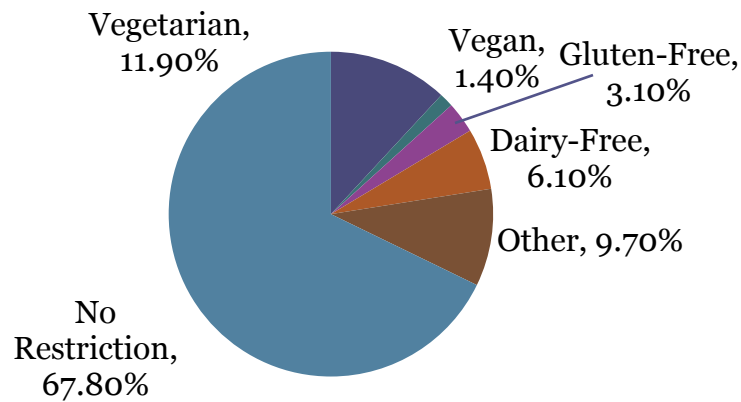
***Satisfaction with Current Food Service through Sodexo***

Very unsatisfied - Somewhat unsatisfied - Neutral - Somewhat satisfied - Very satisfied  
 12.8%                      28.8%                      28.1%                      28.1%                      2.1%

***Money Spent in Cafeteria per Week***

**60.1%** \$20 or less  
**22.7%** \$20 - \$50  
**17.1%** More than \$50

***Dietary Restrictions***



***Food Value Rankings***

Ranking placed our proposed food values in the following order (1 being the most important). It is significant that, although organics and locally grown were ranked last on average, the average score assignment for them placed them both near fourth position.

- 1- Health (scoring 1.9 on average)
- 2- Cost (scoring 2.6 on average)
- 3- Variety (scoring 2.6 on average)
- 4- Organic (scoring 3.8 on average)
- 5- Locally grown (scoring 3.9 on average)

*Food Values Relative to Meat, Dairy, Grains and Produce***Meat**

Organic	Not at All <b>28.1%</b>	Somewhat <b>51.1%</b>	Very <b>20.8%</b>
Locally grown	Not at All <b>33.0%</b>	Somewhat <b>50.0%</b>	Very <b>17.0%</b>
Hormone and antibiotic free	Not at All <b>13.4%</b>	Somewhat <b>36.8%</b>	Very <b>49.8%</b>
Humanely raised	Not at All <b>13.8%</b>	Somewhat <b>31.2%</b>	Very <b>55.0%</b>

**Dairy**

Organic	Not at All <b>25.3%</b>	Somewhat <b>47.3%</b>	Very <b>27.4%</b>
Locally grown	Not at All <b>27.2%</b>	Somewhat <b>52.7%</b>	Very <b>20.1%</b>
Hormone free	Not at All <b>13.2%</b>	Somewhat <b>30.4%</b>	Very <b>56.4%</b>
Humanely raised	Not at All <b>13.6%</b>	Somewhat <b>29.4%</b>	Very <b>57.0%</b>

**Grains**

Organic	Not at All <b>26.6%</b>	Somewhat <b>50.0%</b>	Very <b>23.4%</b>
Locally grown	Not at All <b>31.7%</b>	Somewhat <b>52.1%</b>	Very <b>16.2%</b>
Whole grain content	Not at All <b>12.8%</b>	Somewhat <b>32.5%</b>	Very <b>54.7%</b>

**Fruits and Vegetables**

Organic	Not at All <b>16.8%</b>	Somewhat <b>45.9%</b>	Very <b>37.3%</b>
Locally grown	Not at All <b>18.6%</b>	Somewhat <b>50.0%</b>	Very <b>31.4%</b>
Seasonal	Not at All <b>8.9%</b>	Somewhat <b>45.5%</b>	Very <b>45.5%</b>
Fresh (instead of canned or frozen)	Not at All <b>3.8%</b>	Somewhat <b>19.5%</b>	Very <b>76.7%</b>

### ***Willingness to Pay More for Local/Organic***

The following lists how many individuals reported willingness to pay a selected amount more for **Organic** foods. In total, 64.5% were willing to pay some amount more.

- 35.5%** - None
- 30%** - 5%
- 20.3%** - 10%
- 9.7%** - 20%
- 4.5%** - 30% or more

The following lists how many individuals reported willingness to pay a selected amount more for **Local** foods. In total, 62.1% were willing to pay some amount more.

- 37.9%** - None
- 27.6%** - 5%
- 20%** - 10%
- 10%** - 20%
- 4.5%** - 30% or more

### ***“Healthy” Food Qualifications***

The following lists how frequently each quality was used to define “healthy.”

- 61.1%** Low-Fat
- 54.5%** Low-Sugar
- 86.8%** Whole grains
- 64.2%** Organic/pesticide free
- 95.1%** Fresh fruits and vegetables
- 74%** Unprocessed foods
- 62.8%** No high-fructose corn syrup
- 14.9%** Other (describe)

## **FOOD SYSTEM RECOMMENDATIONS**\_\_\_\_\_

- 1. All food must be obviously labeled with prices.***
  - a. In our survey, we found a disparity between how much people were eating at Shaw, how much they thought they were spending, and how much money was left on their meal cards. We also received many comments from people concerned with prices, and believe that labeling all prices may help remedy this.

2. ***All local/organic products or ingredients must be obviously labeled.***
  - a. Thanks to information provided by Jessica Alford and Lew DeFierro, we understand that some organic and local foods are already being provided in Shaw. Unfortunately, we, along with other Shaw customers, are unsure which foods are local or organic because there is no labeling. Based on our survey results, many people value the qualities of local and organic, and would therefore be more likely to buy them.
3. ***Allergy-free foods (i.e. gluten or dairy-free) must be obviously labeled.***
  - a. In our survey, we found that over 25% of respondents reported some type of food allergy, many with multiple allergies. This raises a large concern for the health and safety of those students, and therefore, allergy-free foods must be labeled to minimize risk. Labeling would also boost sales because people would be surer about what safe foods they could buy.
4. ***Allergy-free food options must always be available (i.e. gluten or dairy-free).***
  - a. See 3(a).
5. ***Vegetarian and vegan foods must be obviously labeled.***
  - a. In our survey, we found that over 13% of respondents reported being vegetarian or vegan. Again, this raises concern over the ingredients in certain food products, and so all vegetarian and vegan foods must be labeled.
6. ***There must be one organic green at the salad bar every day.***
  - a. Organics, which are free of pesticides, synthetic fertilizers, and are not genetically modified, are naturally better for health. In our survey, health ranked as the #1 priority for Shaw consumers (over price or variety) and 64% of respondents considered organic/pesticide-free food healthy. Also, over 83% of respondents reported that organic fruits and vegetables were somewhat or very important to them.
7. ***One organic fruit must be available each day, and at the same price as non-organic fruit.***
  - a. See 6(a).
8. ***Organic yogurt and string cheese must be available, and at the same price as the non-organic yogurt and string cheese.***
  - a. In our survey, almost 75% of respondents reported that organic dairy was somewhat or very important to them. Also, over 50% of respondents said that hormone free dairy was very important to them, which is a main quality of organic foods.

**9. All produce must be fresh (i.e. not canned or frozen) April through October.**

- a. For fruits and vegetables, a substantial 76% of survey respondents said that fresh produce was *very* important to them, and only slightly less than 4% said that it was “not at all important.” 95% of respondents considered fresh produce healthy, which is, as stated above, the #1 concern of survey respondents. One option is to shop local, where fresh produce is available for several months out of the year.

**10. All milk (including bottled) must be hormone and antibiotic free.**

- a. Over half of our survey respondents reported that hormone free dairy was very important to them, and another 30% reported that it was somewhat important. Antibiotics and hormones pose many health risks, and should therefore be eliminated from our dairy.

**11. All meat must be hormone and antibiotic free and all chicken must be antibiotic free.**

- a. Again, hormones and antibiotics pose health risks to both us and the animals being raised. In our survey, about half the respondents said hormone free meat was very important, as well as humanely raised. Humanely raised or pasture-raised animals are not fed hormones or antibiotics, and are therefore a viable option for our meat selection. Organic meat also does not have hormones or antibiotics and has humanely raised standards, something which over 70% of survey respondents said was somewhat or very important to them.

**12. Two weekdays a month, the main ingredients of one meal must be organic, and at the same price as regular meals.**

- a. See 6(a). Also, if price did need to be increased in order to cover costs, over 64% of survey respondents would pay at least 5% more for organic food. We feel, however, the cost increase would not be supported if it was more than 10%.

**13. One weekday a month, the main ingredients of one meal must be local, and at the same price as regular meals.**

- a. Buying local encourages fresh produce and organic farming. It also supports the local community with economic value and a connection between students and local farms. If cost did need to be increased, over 62% of survey respondents said they would pay at least 5% more for local food, but again, probably not supported if it was more than 10%.
  - i. Local is defined as within 300 miles with a strong preference for foods produced within Utah.

## NEXT STEPS FOR CAMPUS SUSTAINABILITY FELLOWS \_\_\_\_\_

Based on the results of this survey, we were able to infer that food education initiatives would be valuable to our campus community. There was an inconsistency between the overall campus perspective of local and organic products, and the specific food qualities deemed important. As shown in the data above, locally grown and organic products ranked last in terms of overall importance, yet the qualities that local and organic food possess were ranked as very important through other questions on the survey. For instance, over 50% of surveyed individuals deemed humanely raised meat and dairy livestock as “very” important, as well as evaluating hormone and antibiotic free meat and dairy livestock as “very” important. These qualities can best be found in organic and local products. Organic certifiers stipulate humane animal conditions, while small local companies tend to meet higher animal standards than large Confined Animal Feeding Operations (CAFOs), though animal welfare at local farms is still dependent on size of farm. Additionally, 64.2% of individuals used “organic/pesticide free” to describe healthy food, and healthy food was ranked the number one priority for campus consumers. After reading the written comments on the surveys, it became clearer that the majority of individuals surveyed knew little about the actual benefits of local and organic production.

In an effort to increase the campus awareness of sustainability through food, the fellows propose to use campus garden produce to provide special, all-organic, all-local meals for campus members. We also have interest in the possibility of selling our produce to campus members through a small campus farmer’s market.

The results of this survey will be preserved for reference over the next few years. The fellows may choose to apply more complex statistical analysis to isolate certain populations and correlations. We also expect that this project will be used as a model in later years so that campus food values can be easily re-evaluated.

