

5/4/2009

UA Dining Proposal Committee
Final Report

<http://ua.mit.edu/dpc/>

1 Introduction

The UA Dining Proposal Committee, hereafter known as DPC, was created March 9, 2009 by the Undergraduate Association Senate and charged with the following goals[1]:

- Examine the current dining system at MIT, including menus, hours, locations, pricing, perceived value, sustainability, etc.
- Review all available data on students' current dining habits and dining preferences
- Assess the impact of retail operations and other external factors on residential dining
- Recommend a comprehensive program that meets the needs of the MIT community

This report is the culmination of that charge. The process itself is detailed in the meeting minutes, data, and analysis summaries on the DPC website[2].

The members of the Dining Proposal Committee are:

- Vinayak Ranade (Chair, East Campus)
- Daniel Hawkins (Vice Chair, Simmons Hall)
- Cinjon Resnick (Data Analyst, East Campus)
- Alexandra Jordan (Peer University Comparisons, Bexley)
- Adam Bockelie (Minuteman, Next House)
- Jonathan Goldberg (Breakfast-to-go, No. 6 Living Group)
- Allison Hinckley (Baker House)
- Lyla Fischer (Random Hall)
- Stephanie Schmit (Burton Conner)
- Fangfei Shen (East Campus)
- Paul Baranay (Webadmin, Phi Kappa Sigma)
- David Templeton (Photographer, Burton Conner)

Other Acknowledgements:

- Nathan Pallo (cover page)
- Todd Schenk (sustainability)
- Elizabeth Riley (pika organic and local foods figures)
- Joshua Velson (subsidies)
- The Tech (history)
- The Blue Ribbon Committee on Dining (survey data)
- All those who showed up to DPC meetings and gave us feedback over email

2 Summary of Recommendations

2.1 Short Term (0-3 years)

- Sponsor a grab-and-go breakfast program with participation and implementation to be decided by each living group
- Move the food trucks closer to main campus
- Offer a quality sandwich and salad bar with weight-based pricing
- Close the dining hall in McCormick
- Replace House Dining with a discounted declining balance program such that participation is still mandatory for residents of dining hall dorms

2.2 Long Term (0-5 years)

- Create a central dining hall with more variety, longer hours, and an all you care to eat (AYCE) dinner option
- Close the dining halls in Baker and Simmons while leaving the dining halls in Next and NW-35 open
- Make the declining balance program optional for everyone
- Reclaim control of the dining system from third party vendors

3 Overview of MIT's Current Dining System

Unlike most schools, MIT does not offer programs that give students a fixed number of meals per week to be used for breakfast, lunch, or dinner at various dining halls. Instead, students generally cook for themselves in dorm kitchens; eat in Fraternities, Sororities, and Independent Living Groups (FSILGs); or eat in one of five dorm-based dining halls (Baker, McCormick, Next, Simmons, and NW-35). All of MIT's dining halls are located on the west side of campus and require residents to subscribe to the House Dining Membership (HDM), which offers a 50% discount on meals purchased in a dining hall. HDM currently costs \$300 per semester, and students not living in one of the five dining hall dorms may enroll voluntarily[3].

In all dorms without dining halls, each basic living group (entry, floor, suite, etc.) is equipped with full kitchens. McCormick is similarly equipped, but other dorms with dining halls have very limited kitchen facilities. See Appendix C for information on students' dining habits.

4 Problems with the Current System

- The variety and quality of dining hall meals is not worth current prices
- House Dining is mandatory for residents of dorms with dining halls
- Early morning and late night food options are insufficient
- Generally inadequate dorm kitchen facilities
- AYCE option is inconveniently located
- Major subsidy is required to keep the system financially sustainable
- Established nutritional standards are unsatisfactory

The House Dining program is the most significant issue in MIT's current dining system. We estimate that House Dining members pay an average of \$13.55 per meal[4] - \$3.55 more per meal than they would be paying without the HDM "discount." This estimate is based on the average of 2.7 meals per week[5], the average price (including a 50% discount) of \$5 per meal[6], the \$300 per semester HDM fee, and a 13 week semester[7]. Students living in dorms without dining halls spend an average of \$1750 on food per year, whereas students living in dining hall dorms spend \$2250 per year[8]. Even with this exorbitant pricing, the campus dining system struggles to maintain financial sustainability. The dining halls create a total deficit of more than \$500,000 per year. Half of that deficit is subsidized by more profitable aspects of the dining system, such as catering and retail operations. The remainder of the deficit is paid for by students, through the HDM fee[9].

5 Peer University Comparisons

Of the universities we considered for benchmarking, none were truly comparable to MIT. All other institutions have mandatory meal plans, and none have expansive FSILG communities. We evaluated the current dining system at MIT against Harvard, Yale, and Princeton. These schools were most similar to MIT in the size of the undergraduate student body, stature in the academic community, and region of the United States (for resource price comparison). After analyzing the available dining options, prices, facilities, and hours of operation, we concluded that while there are aspects worth considering, none of the dining systems at the aforementioned universities would meet the needs and wishes of the MIT student body.

5.1 Harvard

The Harvard University Dining System (HUDS) is a self-operated foodservice, which serves 25,000 meals per day to the Harvard community with a staff of 650. HUDS consists of thirteen AYCE residential dining facilities, plus a Kosher kitchen and fourteen on-campus retail options. In general, Harvard dining halls are open for breakfast, lunch, and dinner every day of the week, with additional “brain breaks” (late-night self-serve snack bars) on school nights. With the exception of freshmen, residents can eat at most dining halls for most meals. All students that live in Harvard dormitories are required to be enrolled in the meal plan, which includes 21 meals per week at a cost of \$4982 per year[10]. Students can use Crimson Cash, similar to TechCash, at several retail facilities both on and off campus.

The Committee found that a system similar to HUDS would not meet the needs of the MIT community. MIT students want the ability to cook for themselves, eat at FSILGs, frequent off campus restaurants, or utilize the dining halls. A mandatory meal plan does not satisfy the diverse needs of the community. The Harvard meal plan is also substantially more expensive than the cost of cooking for oneself[8].

5.2 Yale

The Yale University Dining System (YUDS) is also self-operated, after the university chose to discontinue their contract with Aramark in 2008[11]. YUDS offers twelve residential dining halls, Commons Dining (a central dining location), student-run Butteries, and six on-campus restaurants. Yale dining facilities are open for breakfast and lunch Monday through Friday, with a brunch option on the weekend. Dinner is offered every night.

All on-campus residents must choose one of the five meal plans, though freshmen are

required to purchase either the Full or Anytime meal plan. All YUDS meal plans (see Appendix E) allow students to transfer board meals to on-campus retail facilities at variable retail transfer rates. Similar to MIT, Yale also offers Eli Bucks, usable at dining or retail facilities, and Campus Cash, usable at on-campus retail locations.

Though YUDS offers much more variety than the Harvard plan, this system would still fail to meet the needs of MIT students, since meal plans are mandatory, and students do not have the option to eat at FSILGs or cook for themselves without incurring significant losses. We do believe, however, that the option to transfer meal plan benefits to on-campus retail venues would be popular among students.

5.3 Princeton

The Princeton University Dining Services (PUDS) is also self-operated. PUDS offers four residential dining halls, university-managed cooperatives, private eating clubs, and five retail facilities on campus. Dining halls are open for breakfast/brunch and dinner every day of the week. Lunch is offered Monday through Friday. Meal plan options for students vary by class year and housing (see Appendix E).

Again, we find the variety offered at Princeton to be closer to the desires of MIT students, but the system of mandatory meal plans for freshmen and sophomores would simply not be suitable at MIT.

In addition to the aforementioned issues, neither Yale, Harvard, nor Princeton has university-recognized Greek organizations. Independent living groups and fraternal organizations at MIT use house dinners as an integral part of the recruiting process. Mandatory plans such as those used at the three evaluated institutions would significantly weaken the communities of FSILGs. Because of the high cost, meal plan requirement, and impact to FSILGs, we cannot recommend that any of the evaluated plans be implemented at MIT.

6 Principles

In this section, we present principles that should be upheld at MIT.

6.1 No Mandatory Dining

MIT students are perfectly capable of making their own decisions regarding how, where, and when they want to eat. Therefore, we strongly emphasize that there should be absolutely no mandatory meal plans. There should certainly be meal plans available to

students who want them, but they should be optional. Our short term recommendations include a mandatory cost to residents of dining hall dorms as a transitional measure. In the long term, mandatory dining plans should be phased out completely.

We understand that many parents want their children to be on a meal plan, and this presents motivation for a mandatory meal plan. However, we believe that MIT should let students and parents decide together whether or not to opt into a meal plan. There is no need for MIT to consider a parent's demand more strongly than a student's freedom.

In order to maintain a financially sustainable dining system, MIT needs to ensure good marketing and good service to customers. A substandard service which sustains itself by levying a tax on the community is not a good business model.

We consider all classes to be full members of the MIT student community. Therefore we oppose any meal plan that requires varying levels of commitment based on class year, including meal plans required only for freshmen.

6.2 Kitchens

Even if MIT is able to establish a sustainable dining hall system, there will still be times when students want to prepare their own food. Most MIT students would like to have the option of cooking in close proximity to where they live. There should be sufficient kitchen facilities provided in every living group. Providing substandard or insufficient kitchen facilities is not acceptable.

Kitchen facility requirements are beyond the scope of this report. However, we suggest establishing a minimum standard for kitchen facilities in dorms with and without dining halls.

It is worth noting that neither East Campus nor Senior House had kitchens until 1983[12]. This suggests it is possible for MIT to renovate the other dormitories to provide kitchens. In Baker, for example, a kitchen could replace a section of the lounges beside the elevators.

6.3 Sustainable Food

Students are concerned about the environmental and social impacts of MIT's food system. Given equal or lesser costs, we would like to see MIT choose locally-grown food and/or food that meets environmental quality standards such as organics, fair trade, and Marine Stewardship Council-certified fish and seafood. Food service-related waste should be minimized, with composting instituted campus-wide and food packaging avoided whenever possible.

One of the MIT FSILGs, pika, provides a good model for smaller living groups to institute

sustainable food practices on a dorm or floor level. See Appendix D for specifics regarding this sustainable food program.

7 Valuable History

It is worthwhile to point out that in 1998, the MIT Institute Dining Review requested the creation of the Office of Campus Dining[13]. The following were some of the goals:

- Dining hall hours will change. In general, the dining halls will serve dinner seven nights a week during 2.5-3 hour time blocks, including during IAP and in a limited capacity during the summer.
- There will be support for personal cooking.
- Meal plans will be made available to the MIT community. These plans will offer packages of meals at significant savings over the regular *à la carte* prices. To further relieve financial burdens on students, vendors will be required to offer low-priced “value meals.” These meals will include an entree, side dishes, and a beverage. They will be full, healthy meals (not “junk food”) and will cost under \$5.00. Mandatory, system-wide meal plans will not be implemented. However, the residents of a house certainly may require meal plans to build a house dining program.
- Meals will be available to students 24 hours a day, either through open facilities or through delivery services.

Ever since the 1998 Review, there have been countless committees and resources focused on solving the dining problem. The Office of Campus Dining has achieved some of its goals, but dining halls are not financially sustainable, and the concept of “value meals” was lost somewhere in the shuffle. It is surprising and unacceptable that in all this time the Office of Campus Dining has not managed to find a dining system that is sustainable, healthy, and affordable to students.

Over the last 50 years, MIT has tried most of the suggestions that will come out of any report that this committee or the Blue Ribbon Committee on Dining could publish[14]. None of these seem to have provided a sustainable and agreeable solution to the dining issue. This raises the question of whether there is something wrong on a more basic level. Prior to 1957, MIT had a self-run dining system. In 1957, the Institute signed a contract with Stouffer’s as a third party dining service, and it has been signing deals with third party vendors to run campus dining ever since[15].

It is time for MIT to revisit the idea of self-operated dining. Though we were denied access to financial data, we believe that an institute operated system would cut operating

costs, and that those savings would offset any increase in logistical costs. Many of the problems with the current dining system are passively dismissed by the Office of Campus Dining because operations of third party providers cannot be controlled. None of the contracts with private food service providers are available to the public or to the MIT student body, which limits any outside oversight of the dining system. Having a self-operated dining system would enable MIT to have full control over when, where, and how dining options are provided. We strongly urge the Institute to consider this as a long term strategy.

8 Short Term Recommendations (0-3 years)

The following sections detail our short term recommendations for breakfast, lunch, and dinner.

8.1 Breakfast

Contrary to the systems at benchmark universities, in the short term we suggest that the residential dining halls do not open for breakfast. Many students leave little time between waking and leaving for class. We do not believe that a hot breakfast option in dining halls could be profitable, since operating costs would be roughly equivalent to that of dinner but with less revenue.

Instead, we propose having Campus Dining sponsor a grab-and-go breakfast program. This would provide a fast, nutritious, cheap breakfast, Monday to Friday, for students on their way to class. It would be the responsibility of Campus Dining to provide an infrastructure that dorms could purchase. This infrastructure would include:

- Physical devices to store and present the food at appropriate temperatures and sanitation levels
- Fresh food, which should be ordered remotely and delivered to the dorm/living group

Campus Dining would coordinate food delivery via a web interface. A variety of options should be available for delivery, including but not limited to:

- Quick snacks - Fruits, Granola Bars, Yogurt
- Grains - Bagels, Cereal, Oatmeal
- Drinks - Milk, Orange Juice, Apple Juice

Each dorm would decide, independently, whether to offer a grab-and-go breakfast program, whether the program would be optional or mandatory, how much to charge, what types of food to order, and how the food will be served (i.e. AYCE, single visit unlimited, à la carte, etc.).

Further, each dorm will also decide the hours of operation and the staffing of the breakfast program to provide organization and cleanliness. We recommend using students to staff the program. Last, the dorm would also be responsible for collecting revenue from its residents and paying Campus Dining for the food delivery service.

As an example, let us highlight Bexley Hall. If the 120 residents choose a plan costing \$50 per resident per semester, over fifteen weeks the dorm would have \$80 a day to spend on breakfast. If students, paid at \$10 per hour, are hired to set up and take down the grab-and-go options, the dorm still retains \$60 per day to spend on food.

8.2 Lunch

- Do not open the residential dining halls for lunch. More than 70% of students are in the main academic buildings, Zone 3, before eating[16]. This suggests that students predominantly do not want or do not have the time for a sit-down lunch, hence it is unlikely that in the current layout the residential dining halls would receive enough business to make lunch a worthwhile endeavor.
- Move the existing food trucks to a more central location. The food trucks were originally moved from the parking lot between Building 68 and Building 32 for construction purposes, but the new location on Carleton Street does not provide access to many students; at some vendors lunch sales have fallen by 50% since the move[17].

We suggest moving the trucks to a more central location near Stata. This would greatly improve access to variety and low-cost options.

- Add a fresh salad, sandwich, and fruit bar with weight-based pricing in W20. A good model is Damon's in the Kendall Food Court. Damon's offers a \$.35/oz food bar, which consists of a large, varied, and quality salad bar; hot food selections including sandwich ingredients, meats, and prepared foods; a fruit section; and a variety of soups. The Coffee House on the third floor of W20 is an optimal location. The current patrons could easily redistribute their activities to other rooms within W20. This new, healthy food option would directly compete with LaVerde's Market and other vendors.

LaVerde's prices are notoriously expensive[18]. In addition, because it is the only centrally located convenience store, LaVerde's has no incentive to listen to students' input. In recent years this has resulted in the end of 24 hour service. The only way to affect change is to introduce another vendor with competitive pricing.

8.3 Dinner

- Close the residential dining facility in McCormick Hall. This would ease the financial strain on the current system while still providing the opportunity for McCormick residents to eat in a conveniently located dining hall, such as Baker. We acknowledge that this relocation could cause longer wait times at other dining halls. Closing McCormick, however, would also reduce the number of students who are required to buy a meal plan, so we can reasonably expect that not all users of McCormick will transfer to Baker. Finally, McCormick, as opposed to the other dining hall dorms, already has kitchens available.
- Replace HDM with a declining balance program integrated into Dining Dollars (DD). Purchasing DD would be possible only at the beginning of each semester and would not be rolled over or refunded. Residents of dorms with dining halls would be required to purchase a minimum of 300 DD per semester (note that this is a short term solution). As an incentive for further commitment, we recommend adding a bonus to the DD account based on how much students purchase (see Appendix A). This plan, as opposed to the current system, does not require menus with separate prices.

9 Long Term Recommendations (0-5 years)

The following sections detail our long term recommendations for dining facilities, Dining Dollars (DD), hours of operation, availability of options, and quality assurance. Unless explicitly stated otherwise, all short term recommendations apply to the long term as well.

9.1 Dining Facilities

This section encompasses locations and hours of operation.

Create a large, centrally-located dining hall in either W20, W1, or a new building to be constructed in the space behind Kresge Auditorium that is currently a parking lot. The W20 option could replace Lobdell Cafeteria. Any displaced vendors that still appeal to students, such as Subway, should be relocated. The addition of a large dining hall to W1 should not be contingent on removing the kitchens from the dorm.

At a minimum, this central dining hall should be open on weekdays for breakfast (8:30am to 10:30am), lunch (11:30am to 2:30pm), and dinner (6pm to 10pm). We consider these hours optimized for class schedules, athletics, and students' nocturnal tendencies. We recommend, however, that the dining hall offer continuous service, as this would incur

only a nominal cost increase[19]. The dining hall should also be open with shorter hours on weekends.

Close the residential dining facilities in Baker House and Simmons Hall, but leave NW-35 and Next House Dining open to serve the needs of NW-35, Next, and Simmons residents who are normally in their dorms during dinner hours. The residents of McCormick, Baker, and Simmons should be allowed to determine how they will use the space previously occupied by their dining halls. Popular options might include converting the space into a lounge, creating or expanding a community cooking area, or setting up a student-run late-night café similar to the Butteries at Yale[20]. We endorse this last idea strongly; student-run late-night cafés allow development of student leadership and organizational skills and provide a convenient, affordable late-night option.

We recognize that a central dining hall in Lobdell Cafeteria would raise concerns regarding space on campus and displaced dining options. However, we also believe that a central dining facility will concentrate customers and revenue, creating a stronger, more convenient dining system. To gain the benefits of a central dining hall while preserving existing facilities, we believe the parking lot replacement suggestion is worth strong consideration, despite its large initial cost. The Kresge parking spaces could be easily relocated or built into the new structure.

9.2 Dining Dollars

Allow all students, regardless of residence, to purchase any amount of DD. Dining Dollars should be accepted as a method of payment at all MIT-sponsored services, including the Forbes Café in Stata, Steam Café, Café 4, and the central dining hall. In addition, we propose a bonus system (see Appendix A) that would create a participation incentive for students in dorms without dining halls while maintaining freedom of choice.

9.3 Options

The options available at the central dining hall should be varied. All meals should be available *à la carte*. In addition, AYCE meals should be available during dinner. Students tend to skip lunch more than they skip dinner[21], so it may not be economically viable to offer AYCE at lunch. Wherever AYCE is offered, it should not be the only option. For a more detailed analysis, see Appendix B.

Another possible option is single-plate-unlimited, in which students are charged a flat rate for each plate of food.

The central dining hall should offer ethnic diversity and a wide variety of food selections, including but not limited to a sandwich bar, salad bar, pasta bar, grill, and stir-fry.

Prepared dishes should be healthy, balanced meals with an ample selection of halal, kosher, vegan, and vegetarian foods.

Students should also be able to purchase gift cards on campus for local grocery stores, such as Trader Joe's, Shaw's, and Whole Foods, using TechCASH or Dining Dollars. This would increase the variety of options available to students.

9.4 Third Party Vendors & Quality Assurance

If MIT does not reclaim the dining system, the institute should at least provide some method of control over vendors.

Currently, we are unaware of any existing quality assurance program. The UA Committee on Dining conducts surveys in dining halls, but Bon Appetit is not obligated to change based on survey findings. We recommend that the Office of Campus Dining include a contractual clause requiring quality food service, as determined by students and the administration. A violation of such a clause would incur fines or would terminate the contract.

The current dining contract provides Bon Appetit a guaranteed profit and a pledge to cover any deficit in addition to that profit[9]. Thus, there is effectively no penalty for inefficient business practices. If MIT continues to contract outside vendors, we recommend changing the subsidy structure to maintain low meal prices for students and provide a market incentive for vendors.

For instance, MIT could subsidize meals directly and remove the profit ceiling for Institute support. For every meal purchased through the dining halls, MIT would pay an extra fixed percentage of the meal to the dining operator. This would tie vendor profits to purchases. The subsidy could be reduced progressively with larger sales volume, but this reduction would need to be structured such that more sales would not actually reduce profit.

9.5 Campus Impact

There was once a dining hall in W20 that was ultimately shut down in favor of individual vendors[22]. We expect that the proposed central dining hall would not meet the same demise. Whereas the former Lobdell cafeteria was competing directly with several residential dining halls, the proposed central dining hall would be a consolidation aimed at reducing costs and not a conflict with existing options.

A centralized dining facility would reduce operating costs and expand the customer base, making the dining program more sustainable. It would be able to offer better quality food at lower prices, a wider selection of options, and more flexible hours, thereby addressing

most of the current complaints concerning MIT’s dining system. It would also create more opportunities for faculty-student interaction and campus-wide social engagement.

10 Blue Ribbon Committee Report

In 2007, the Blue Ribbon Committee (BRC) was charged with “examining the existing structure of the dining system and making recommendations for what the program should look like in years to come” [23]. There are some things in the BRC’s draft report that we felt compelled to address.

The BRC recommends several Individualized Eating Plans (IEPs). The first IEP option is a \$600 per semester mandatory declining balance system for students living in dorms with dining halls. A mandatory \$600 fee for five meals a week was tried with the Phoenix group of about 50 students in Fall 2008 but was discontinued after one term because of student dissatisfaction [24]. Given this response, it seems unwise to implement such a system campus-wide.

Even more disturbing is the proposed \$500 fee for opting out of the IEP. For students who choose to prepare their own meals, this fee results in a cost of \$1,000 per year and absolutely no benefits. The fee is designed to make the dining system “more solvent,” which means students will be responsible for subsidizing the poor business practices of Bon Appetit. Currently, dining facilities play a small role in students’ housing selection [25]. If excessive dining-related costs are imposed on residents of dining hall dorms, students may base their housing decisions on financial concerns rather than cultural and social well-being.

The BRC report says that Approximately 50% of the undergraduates surveyed expressed a desire for some meal plan configuration that offered AYCE meals. This claim is ambiguous, as it does not differentiate between undergraduates who would like to eat AYCE meals and undergraduates who would not mind an AYCE option being available. Upon further examination, we determined that only 7% would like to eat all their meals at an AYCE facility [32], and only 39.66% would like to eat AYCE at all [26]. Therefore, any plan that includes an AYCE option must also include an à la carte option. See Appendix B for more information on AYCE.

We also are concerned about the objectivity of the data that we were given by the Blue Ribbon Committee on Dining. For example, Table 62 has a “Base: Students who live on campus and agree that breakfast should be offered” with a total of 862 undergraduates. Further down, Table 65 has a “Base: Students who live on campus and agree that breakfast should be offered and agree that it is important for the dining program to help build community around meals,” also of 862 undergraduates. We do not believe that this is plausible considering that it implies that 100% of those responding to Table 62 really believe that dining is important to help build community.

Clerical errors likely contributed to these data inconsistencies. Nonetheless, we now question the validity of all of the data we were given, including the data used by the BRC.

11 Conclusion

The goal of the UA Dining Proposal Committee was to recommend a comprehensive dining program based on a careful examination of the current system and a thorough, objective analysis of all available data.

In summary, we recommend closing the dining halls in McCormick, Simmons, and Baker, and constructing a centralized dining facility. The centralized facility would be open for three meals a day at least five days a week and would accept Dining Dollars as a method of payment. The purchase of Dining Dollars, while incentivized, would be completely optional for all students. For breakfast and lunch, increasing options, quality, accessibility, and affordability are most important. We urge MIT to implement a grab-and-go breakfast option in dorms and a lunch bar with weight-based pricing in the student center. Student kitchen facilities should be preserved and expanded, and meal plans should not be mandatory.

Accountability and oversight of the dining system are of the utmost importance. The Office of Campus Dining cannot continue to patch holes in the dining system with temporary fixes, use student-funded subsidies to cover vendors' failing business practices, and push initiatives that are opposed by the student community.

MIT must regain control of campus dining operations and set standards that are becoming of a world class institution. In true MIT spirit, we have analyzed the problem and presented a solution based on solid evidence that can vastly improve the dining system. All that remains is to make it so.

References

- [1] UA Senate Bill - 40 U.A.S. 8.1 (March, 2009)
“Toward a Better Dining System” (*The Tech*, Vol. 129, N12)
“Dining Report Was Kept Under Wraps: UA to Discuss” (*The Tech*, Vol. 129, N4)
- [2] UA Dining Proposal Committee web site
- [3] MIT Campus Dining web site (April, 2009)
- [4] Average meals per semester:
$$\frac{2.7\text{meals}}{\text{week}} \times \frac{13\text{weeks}}{\text{semester}} = \frac{35.1\text{meals}}{\text{semester}}$$

Average HDM meal price per semester:
$$\frac{35.1\text{meals}}{\text{semester}} \times \frac{\$5.00}{\text{meal}} = \frac{\$175.50}{\text{semester}}$$

Average actual cost per semester to HDM student:
$$\frac{\$300.00}{\text{semester}} + \frac{\$175.50}{\text{semester}} = \frac{\$475.50}{\text{semester}}$$

Average actual cost per meal to HDM student:
$$\frac{\frac{\$475.50}{\text{semester}}}{35.1\text{meals}} = \frac{\$13.55}{\text{meal}}$$
- [5] Table 16, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [6] Table 49, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [7] The purpose of this figure is to represent the number of opportunities available for students to eat in a dining hall. With the exception of Baker, dining halls are open only on nights followed by class days (i.e., typically five days per week).
MIT Campus Dining web site
There are 65 class days in a semester.
MIT 2008-2009 Academic Calendar

Thus, there are $\frac{65}{5} = 13$ weeks of dining hall availability in a typical semester.
- [8] “*The amount of money students spend on food each year varies from approximately \$1,750 (East Campus and Senior House) to \$2,250 (average for students living in residence halls with dining facilities).*”
MIT Meal Plan Study Final Report, Envision Strategies (April, 2009)

- [9] Richard Berlin III, Director of MIT Campus Dining
- [10] Data for fiscal year 2009 provided by Raymond Cross, Director of Finance and IT at HUDS.
- [11] “Aramark to Leave Dining Halls in '08” (*Yale Daily News*, August 31, 2007)
- [12] “Forced Commons to End for E.C., Senior House” (*The Tech*, Vol. 102, N25)
 “EC, Senior House Kitchens Started” (*The Tech*, Vol. 102, N60)
- [13] “Description of the New Dining System” (Institute Dining Review, 1998)
- [14] Baker House Dining Report (2007)
 “Underclassmen Should Remember Baker Dining Story” (*The Tech*, Vol. 116, N25)
 “A Look At Dining Systems” (*The Tech*, Vol. 121, N56)
 “House Dining Proposal Ignores Needs of Students” (*The Tech*, Vol. 112, N19)
 “Students Are Coping With Dining Changes” (*The Tech*, Vol. 113, N44)
 “MIT Dining Creates Required Meal Plan” (*The Tech*, Vol. 121, N45)
 “Proposed Fee Would Offset Dormitory Dining Deficits” (*The Tech*, Vol. 112, N19)
 “New Proposal Closes Dorm Dining Halls” (*The Tech*, Vol. 113, N7)
 “Search for Dining Contractors, Director Goes to Final Stages” (*The Tech*, Vol. 118, N61)
 “If Aramark Stays, Better Cook for Yourself” (*The Tech*, Vol. 116, N44)
 “Students Protest Aramark Monopoly With Boycott” (*The Tech*, Vol. 119, N14)
 “Dining Plan Stresses Profitability, Choice” (*The Tech*, Vol. 121, N62)
- [15] “Commons: A Thirteen Year Perspective” (*The Tech*, Vol. 90, N45)
 “This Week in MIT History” (*The Tech*, Vol. 120, N11)
- [16] Tables 11 & 12, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [17] Loc Vo, owner of the Gooseberry’s food truck
- [18] “College Student Price Index” (*The Tech*, Vol. 126, N59)
- [19] *“One might ask why the dining hall does not close between meals, which might allow the dining program to save money. The consulting teams experience is that it will not cost the Institute that much more money to offer continuous service versus three meals a day.”*
 MIT Meal Plan Study Final Report, Envision Strategies (April, 2009)
- [20] Yale Buttery at Calhoun College
- [21] Table 15, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [22] “New Vendors to Open in Redone Lobdell Next Week” (*The Tech*, Vol. 125, N32)

- [23] Official charge, Blue Ribbon Committee on Dining
- [24] “Mandatory Dining is Gone for Ashdown Undergraduates” (*The Tech*, Vol. 129, N4)
- [25] Tables 8 & 9, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [26] Table 66, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [27] Table 58, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [28] Table 24, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [29] Table 18, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [30] Table 44, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [31] Table 34, survey response data, Blue Ribbon Committee on Dining (April, 2008)
- [32] Table 68, survey response data, Blue Ribbon Committee on Dining (April, 2008)

Appendix A

The following table represents a tiered bonus system in which students are rewarded for purchasing more Dining Dollars. The three highest bonuses are based on current realized HDM benefits for students eating in a dining hall five, six, and seven times per week.

Dining Dollars Bonus Table

Dining Dollars Purchased	Bonus Received	Total Dining Dollars
\$800	\$200	\$1000
\$750	\$150	\$900
\$675	\$75	\$750
\$400	\$20	\$420
\$300	\$0	\$300

Appendix B

Table 66 / Question 43A seems to imply that MIT students want to eat at All You Can Eat (AYCE) dining services. Half of the base [all students responding to the question] respond affirmatively to AYCE. However, the actual question asks if MIT should offer AYCE. We suspect that students were confused about the meaning of this question. Some students may have answered affirmatively meaning that they would eat at an AYCE facility. Other students, however, may have responded affirmatively to mean that they believed an AYCE option should exist for others, not necessarily that they would use it.

In order to decipher this, we consider everyone who responded affirmatively to this question and consider their response to Table 68 / Question 44. More specifically, we singled out responses 1, 2, 5, and 6 as the ones that imply the responder would like to eat at AYCE rather than just have it as an option for others. Note, these responses are the following:

- 1. I would prefer to eat some of my meals in a dining facility that offers an all you care to eat buffet meal for a fixed price per meal and some of my meals on an *à la carte* basis, where I pay for only for the items that I select
- 2. I enjoy cooking my own meals but would also want a combination of a few all-you-care-to eat buffet meals and a small amount of dining dollars for when I do not cook and want to eat in an on campus restaurant
- 5. I enjoy cooking my own meals but would like a few all you care to eat buffet meals for when I do not cook and want to eat in an on campus dining facility
- 6. I would prefer to eat all my meals in a dining facility that offers an all you care to eat buffet meal for a fixed price per meal or meal from my dining plan.

The resulting numbers show a different picture. People who say yes and would eat at the AYCE total $1425 = 39.66\%$ of people. More importantly, though, the reasons favor responses 1 and 2 with 492 and 412 answering those respectively while only 256 respond with choice 5 and 265 respond with choice 6.

Note that 1 and 2 are the responses that offer mixed dining facilities of both “AYCE and *à la carte*” or “AYCE and dining dollars for campus restaurants”. The much greater support for these two suggest that facilities offering just AYCE are not desired. These adjusted numbers also imply that the support for AYCE as a regular eating facility is not particularly strong, totaling at most 40%. And given that we included responses 2 and 5, which clearly don’t support AYCE as much as 1 and 6, this upper bound may be a bit high.

Appendix C

The following information is based on data from a campus-wide dining survey that was conducted by the Blue Ribbon Committee on Dining in April, 2008.

- Only 10% of students indicated that they do not think about health and nutrition when eating, illustrating that the remaining 90% of the student body cares about nutrition. However, only 25% said they eat balanced meals throughout the day[27].
- The majority of students who cook for themselves generally purchase the necessary ingredients off campus. Star Market and Trader Joe's combined make up 66%, whereas LaVerde's and MacGregor Convenience combined make up 7%[28].
- Of undergraduate and graduate students, 52% prepare dinner for themselves two or more times per week. Furthermore, 21% of students get dinner from House Dining or an FSILG two or more times per week, 20% of students get dinner from an on-campus café two or more times per week, and 14% of students get dinner from an off campus restaurant or convenience/grocery store two or more times per week[21].
- Of students who prepare their own dinner, 82% do so because of costs[29]. The primary reason students purchase dinner on campus is convenience[30]. Students buy food off campus for improved quality and variety[31].
- While 49% of students think MIT should offer an AYCE option[26], only 7% would prefer to get all their meals from an AYCE facility[32]. This suggests support for a facility that offers both AYCE and à la carte meals.

Appendix D

The 35 students who eat at pika cook dinner 7 nights per week using produce from Boston Organics; the 30 residents of pika eat cheese from Cabot Creamery, milk and eggs from Whole Foods, and meat from Chestnut Farms in Barre, MA. These products are, in general, more expensive than non-organic and non-local choices, but when bought in bulk and shared amongst living groups, the additional cost per person is very little. Halls in East Campus, entries in MacGregor, floors in Burton Conner, houses in New House, and other living groups could institute similar plans and take personal responsibility for implementing sustainable food practices at MIT. MIT could also purchase food from similar providers.

Summary

- Produce from Boston Organics
 - Costs same or less than purchasing from grocery stores
- Cheese from Cabot Farms
 - Costs \$1.76 extra per person per week
- Milk from Whole Foods (bulk)
 - Costs \$0.71 extra per person per week
- Eggs from Whole Foods (bulk)
 - Costs \$0.22 extra per person per week
- Meat from Chestnut Farms
 - Costs \$2.42 extra per person per week
- Total additional costs for a 15 week semester
 - \$76.75 per person per semester
- Note: some pikans are vegan, so costs for the group (30 residents) are distributed amongst more people than actually consume milk, egg, and cheese products. Meat costs are divided over only the 15 meat eaters.

Produce

- Boston Organics: 3 large boxes per week at a cost of \$157 per week

- This produce is then divided amongst 7 dinners per week for 35 people
- Cost: \$4.46 per person per week, or \$0.64 per person per dinner
- pika estimates that they save money by purchasing produce from Boston Organics instead of from CostCo, Shaws, or Whole Foods

Cheese

- Consumption: 12 lbs per week for 30 people
- Original providers:
 - Shaws and CostCo: bulk cheese, approx. \$2.25 per pound
 - Whole Foods: organic cheese from Wisconsin, \$9.98 per pound
- Cabbot Creamery: local cheese from small farmers* for \$6.65 per pound
- Costs:
 - Compared to Shaws or CostCo: additional \$1.76 per person per week
 - Compared to Whole Foods: saving \$1.33 per person per week
- *Not all diaries under Cabot are certified organic, but the Creamery is releasing an organic line soon

Milk

- Consumption: 10 gallons per week for 30 people
- Original provider: Non-organic milk from Costco, approx. \$3 per gallon
- Whole Foods: organic, local milk for \$5.13 per gallon (after 10% bulk-price reduction)
- Costs: additional \$0.71 per person per week

Eggs

- Consumption: 3.75 dozen per week for 30 people
- Original provider: eggs from Costco, approx. \$1.30 per dozen

- Whole Foods: Organic, local, humane eggs for \$3.06 per dozen (after 10% bulk-price reduction)
- Costs: additional \$0.22 per person per week

Meat

- Consumption: 35 lbs per month for 15 people
- Original provider: Costco and Shaws, approx. \$100 per month (at an averaged cost of \$3 per pound of meat)
- Chestnut Farms: local, humane meat for \$245 per month for 35 lbs
- Costs: additional \$2.42 per person per week

Appendix E

<u>School</u>	<u>Undergraduates</u>	<u>Meal Plan</u>	<u>Types of plans</u>	<u>Mandatory</u>	<u>Costs</u>	<u>Dining Halls</u>
MIT	4172	No	Preferred Dining	For students in dining hall dorms	\$600/year with a 50% (\$2250/year total est.)	4 residential
Harvard	6650	Yes	21 meals/wk	For all residents	\$4982/year	13 residential
Yale	5332	Yes	Anytime	Some meal plan required for all residents	\$5122/year	13 (12 residential, 1 common)
			21 meals/wk	Freshmen	\$4860/year	
			Kosher		\$4860/year	
			Any 14		\$4860/year	
			Any 10		\$3780/year	
			5 lunches	non-residents only	\$1430/year	Only used in Commons
Princeton	4635	Yes	Unlimited	Freshmen/Soph	\$5340/year	6 dining halls
			Block 235	Freshmen/Soph	\$5127/year	
			Block 190	Freshmen/Soph	\$4913/year	
			Block 95	Upperclassmen	\$2937/year	
			Eating Club shared meal plan	Upperclassmen		10 Eating clubs
			Eating Club membership	Upperclassmen	\$7200/year	10 Eating clubs
			Independents	Upperclassmen		Dorms with kitchens
			Coops	Upperclassmen	\$1000-1200/year	3 co-ops